

**DVD
INSIDE**

VIDEO ON DVD

Joris Voorn

STUDIO SPECIAL See the skills that make his sound

2643

NEW SAMPLES

Classic 80's sound packs
Analogue kits **AND MORE**

IN THE STUDIO

Sharam Jey

EXCLUSIVE ACCESS See and hear his new track take shape

FutureMusic®

Issue 223
Making the future since 1992

Technique and technology for making music

2010

GEAR SPECIAL

Get the hot new kit that'll make your decade

**TUITION
OVERLOAD**

More tips! More video!
Biggest issue EVER

REVIEWED

Wavedrum Returns!

Korg bring the beat back
and it's a belter!

EXCLUSIVES

Pioneer CDJ-2000

First review of the ultimate DJ deck

Korg Kaossillator Pro

Our favourite pocket synth goes extra large

Native Instruments Kontrol X1

Traktor finally gets physical – full review INSIDE

10

**YEARS OF
GREAT GEAR**

We pick the kit that
rocked the noughties



The new Perception 820 TUBE

Recording Microphone

Two back-to-back capsules allow
choice of cardioid, figure-eight
and omnidirectional pickup patterns

Large-diaphragm true condenser microphone

Warm, rich 3-dimensional sound quality

Legendary "up-front" AKG sound



"Real Tube Sound Quality meets Classy Design."



Perception 120



Perception 220



Perception 420



Perception 170



Perception 820 TUBE

www.akg.com

H A Harman International Company

AKG SOUNDS BETTER



EDITORIAL

Editor

Daniel Griffiths, daniel.griffiths@futurenet.co.uk

Art Editor

Phil Cheesbrough, phil.cheesbrough@futurenet.co.uk

DVD Editor

Will Seelig, will.seelig@futurenet.co.uk

Reviews/Features Editor

Chris Barker, chris.barker@futurenet.co.uk

Production Assistant

Declan McGlynn, declan.mcglynn@futurenet.co.uk

BIG THANKS TO...

Robbie Stamp, Doug Kraul, Andy Short, Armin Zedler, Martin Delaney, Gavin Roberts, Jono Buchanan, Richard Wentk, Stuart Bruce, Danny Turner, Dan 'JD73' Goldman, Dave Bullock, Greg Scarth, Bruce Aisher, Oli Bell, Imelda Espinoza

Group Senior Editor: Julie Tolley

Group Art Director: Ian Miller

Creative Director: Robin Abbott

Design Director: Matthew Williams

Editorial Director: Jim Douglas

ADVERTISING

Senior Advertising Sales Manager: Matt King, mking@futurenet.co.uk

Advertising Sales Manager: Andrew Tilbury, atilbury@futurenet.co.uk

Sales Executive: Leon Stephens, lstephens@futurenet.co.uk

Sales Executive: James L'Esteve, jlesteve@futurenet.co.uk

Advertising Sales Director: Claire Dove, cdove@futurenet.co.uk

MARKETING

Campaign Marketing Manager: Charlotte Pratten, cpratten@futurenet.co.uk

Promotions Executive: Madeleine Umpleby, mumpleby@futurenet.co.uk

CIRCULATION

Trade Marketing Manager: Verity Travers, vtravers@futurenet.co.uk

Trade Marketing Director: Rachael Cock, rcock@futurenet.co.uk

PRINT & PRODUCTION

Production Co-ordinator: Ian Wardle, iwardle@futurenet.co.uk

Production Manager: Rose Griffiths, rgriffiths@futurenet.co.uk

Head of Production: Richard Mason, rmason@futurenet.co.uk

LICENSING

International Licensing Director: Tim Hudson, thudson@futurenet.co.uk

Tel: +44 (0)1225 442244 Fax: +44 (0)1225 732275

FUTURE PUBLISHING LIMITED

Assistant Publisher: Rob Last, rlast@futurenet.co.uk

Publishing Director: Mia Walter, mwalter@futurenet.co.uk

Chief Operating Officer: Simon Wear

Chief Executive: Robert Price

SUBSCRIPTIONS

Phone our UK hotline on: 0844 848 1602

Subscribe online at: myfavouritemagazines.com

NEXT ISSUE ON SALE... Thursday, 3rd September 2009

Printed in the UK by BGP Ltd on behalf of Future.

Distributed in the UK by Seymour Distribution Ltd,
2 East Poultry Avenue, London EC1A 9PT. Tel: 0207 429 4000

Want to work for Future?

Visit www.futurenet.com/jobs



A member of the Audit Bureau of Circulations



Future Publishing Ltd is part of Future plc. Future produces carefully targeted special-interest magazines, websites and events for people who share a passion. We publish more than 170 magazines and websites and 100 international editions of our titles are published across the world.

Future plc is a public company

quoted on the London Stock

Exchange (symbol: FUTR).

www.futureplc.com

Non-executive Chairman: Roger Parry

Chief Executive: Stevie Spring

Group Finance Director: John Bowman

Tel: +44 (0)1225 442244

© Future Publishing Limited 2009. All rights reserved. No part of this magazine may be used or reproduced without the written permission of the publisher. Future Publishing Limited (company number 2008885) is registered in England and Wales. The registered office of Future Publishing Limited is at Beauford Court, 30 Monmouth Street, Bath BA1 2BW. All information contained in this magazine is for information only and is, as far as we are aware, correct at the time of going to press. Future cannot accept any responsibility for errors or inaccuracies in such information. Readers are advised to contact manufacturers and retailers directly with regard to the price of products/services referred to in this magazine. If you submit unsolicited material to us, you automatically grant Future a licence to publish your submission in whole or in part in all editions of the magazine, including licensed editions worldwide and in any physical or digital format throughout the world. Any material you submit is sent at your risk and, although every care is taken, neither Future nor its employees, agents or subcontractors shall be liable for loss or damage.



We are committed to only using magazine paper which is derived from well managed, certified forestry and chlorine-free manufacture. Future Publishing and its paper suppliers have been independently certified in accordance with the rules of the FSC (Forest Stewardship Council).



When you have finished with this magazine please recycle it.

Welcome

Dawn Of A New Era



It's incredible to think that the noughties are over already. What felt like a gradual change in music making has actually been surprisingly pronounced when you look at the facts. We've seen massive keyboard workstations giving way to a laptop and software and elastic audio granting the power to make anything happen.

Hardware samplers are mostly consigned to eBay while the resurgence in classic analogue hardware grows ever more fierce. We look back at the last ten years and pick out the landmarks that shaped music from page 42.

Likewise we look to the decade ahead across this issue, from the first wave of new gear in our Filter section (starting on page 10) to our review zone which sees not only the successor to clubland's most popular DJ kit (the Pioneer CDJ-2000 reviewed on page 84) but the return of Korg's critically lauded but criminally under-employed Wavedrum. We've got the new generation of this amazing hardware reviewed on page 92.

And this month we've more tuition (with more audio, video and project files on the disc) than ever before – backed up with a trio of *In The Studio* specials, from Joris Voorn, Sharam Jey and American legends The Crystal Method. Another packed issue! Hope you enjoy it.

Daniel

Daniel Griffiths, Editor
daniel.griffiths@futurenet.co.uk

EXPERT CONTRIBUTORS THIS MONTH...

Jono Buchanan
engineer, producer



Jono whipped the tarp of his garage-bound DeLorean this month to travel back to the start of century and tell the story of a decade of fantastic studio gear. Feature starts page 42.

Stuart Bruce
producer, engineer



Stuart tackles two reviews this month, namely the impressive new Sonodine monitors from the Far East on page 98 and the fantastic Elysia Mpressor – a software version of the high-end and flexible hardware compressor on page 104.

Marc '01'
artist, producer



Doefer's new Dark Energy semi-modular desktop synth is a force of the dark side, so who better to tackle it's analogue monophonic wrath than a man who's jumped through FireWire and wrestled with SHARC chips? Ahem.

Contents

Issue 223 | February 2010 | UK Edition



ON THE DVD

Joris Voorn

36 Celebrated Techno and Progressive pioneer Joris Voorn speaks to *FM* from his Amsterdam studio and home and we discover the secrets behind his club hit *Sweep The Floor*

FutureMusic®

Technique and technology for making music

Filter

From p8 We uncover the brand new kit that will make your year

From p84 A plethora of exclusive reviews this month including NI X1 and the CDJ-2000

Exclusives



Packed DVD

p6 Joris Voorn and Sharam Jey talk you through their production techniques

First Look!

p92 We take a look at Korg's revamped and repriced Wavedrum

Reviews

Pioneer CDJ-2000

84 The next generation of industry standard CDJ have finally landed.

ON THE DVD

Doepfer Dark Energy

88 Semi-modular, wooden-ended analogue, at a bargain price – what are you waiting for?

ON THE DVD

UAD Trident-A EQ

90 Another UAD emulation of a classic piece of studio royalty.

ON THE DVD

Korg Wavedrum

92 Will Korg's re-launch of a digital percussion legend manage to hit the spot at a new dramatically lower price?

ON THE DVD

Nord C2 Organ

96 The dual keyboard deck of Nord's new organ gets its drawbars yanked and keys stroked by our expert organ fingerer.

Sonodyne SM100AK

98 An impressive new monitor from the Far East finds its way to the UK.

Livid Instruments Block

100 Another new pad controller ready to send you trigger happy and sequence to your hearts content.

Native Instruments Traktor Kontrol X1

102 Have NI finally built the ultimate in Traktor control? We find out...

ON THE DVD

Elysia Mpressor

104 By recreating their high-end hardware unit, Elysia have delivered a stunning software compressor with innovate forward-thinking features.

sE X1 Microphone & Project Studio Reflexion Filter Bundle

106 Two great products to deliver great recordings for under £200. We find out if there's a catch.



p98 Sonodyne SM100AK

p88 Doepfer Dark Energy

p108 Mini Reviews

The issue...

Filter

Korg Kaossilator Pro

8 The tiny bass unit has grown up and is ready to cause Kaoss.

Yamaha CP1

12 Yamaha relaunch their classic CP range with a new flagship.

Classic Album

16 We speak to Midge Ure about Ultravox's classic *Vienna*.

Studiofile

20 The *FM* crew visit the brand new facilities impressive at Audiocooker in Leeds.

Technique

ON THE DVD

Logic Tips

48 How to design the perfect vocal channel strip using Logic's plug-ins.

ON THE DVD

Knowledge Base: Harmonics Part Two

52 Understanding the science and practicalities behind harmonic distortion.

ON THE DVD

Max MSP: Part Two

62 Discover the power of audio processing using Max MSP

ON THE DVD

Cubase Tips

72 Get to grips with the awesome power of Prologue.

ON THE DVD

Knowledge Base: Stereo

76 Get to grips with the important science behind stereo mixing and effects.

ON THE DVD

Ableton Live Tips

78 A beginners guide to DJing with Live.

Features

ON THE DVD

Joris Voorn

36 Dutch DJ and production superstar shows us his studio.

Gear Of The Decade

42 We bring you a selection of the decades finest kit.

ON THE DVD

Sharam Jey

54 We reveal the secrets behind his eclectic productions.

The Crystal Method

66 We catch up with the twice-Grammy-nomintaed US Electronic music legends.

REGULARS

- 6** DVD Contents
- 33** Album Reviews
- 108** Mini Reviews
- 110** Q&As
- 117** Reader Demos

FM DVD

Issue 223 | February 2010 | UK Edition

INSIDE STORY



DVD Editor Will Seelig's inside track on the making of FM's DVD



This month's highlight was an early-morning visit to Amsterdam to check out Joris Voorn's studio. This was a brilliant opportunity for FM to chat with the man himself and, as always, to have a good nose around his studio. Unlike any studio FM has visited before, this one holds the award for 'steepest stairs without handrails ever'. Getting the camera equipment up there was more like a climb up Everest. Lets just say gravity wasn't our friend going up or coming down – but the view of the rooftops was well worth it.

Enjoy the FM DVD? Want to see your favourite artist on video? Then email us at fmdvd@futurenet.co.uk

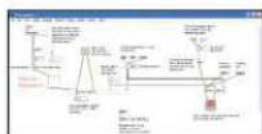


DVD HIGHLIGHTS

From the Vaults: Analogue Sessions

999 Our Analogue Sessions collection gives you a full range of synths, drums and construction kits all created purely from analogue sources available in Kontakt format

Max/MSP Patches



In Part 2, we create a custom switchable looper patch in Max/MSP

'80s Drums

To accompany our synths, we've got a huge collection of '80s drum machine samples and some very authentic loops

Knowledge Base

Want to understand Harmonics and Stereo Mixing? Get the knowledge from our audio examples

PLUS OUR SPECIAL BONUS SAMPLES COURTESY OF

Sounds/To/Sample

200+ demo sounds for you to use and enjoy. If you like what's here then bag the full collections from soundstosample.com. They're instantly downloadable online!

AFTERHOURS TECHNO 2



"The second instalment in the hugely popular *Afterhours Techno* series, this sequel

features a spanking new collection of dancefloor-pounding bass, beats, bots and glitched vox loops.

Produced by seasoned sound designer 6pod9, the collection includes 131 24-bit WAV loops customised to fit together instantly."

DEEP TECH-HOUSE



"Moody and melodic, deep and dirty House grooves featuring: 100s of jackin' Minimal

grooves, classic Tech workouts and dusky soulful drums, basslines from Chicago to Detroit and beyond, subby low enders, wonky squarelines and dubbed out sinelines plus 300+ finely sculpted drum hits, jazzy chords and bass hits"

KICK FREE REVOLUTION 2



"The world's biggest-selling kick-free loop producer comes exclusively to Sounds/

To/Sample for Kick-Free Revolution 2, featuring 600+ of the tightest, funkier, most detailed top loops. Now he's back with his latest arsenal of kick-free workouts – plus 70 bonus deep, round kicks to fill out the bottom end."

RIEMANN KICKS KOLLEKTION

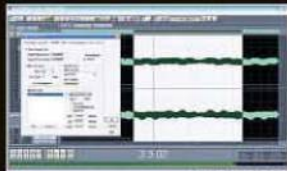


"Riemann Kollektion presents a unique collection of 100 analogue kicks.

Painstakingly crafted from scratch, Riemann's hits are never found elsewhere. Categorized into sub-genres, the collection will satisfy not only House and Minimal producers but also slots comfortably into Urban or Dubstep styles."

Sample Techniques

Each month, our sample creators work tirelessly to bring you original content for use in your music. As always, they go that extra step to make sure that the samples are both unique and usable...



Multi-sample Loop-points

Creating multi-sampled instruments can be a great way to capture an analogue synth or analogue-processed digital synth, but there is one major difficulty: creating a clip-free sustain loop with a stereo and/or complex waveform. To overcome this, a note can be split at tempo specific bar points and repeated to make the start and end loop points identical. For instance, sample a note for five bars at 120bpm then chop out the second two bars (i.e. 3 and 4 – lose 5) and repeat these two bars straight after (i.e. the note now runs as bars 1,2,3,4,3,4). Leaving the first two bars (or more) allows the attack stage to level out to a steady state. Cross fade the repeated two bars with the first instance and bounce the whole section into one file. The sustain loop points can then be set (I use Adobe Audition for this) as a two-bar section (at 120bpm) after the start of bar three. Embedding this loop point into the WAV or AIFF means a sampler will assign it as a sustain loop and all you have to do is define the release characteristic. Simple!



© Andy Short



THE MAKING OF YOUR UNIQUE FM SAMPLES...

Back to the Eighties

Our sample sages tackle '80s synths and beats

This month the samples are all of the '80s persuasion with *Groove Criminals* giving us a sublime collection of '80s drum sounds and loops that sound like they have been lifted straight from the past.

Cyclick samples return this month with even more '80s synths. Part two of this *Eighties Synth Collection* offers twelve synth multi-samples (four leads, pads and basses) and two drum kits that have been especially created and programmed for Kontakt 1.2, 2.0 and above.

We interrupted Cyclick's vast programming session to find out how these instruments were made:

"The instruments were created with the Kurzweil K2600R and recorded through the Gyraf G9 dual valve preamp and the GSSL buss compressor for some extra analogue bite. The G9 input gain was set as high as possible, only pulling back when the distortion became too audible, thus exciting the harmonic content as much as possible.

"The K2600R may be a '90s synth, but it has some very '80s tendencies and can create some 'classic' synth replications. It's V.A.S.T. operating system is staggering with pages of menus and parameter options. Reading the

manual can take a lifetime, but once mastered, it is capable of some enormous and complex sounds."

1,000 samples

Complete kontrol

"Having assembled the basic multi-sample in Nuendo and dithered it down to 16-bit, the resulting files were then shipped into Adobe Audition where the sustain loop points and pitch could be set for each note. Though each instrument is different, a set of MIDI CCs have been used to give a similar level of controllability."

The list of assigned CCs can be found on the PDF in the samples section of the DVD.

GEAR USED



'80s drums
Groove Criminals
use: Peavey Univerb 2



"One of the first affordable preset digital reverb units. We picked this up for peanuts off eBay. Although it's not quiet or hi-fi, it does nail the not-so-subtle '80s reverb sound with a rather nasty gated-verb."



'80s Synths
Cyclick Samples
use: Kurzweil K2600R



"A classic American powerhouse synth/sampler that has possibly the deepest operating system I have ever encountered outside of a PC/Mac. It is surprisingly easy to use and can create an astronomical range of sounds, from the simplest of mono synths to the most insane, self-evolving oddities you can imagine. The onboard effects are also quite stunning and are found separately in the KSP8 module. Not cheap, but getting cheaper by the year secondhand."

Filter

news | people | opinion | technology | events

Arpeggiator

The Electribe-inspired gate arpeggiator adds more features than the original Kaossilator, with the added slider able to control the gate time or gate speed, with Tempos set manually, sync'd via MIDI or on-the-fly using the Tap Tempo function

XY Pad

The X/Y Control surface triggers the thirty-one types of scales. These cover everything from chromatic scales to major, minor, blues and beyond. By specifying a scale and key, a single finger on the pad can trigger and play complex and expressive melodies. Another addition is the new Note Range function, which lets you specify the range of pitches available on the touchpad

SD Slot

Store your loops and program changes on SD card for easy transfer to other Kaossilators and other devices

Highlights this issue...

Allen & Heath Mini Mixers

10 A&H's prestigious ZED series gets a baby brother in the form of the ZED-10.

Dynamic Range

11 Focusrite's OctoPre range gets yet another update, this time with added compressors.

CP Returns

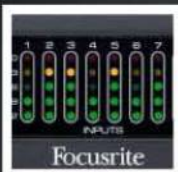
12 Yamaha relaunch their acclaimed CP-series of electric pianos. Will it be as loved as it's famous ancestors?

Classic Album

16 Eighties legend Midge Ure talks you through the story of Ultravox's breakthrough album *Vienna*.

Studiofile

20 The *FM* team visit the fantastic facilities and gear at Audiocooker in Leeds, UK.





Ins and Outs

Around the back of the unit you'll find a USB connection, MIDI I/O and phono RCA line in and outs

Program Memory

Favourite programs can be easily assigned to the eight Program Memory buttons for instant recall, making live performances very smooth indeed

Mic Input

The addition of a front-mounted mic input and vocoder now makes vocal effects possible

Kaossilator Goes Pro

Touch-synth action gets taken to the next level as the latest addition to Korg's famous Kaoss range

We first saw Korg's fun little yellow Kaossilator back in June 2007 and loved

its hands-on take at music making both live, DJing and in the studio.

This year's NAMM show will see Korg launch their feature-packed Kaossilator Pro, which is housed and styled in the same manner as the blindingly successful Kaoss Pad. As a touchable sound generator, just like the original pocket-sized Kaossilator the new flagship Kaossilator can trigger sounds and control them via the touch pad, which can be locked to the key and set to various scales. For instance, horizontal motions control the pitch, while the vertical axis can easily control other parameters such as cutoff, feedback, or modulation.

The Pro is packed with features including 200 sound programs, an Electribe-inspired gate arpeggiator and modern studio features such as USB and standard MIDI I/O. Sounds are generated using the same modelling synthesis as the original Kaossilator, plus the addition of a new PCM sound generator means that the Pro has much more realistic drum

sounds. There are twenty different one-shot sounds for kick, snare and hi-hat etc, as well as twenty-five rhythm loop patterns.

Another added feature of the pro is an onboard vocoder, mic input, plus the ability to record up to four bar loops and overdub them using either the internal sounds or an audio input source from either the Pro's mic inputs or stereo line ins. As well as providing MIDI I/O the USB connection also allows the backing up of loop data and program changes using the included editor and librarian software.

This software also allows assignment of the MIDI information to the controls of the Kaossilator Pro converting it into a fully-fledged MIDI controller. Similar to its red-faced cousin, there's also the additional SD card slot on the front of the unit for transferring and saving loop data and program changes. Is it just us, or do you think the entire unit should have been yellow? Available in March, expected pricing to be £355. **FM**

WANT TO KNOW MORE?

Out March 2010. Watch out for the *FM* review soon. korg.co.uk



Mini Mix

Allen & Heath announce their most-baggable mixers ever. Meet the tiny twins that are the ZED-10 and the ZED-10FX

Reasily equipped for live performance, recording and production, these diminutive little mixers come complete ultra high impedance discrete Class A FET (Field Effect Transistor) inputs. These allow the mixer to accept an instrument to be directly into the mixer, emulating the valve/tube input circuitry commonly

found on instrument combos or amplifiers. There is also a 26dB gain switch, which will boost any instruments with very low outputs. There's even DI level switching for simple sub mixing.

A major plus is the addition of USB sends and returns for PC or Mac recording, playback and effects. The four mono channels all feature

swept-mid three-band EQ while the stereo channels feature two-band EQ. Other impressive features for such a compact package include high gain low noise pre-amps, two aux sends and a separately switched stereo bus, which will happily be routed to from any channel creating a selective recording bus, monitoring bus or stereo clean feed output.

The ZED-10FX features the same high specs as the ZED-10 but, with the addition of, yes you guessed it, effects. All the effects have a 24-bit/48kHz conversion rate and are derived from Allen & Heath's pro touring digital mixing system. There's even a handy tap tempo function to tighten up all the tempo specific effects such as delays.

With the usual Allen & Heath quality build it seems like quite an impressive feature list considering the expected price point of £233 for the ZED-10 and £292 for the ZED-10FX.

WANT TO KNOW MORE?

The pair are available from April. Check out allen-heath.com for the full tech specs

Bigger than Hip Hop

Arturia serve up a solution for Hip Hop producers

Putting together a suite of tools for Hip Hop production may not seem like something you'd expect Arturia to do, but it's here and it seems like a pretty sweet deal. For 129Euros they've bundled a copy of Live Lite 8 Arturia Edition, including an MPC-style sampler and over 1,200

Hip Hop samples. There's also Arturia's Analog Factory – this time in its Hip Hop Edition, bringing 250 high-quality patches specifically designed for Hip Hop. Another included instrument is the Lounge Lizard Session serving up four electric pianos. Available now arturia.com



Diary

Events, festivals and gigs...

Etienne de Crecy

When: 3 February
Where: Koko, London
koko.uk.com

Miike Snow

When: 5 February
Where: Digital, Newcastle
yourfutureisdigital.com

Aeroplane

When: 5 February
Where: Coronet, London
myspace.com/aeroplanemusiclove

Trentemøller

When: 5 February
Where: Sankeys, Manchester
sankeys.info

Eric Prydz & Sebastien Leger

When: 6 February
Where: Matter, London
matterlondon.com

Toolroom Knights ft. Fedde Le Grand

When: 6 February
Where: Ministry Of Sound, London
ministryofsound.com

Imogen Heap

When: 10 February
Where: O2 Academy, Bristol
o2academybristol.co.uk

Fischerspooner

When: 12 February
Where: Matter, London
matterlondon.com

Erol Alkan

When: 12 February
Where: Stealth, Nottingham
stealthattack.co.uk

DJ Sneak

When: 20 February
Where: Sankeys, Manchester
sankeys.info

MUSIC TO OUR EARS

The FM Playlist

What we're listening to this month...



Get Famous

Get Famous E.P.
Melodic, retro and downright cool, this new act are bringing funk back all the way from Winnipeg. **Chris, Reviews Editor**



The Knife

Colouring of Pigeons
The Knife return with top-notch results. Optronica, big in 2010. **Declan, Production Assistant**



Hot Chip

One Life Stand
Eagerly awaited and it doesn't disappoint. Another tuneful batch of eclectic Minimal Electro quirk. **Daniel, Editor**



Kate Rusby

Awkward Annie
Beautifully crafted songwriting from the Yorkshire Belle – prepare yourself for an emotional rollercoaster. **Phil, Art Editor**

Overdub Be Good To Me

Korg's new Sound On Sound handheld recorder serves up some unlikely features that set it aside from the bulging competition

Don't be put off by the name and the fact Korg have chosen to make the unit look like an electric

shaver, the Sound On Sound is jam-packed full of great ideas for anyone looking to sketch down musical inspirations on the go.

Battery powered, this multi-track recorder comes complete with on board rhythms and the ability to overdub an unlimited amount of tracks with an unlimited amount of

Undo/Redo functions providing you have a large enough microSD/SDHC card. Another quirk is the A/B loop function allowing users to continuously loop a part of their recording while also having the ability to record overdubs at the same time.

100 on-board effects are also included and can be applied either directly when recorded or added later to tracks that have already been recorded. There are also seven

touch effects which can be controlled in real time using the display. Probably one of the most innovative features is the built in Sound Stretch feature making it possible to change the playback speed without affecting the pitch during playback or during recording.

Playback speed can be set anywhere from 25% to 150% of the original speed. Recordings are made simple via a microphone jack, guitar input or even by using the Sound On Sound's built in stereo condenser microphone.

There's also a line input for an external audio device, plus a built-in speaker allowing you to play back your recordings instantly with no other equipment.

Other nifty extras include a built in tuner and it can be powered either from two AA batteries. Retail price will be the very reasonable price of £230. Expect this handy recorder to be reviewed soon.

WANT TO KNOW MORE?

Check out korg.co.uk for the tech specs and availability. And *FM* for the review!

Razor sharp

Not so much a field recorder but a full multi-track studio in packed a shaver-sized case. Hirsutes you



In The 'Sone

Ultrasone deliver yet more high quality hi-fi headphones

New top end cans from German manufactures Ultrasone aim to set high standards in the hi-fi

headphone market. When developing the new flagship model in the HFI range, the HFI-2400, Ultrasone implemented a gold-plated 40mm transducer that, by means of its decentralised placement, presents a more spatial sound production.

The opened-back design means Ultrasone also claim a huge frequency response from the HFI-2400s – from 10Hz to a dog deafening 25kHz. Ultrasone tell us that these silver beauties also have removable and replaceable earpads and high-quality 9.8-foot cord with gold-plated adaptor meaning these headphones should last a fair few years. Mind you, at a whopping \$399 retail price you'd certainly hope so! We'll be putting these to test as soon as we can. Ultrasone.com

Octo Pre-Styler

Focusrite pack even more features into their popular, ever evolving OctoPre range

After giving the OctoPre a fantastic review in its original incarnation and in it's MkII just last issue, we were excited to spot this

new model that comes complete with new, single-dial, VCA-based compressors derived from the classic Focusrite Red 3 on every blinkin' channel – that's eight mic pres and

eight compressors. The unit is loaded with the same preamp circuits as those found in the Saffire PRO range of audio interfaces, so the OctoPre is no slouch. Because the compressors are modelled on the Red 3, Focusrite have aimed to accurately match the shape of the Red 3's knee, to ensure the characteristics of the studio classic were captured. This means that the compressor on the OctoPre can

provide a clean, controlled sound, or using the 'more' switch, it can transform the behaviour of the VCA, doubling the ratio to deliver a more creative compressor.

Considering the feature set and the price point of just £585, it seems like Focusrite have served up another budget conscious buy. We'll be putting the new OctoPre MkII Dynamic to the test in the review pages of *FM* very soon. focusrite.com





Yamaha unveil CP1

The CP range returns to continue its legendary legacy

Their CP70 and CP80 keyboards were, and still are, loved by players all over the globe, from U2 and

Stevie Wonder, to defining the sound of Keane. So we were both excited and a little nervous to hear about Yamaha's re-introduction of their famed CP series with the CP1 flagship stage piano. It may not have the grandeur, and hammers and strings of the original CP pianos, but

the CP1 still has a fair few impressive features to shout about, including its lovely wooden panels and pro, real-wood piano action keyboard.

Based around a brand new, unique Spectral Component Modelling tone generation system. Yamaha informs us that their new CP1 recreates the sound of acoustic and vintage electronic pianos more faithfully than anything else before has ever done. This is done by a

fusion of both sampling and modelling technology making it possible for standard vintage sounds to be recreated or for players to create their own unique, original sonic palettes. This is possible by players choosing from a selection of component types such as the choice of modelled piano (17 Acoustic or Electronic types to choose from including some from the DX7), preamp, speaker simulator, power

amp, compressor and/or modulation effects. Another feature that sets this keyboard apart from the original are its master keyboard skills. Designed for use on-stage – up to four virtual zones can be set up on the keyboard and then assigned to tone generators, including other MIDI instruments.

Best of all the CP1 is a fraction of the weight and size of the originals, with the CP1 weighing in at just under 28kg. As another bonus, you'll have a much lighter wallet too because the CP1 retails at whopping £4,502. Ouch! *FM* review soon.

WANT TO KNOW MORE?

Check out uk.yamaha.com for the full tech specs of the entire new CP range

Dark Time

Doepfer show us their new dark delight...

Unfortunately not quite finished to be officially revealed in full, Doepfer have announced plans to build a sequencer adding to they're 'Dark' range of hardware analogue synth goodies. The proposed analogue sequencer features sixteen steps with on/off, skip, reset and stop switches. There's USB, MIDI and CV/gate

connections and an internal clock oscillator too that can be synced to MIDI clock if required. Other features that are set to be included are different direction options for the sequences, such as forwards, backwards and random. Release date is the Summer of 2010, with a price aim of around 400Euros. doepfer.de



Ion Man

Could this quirky idea become a pro concept?

Budget-brand Ion have served up a strange but sort of cool concept in the iDiscover keyboard, a 25-key controller for their custom iPhone app. Coming complete with a 'music creation app' with over two dozen sounds, the quirky device will also work as a MIDI controller keyboard and has an audio output and headphone connection around the back. Although it's not ground breaking as a piece of technology goes, we love the idea and would be interested to see the Ion iDiscover working with more professional music apps on the iPhone. Pricing we're sure will be reasonable. ionaudio.com

White Goods

Akai and Access show their white bits

Oh God, what has Apple done? It seems like everyone's painting their kit white at the moment. First up is the limited edition Akai MPC2500SE, which comes complete with a carbon fibre printed sidepanel that makes it look like a motorcycle from the '90s. Then there's the slightly more limited Virus TI Desktop WhiteOut edition. Limited to a run of just 100 units, each is equipped with a laser-engraved serial number. If you want to get your hands on either of them, head to virus.info and akai.com



Bring The Band!

Spend over £1000 & Get FREE Cream Studio Time

Another awesome CW[Pro] first. - Spend over a grand on musical instruments with us and get some FREE rehearsal STUDIO time at the world famous Cream Production Studios. All you need to do is tell us the name of your band when purchasing your gear we'll keep a running total. Once you have spent over £1000 - the you can claim your **FREE STUDIO REHEARSAL TIME!**

CW[Pro]

www.cwpro.co.uk | Call us today for expert advice on your Pro solutions: Tel. 0208 400 9400



Solution
Expert

SHURE

SONNOR

Euphonix

AJA

YAMAHA

TELESTREAM

wacom

Roland

Adobe

LACIE



Solution
Expert
Creative



Cream

Production Studios

Exclusive!!

The Cream Production Studios simply offers the most stunning Production Suites / Recording facilities for hire in London, if not the UK. The simply spectacular 850 Sq foot live room, complete with adjustable ceiling baffles is suitable for any high-quality music recording / rehearsal.



Octopad Is Back

Roland announce new digital percussion pad

Building on the success of their SPD-20 and smaller SPD-S units, Roland have upped their game and launched the top end SPD-30, which packs in 50 kits and hundreds of drum and percussion sounds. The eight pads are based on the same

technology that Roland are known for in their V-Drum range and will happily trigger the built-in sounds or use external devices with either standard MIDI I/O or USB. The eight separate trigger pads claim to provide a superior dynamic response and trigger consistency over the whole surface of

the pad, as well as the elimination of crosstalk which has always been a problem of these smaller units.

Inputs are also included around the back of the unit making the SPD-30 expandable for kick drum pedals, hi-hat pedals and other pads. On the surface of the unit, there's a large backlit LED screen for selecting kits and tweaking them, plus above each pad a small LED light helps illuminate the playing surface.

As well as the on-board sounds, there are also 30 types of multi-effects with ambience, equaliser and a limiter available on the overall output of the SPD-30. A phrase looper is also included inside the SPD-30, giving players the ability to create up to three layers of sounds per-phrase, adding to the potential for both live and studio work.

WANT TO KNOW MORE

Release dates and pricing are still to be confirmed at the time of press. roland.co.uk

Get Your XOX Off

New drum machine plug-in from Audio Damage

Named Tattoo, this is the latest software to be built around Audio Damage's proprietary D-Plane synthesis methods and contains 12 different drum synths, all based on the XOX series of analogue drum machines. But because of the internal sequencer, Audio Damage claim Tattoo is much more than a simple drum machine and is in fact, a complete rhythm programming

environment. The sequencer is capable of some very interesting things, including a multitude of randomisation options and routing. Tattoo's sequencer can also be routed to trigger external MIDI devices or VST instruments and every synth parameter has its own sequencer. There are six stereo outputs and a handy version of the Kombinat One Knob Compressor is ready to go on the first buss. audiodamage.com



Tenori-on 2.0

Yamaha's marvel gets a welcome upgrade

In continued work alongside Japanese media artist, Toshio Iwai, Yamaha have tweaked the Tenori-on with a highly anticipated version 2.0 firmware. An updated Tenori-On includes improved MIDI sync, the ability to expand and edit the global note scaling and a much needed addition of swing. Users can now add the more humanised feel or swing to the grooves on the Tenori-on, by increasing or decreasing the swing. More impressive is the fact that you can tweak the swing in real-time and when the unit is sync'd to your DAW, the Tenori can swing freely while the DAW remains tight. The new firmware is available now global.yamaha.com/tenori-on/downloads



SE USERS
INCLUDE;

GIL NORTON

FOO FIGHTERS, PIXIES, GOMEZ

TONY PLATT

BOB MARLEY, AC/DC, THIN LIZZY

STEVIE WONDER

SVEN LENS

SNOOP DOG, WILLIE NELSON

TROY VAN LEEUWEN

GOTSA, A PERFECT CIRCLE, SWEETHEAD

ADRIAN BUSHBY

U2, FOO FIGHTERS, NEW ORDER

JACKNIFE LEE

REM, SNOW PATROL, GREEN DAY

DOM MORLEY

AMY WINEHOUSE, MARK RONSON

ENDA WALSH

U2, SHANE MACGOWAN, CORRS

DON WAS

BOB DYLAN, THE ROLLING STONES

JOHN MERCHANT

BEE GEES, BARBRA STREISAND

CHRIS PORTER

PET SHOP BOYS, TINA TURNER

BT - BRIAN TRANSEAU

BT, DAVID BOWIE, TORI AMOS

BRENDAN BENSON

RAconteurs, BRENDAN BENSON

PAUL BARRETT

QUINCY JONES, U2, FRANK SINATRA

GUY CHAMBERS

ROBBIE WILLIAMS, JAMES BLUNT

GEOFF DUGMORE

JEFF BECK, JAMES BLUNT

ROGER LYONS

NEW ORDER, BEE GEES, OLIVE

STEVE LEVINE

THE BEACH BOYS, THE CREATURES

PAUL HERMAN

FAITHLESS, NATASHA BEDINGFIELD

ALAN BRANCH

BLUR, PRIMAL SCREAM, U2

STUART CRICHTON

PET SHOP BOYS, BONO, KYLIE MINOGUE

PAUL MERTENS

BEACH BOYS, PET SOUNDS, STEREO LAB

NICK FRANGLIN

LEMONJELLY, PRIMAL SCREAM, JOHN CALE

ROB HARRIS

JAMIROQUAI, KYLIE MINOGUE

JAMES MURPHY

LCD SOUND SYSTEM

ALAIN JOHANNES

ELEVEN, GOTSA, SPINNERETTE

ERIC VALENTINE

ALL AMERICAN REJECTS, GOTSA

JAMIE CULLUM

GRAHAM PATTISON

SPIRITUALIZED, KULA SHAKER, GOMEZ

COURTNEY PINE

THERE ARE NO
COINCIDENCES

Black Magic

NOT JUST A KILLER VOCAL MIC



'The sE4400a is a beautiful microphone. I've tried it on nearly everything I can with stunning results. It will be a classic and will be used by me for a long time to come.'

JACKNIFE LEE

REM, U2, Green Day,
Snow Patrol, Bloc Party,
The Hives, The Editors

'I have used the sE4400a on acoustic guitar, electric guitar, bass, percussion. It is a true all-rounder. I can see the sE4400a becoming a requirement for all good mic cupboards.'

TONY PLATT

Bob Marley, Thin Lizzy,
AC/DC, The Stranglers,
Motorhead, Buddy Guy

sE4400a - Actual Size

- 4 Polar Patterns - Cardioid, Figure of 8, Hypercardioid, Omni
- 4 Pads and Cuts - Pads: -10db, -20db, - Cuts: 60Hz, 120Hz
- Matched Stereo Pair - Available as a Factory Matched Stereo Pair



Patent Pending

THE Reflexion Filter

The sE Reflexion Filter is the only one used by professionals including Gil Norton, Dom Morley, Don Was, Chris Porter and Tony Platt ...
FIND OUT WHY

'T' is for 'TUBE'

Introducing the **sE2200T**
The multi-award winning sE2200a is now available with a Tube.



FIND OUT MORE

0845.500.2.500
www.sonic-distribution.com

SONIC



Sound Engineering
www.seelectronics.com

THE
CLASSIC
ALBUM



© Gettyimages

Ultravox

Vienna

Chrysalis Records, 1980

By the close of the 1970s it looked like the end of Ultravox, but one song, a great album and a new line-up would change their fortunes.

Jon Andrews tracks down Midge Ure to discuss the making of *Vienna*...



These days if a band doesn't make it big after their first album, they'll be dropped like a hot potato. In 1979

Ultravox had released three and, while they had a loyal fan base and had become a big influence in other acts, they hadn't exactly set the world on fire in terms of sales. So when lead singer John Foxx and guitarist Robin Simon quit it looked like it was all over for the band.

In all of this confusion, keyboard player Billy Currie ended up working with New Romantics Visage and it was here that he met Midge Ure who was both a guitarist and could sing. "Mmm", Billy very possibly thought, "I might be on to something here..." Midge was invited to join Ultravox and their next album, *Vienna*, changed Ultravox's fortunes for good. Which is just as well, because at the time Midge couldn't even afford a phone

and the band's gear list wasn't exactly full to the brim...

"We had virtually nothing," Midge recalls. "Billy had an ARP Odyssey which is his signature solo synthesizer on which he can make all these weird and wonderful noises – he is the Jimmy Hendrix of the synthesizer! He also had an electric piano that didn't sound like a piano at all, and an Elka Rhapsody string machine.

"Chris [Cross] had a Minimoog and an EMS Suitcase synthesizer which was the one with the little pin matrix on it and a bass guitar. Warren Cann had a drum kit and a very early Roland drum machine that was all presets and we managed to scrape up enough to buy a Roland CR-78 which I think was the first ever programmable drum machine. I had my guitar and a Yamaha CS40 which was a polyphonic synth but with a single oscillator so it was very thin."

It might sound like a limited set-up but for the time this combination of guitars, strings and synths was new and it was only when the band first got together that they realised what a great combination the line-up was...

Mixed line-up

"The moment I walked into the first rehearsal room with the band, even with the limited equipment we had, it was phenomenal. It was a Rock band with electronics: me with a raunchy guitar set-up, Billy and his synthesizer, drums and synthesized bass... all of a sudden you're hearing this sound amplified and it was just magnificent, it was fantastic. So the sound was set in stone before we'd even said anything and it just kind of grew in a very short space of time.

You plug in using that kind of instrumentation and throw Billy's viola into the mix and you have a sound like nothing else. We didn't have to sit down and try to conjure up something new because it already sounded different from anything else around!" The band, without a contract, begged, borrowed and stole time in rehearsal rooms.

Eventually Chrysalis Records decided – after much nagging from the band – to put them in Air Studios for two days to see what they could come up with in a proper studio rather than a rehearsal room. The result was *Sleepwalk*, the band's first single and the track that persuaded Chrysalis to sign Ultravox and to make

an album, albeit on a pretty limited budget...

"At that point we approached the producer Conny Plank," says Midge. "He had worked with Ultravox prior to me joining and he came in after we recorded *Sleepwalk* and produced the album with us at Rak Studios. And that was it, we did the entire album in about three weeks before the money ran out!"

Producing Vienna

Even though they were now in a bigger studio, Ultravox stuck by the powerful sonic combination they had discovered in those rehearsals...

"I think Rak Studios was one of the few places in the world that had purchased a Yamaha GX1 triple keyboard synthesizer that Keith Emerson had," Midge recalls. "So they had one of those in the corner worth an obscene amount of money, like £50 or £60k, and we never even used it because the sounds we were making with our very basic equipment were so good and unique.

"Billy's ARP sounds that he made – and still makes – didn't sound like anything else. By the time you'd put them through amps and distortion units and all sorts of other stuff, it just had a screaming madness to it that you couldn't emulate on a better machine so there was no point in using anything else."

And with a new sound, producer Conny Plank – who had previously worked on some seminal Kraftwerk recording – was also in his element...

"It was fantastic," says Midge. "He didn't speak much English but we had music in common. He was an amazing producer. He produced 'sounds' so there was no 'you should play a Bflat there', that was down to the musicians. Instead he would hear things, like when we played him *Vienna* he said 'OK I hear an old man sitting at a piano in an empty ballroom who is playing the same tune over and over and he's played it many times and he's getting tired...'. And that was what he created on the piano in *Vienna*, this very haunting and atmospheric sound."

"And that's how he pictured things," Midge continues. "It was amazing. It was because Conny was an adventurous character – he wasn't old school trained. This was the guy who engineered Kraftwerk's *Autobahn*, and was friends with Holger Czucak from Can. He was

LIKE IT? TRY THESE...



Visage

OK, a real cop-out but with Billy and Midge involved in both you will love it!

ADD THESE TO YOUR PLAYLIST:

Fade to Gray; Moon Over Moscow



Depeche Mode

Songs Of Faith And Devotion

Totally different sound, granted, but SOFAD matches the great Rock and Electronic production and mix as heard on *Vienna*.

ADD THESE TO YOUR PLAYLIST:

Condemnation; I Feel You; In Your Room



Simple Minds

Sparkle In The Rain

Again it's a fierce blend of Rock with technology with one hell of a dynamic. As Midge says, it's all about live...

ADD THESE TO YOUR PLAYLIST:

Up On The Catwalk; Waterfront; Speed Your Love To Me



Sisters Of Mercy

Floodland

Ultravox could pose and postulate but not as well as this lot. Big, brash and silly all at the same time.

ADD THESE TO YOUR PLAYLIST:

Dominion; Lucretia My Reflection



Syntax

Meccano Mind

We're getting more up to date but again it's all about energy, not sound. The vibe here is probably more Electronic but it works live and has a superb Rocky edge.

ADD THESE TO YOUR PLAYLIST:

Strange Days; Tower of Power; Pray

Early Technical Issues

The recording of *Vienna* went very well – it had to as they only had three weeks – but that's not to say the band didn't come up against plenty of technical issues...

"All of the other tracks were written and played in rehearsal rooms and we'd gone out live with some of them as well," says Midge. "So time-wise the recording of the album was OK as we knew what we wanted to put down. Technically, it was a whole different ball game. None of the machines talked to each other so, for example, when it came to doing

something like *Vienna* and the viola solo we would have to manually speed up the drum machine. So you'd take a marker with a chinagraph pencil, manually speed it up, and then when it came to the slow down at the end of the solo – before it kicks back in to the 'this means nothing to me' part – you'd slow it down, stop everything, reset the tempo that you wanted it to come back in at, record the end section and then edit the master tape! So the technology wasn't around to actually do what we were trying to do."



brought up messing things up. Much later we recorded an orchestra with him and he put the orchestra through a distortion unit because that's what he did!"

Studio decisions

During the recording of *Vienna* the band spent three days writing and recording the eventual title track, a song that single-handedly went on to change their fortunes. But during the recording process, that was never the obvious outcome...

"We just didn't know if it was going to do well or not," says Midge, "it was just one of these oddities. You

So was there a definite cut-off point when the band knew the album was complete?

"When we ran out of money!" Midge laughs. "We had enough money to spend three weeks making it and to go to Conny's and mix so we were very limited in time. There wasn't a big budget and I think, if truth be told, Chrysalis were sticking their heads out quite far in signing us, a band that had already been around for three or four years, so they were quite brave."

The label's bravery certainly paid off, but only after a rather slow start... "I'm not sure anyone understood

artwork, the whole direction of it. It didn't stop when we were in the studio, we carried it right through to the extent where we ended up directing our own videos!"

And one video that you might well recall was the one they made for *Vienna* which by now they had decided was worthy of release. The video, the song, the timing and the radio and video airplay made *Vienna* a massive hit. Suddenly the Ultravox world changed...

Response

"It was phenomenal, just fantastic," says Midge. "The album had been

bobbing along quite nicely doing what you'd expect from a band at that level to do. I was living in Chiswick and couldn't afford a telephone and

They'd say 'you've done 80,000 sales today' as I was standing in a smelly phone box with no money

stick your neck out and do what you think is right and hope that the rest of the world falls in sync with you. And that is what kind of happened. You couldn't design it and say 'we'll write this bizarre oddity and everyone will think it's fantastic.' I'm sure Kate Bush didn't think that when she did *Wuthering Heights* or Queen didn't when they did *Bohemian Rhapsody*. Or maybe they did I don't know! But it certainly wasn't that way for us – we just did what we thought was right. It wasn't even until the album was finished that we thought *Vienna* should be a single. We knew it was a standout track but we didn't want to emphasise it."

what it was we were actually trying to do," Midge says on the initial reactions to the album. "The first single *Sleepwalk* was a fairly straightforward, commercial and catchy tune albeit Heavy Metal and synthesizers. It did fairly well and did its bit but I don't think the record company understood any of it. And when the second single came out we insisted on doing a video and they didn't know what that was!

"They had no idea what we were doing but they let us do it as we were quite arrogant and didn't just give them a record and stick it in a sleeve. We were on the case with all of that stuff like the photography and the

every day I'd phone the office in the morning and evening to hear what the sales figures were. They would say 'you've just done another 80,000 sales today' which was just ridiculous, especially as I was standing in a smelly phone box with no money! *Vienna* just tapped into people's imaginations. It did something but we couldn't bottle it and figure out what it was. All we did was do what we thought was right.

"It still sounds fairly fresh for what it was as it was radical at the time. A lot of people say 'oh that was a guaranteed hit' but it wasn't at all. It could quite easily have slipped through the cracks and never been

played on radio as it didn't fit the format. The fact that it became successful is nothing to do with us.

"We made it a successful piece of music the moment we mixed it but the fact that it was successful was due to everyone else, people on the radio, the fact that maybe the great British music audience was sick of what else was on offer.

"You cannot control those things. To do something at polar opposites to what everyone was doing was either stupid or brave and I'm still not sure which it was!"

Track by track with Midge Ure

Astradyne

"I recall the horror on the record company's faces when we opened with an eight minute instrumental. It was something we saw that was huge and magnificent and done on very basic equipment.

"We got some Yamaha SS30 string machines and they feature heavily on that and they became very much part of the Ultravox sound."

New Europeans

"This track is very guitar orientated. Ultravox are very much a live band and that was reflected here. It wasn't all about ambience and textures and mid European romanticism, it was about 'here's a guitar and plug it into a crunchy amp and here you go.'

"Most of our solo sections are well thought out and we did something here that used a combination of all of our elements in the band. It's important that it both lifts the spirits and works well live too. That live element keeps coming back over and over again!"

The Man Who Turned Down Vienna

"There was a classic moment in the studio, Midge recalls. "We were all a bit miffed that the UK was going through a musical dirge at the time. We wanted to be signed but not to a UK company so wanted an American deal, foolishly hoping that America would open up and accept something new! We were in a rehearsal room in London somewhere and an American A&R guy came over and sat with us in that rehearsal room for three days." That three days just happened to be the three days

that the album's stand-out moment came about...

"It was while we wrote Vienna the track from conception to exactly how it sounded on the record. We knew it was good but the reality was that it was a four and a half minute long electronic, meandering ballad with a viola solo so it was far from commercial!

"He saw the whole thing come together and he came in every day to see how it was progressing and, of course, he didn't sign us."



© Gettyimages

Private Lives

"I seem to remember that the title was nicked from a Noel Coward play, that's about it! The thing about the album was that we weren't too precious about who did what. I think I probably did this one but it was more about finding our feet and finding a role at the time."

Passing Strangers

"Again very guitar – all very minor chords but with an immense power so not 'minor and miserable', but 'minor with a grunge thrown in there'. This was more an attempt at writing something that was palatable for the public whereas *Vienna*, the track, certainly wasn't."

Sleepwalk

"Chrysalis Records said, 'just go in and do something' so we did and from start to finish over the two days that they put us in Air Studios we did *Sleepwalk*. We came out with the master tape and on the strength of

that they signed us and it became our first single."

Mr X

"It was the most Krautrock track on there and the biggest nod to what we were listening to coming out of Germany. It was the most heavily-influenced Electro Ambient track we could do.

"Warren wrote the lyrics but it's very much a Billy Currie track all about the textures between different chord changes so very much their baby as I was on a learning curve at the time."

Western Promise

"I'd been to Japan with Thin Lizzy while Billy was touring with Gary Numan and we were trying to generate some money to get Ultravox up and running. So I'd come back from Japan with a head full of machines that made funny noises.

"All this technology was new. So it was a play on that using the

sequencer and a bizarre viola and synth riff with an Eastern tone."

Vienna

"If you speak to all four member they all have different ideas how it came about. I had the hook 'this means nothing to me' and that was it. It was a classic example of four people coming up with something equally important. Take each part out and they don't work but with everyone contributing, it worked brilliantly."

All Stood Still

"We didn't know it was going to be the last track until later. An album should rely on some kind of climax like your live show and that's what it does here. It goes back to its Rock routes with a running synth bass that makes it very exciting." **FM**

WANT TO KNOW MORE?

Ultravox return in 2010 with a reunion tour. Visit their official website at ultravox.org.uk for details on dates and tickets.

NEED TO KNOW

Five essential facts about... *Vienna*

1 Originally the album was not going to be called *Vienna*, until they realised what a great piece of music they had on their hands. "I think Billy had called it 'Torque', but we scrapped that as someone said 'don't be stupid, you've got to call it *Vienna*'."

2 *Vienna*, the single, was held off the number one in the UK by Joe Dolce's novelty song *Shaddap You Face*, which has so far been covered 60 times in ten languages and is biggest selling record (according to Dolce) in Australia for the last 29 years.

3 *Vienna*, the single, was nearly cut down in size... "The record company wanted to edit it but they saw us perform it at The Hammersmith Odeon when the whole place erupted. Chris Wright, who was at the company at the time, said 'I guess I've been proven wrong then!'"

4 The police didn't like *Vienna*. "At Rak Studios we were surrounded by offices but we would set up the drum kit up in the hallway once the offices were closed. We worked it out that we had 20 minutes to make a full take before the police turned up after the complaints had started!"

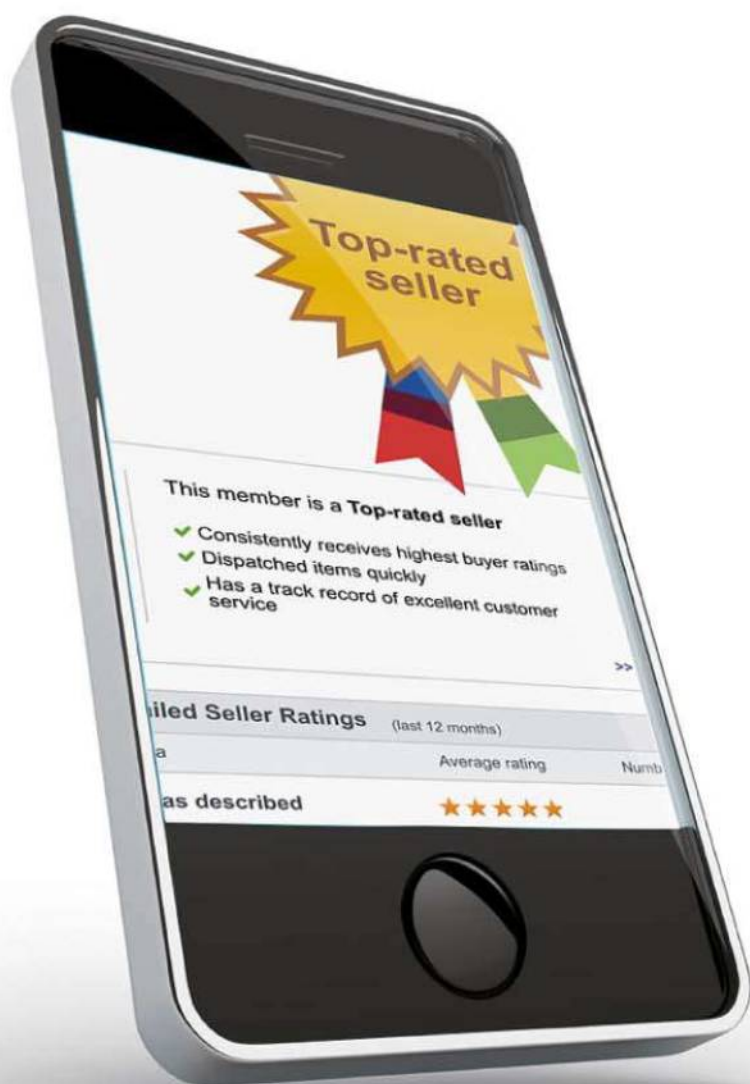
5 One of the first ideas that Midge brought into the *Vienna* sessions was a track that never came together with Ultravox but one that he eventually recorded with Phil Lynott called *Yellow Pearl*, which went on to be the Top Of The Pops theme!

studioxchange.co.uk

The UK's fastest growing Pro-Audio retailer

Want to find out how we
became a top-rated seller?
Just pick up the phone.

Call: 01462 677 333



studio>>>
XCHANGE

Studioxchange Ltd, Peak House, Works Road, Letchworth, Herts, SG6 1GB | Tel: 01462 677 333

FutureMusic Studiofile

The world's finest recording and production environments

ALL YOU NEED TO KNOW

A few essential bits of information about...

Audiocooker, Leeds, UK



ADDRESS

Unit 1 Ratcliff Mills
280 Tong Road
Leeds
LS12 3BG

WHO RUNS IT?

Steve Eaton, Studio Manager

WEBSITE

audiocooker.co.uk

TELEPHONE:

+44 (0)113 279 4644

In the era of fatcat bankers' bonuses, corporate greed and cynical exploitation of every possible revenue stream, it's refreshing to meet someone with a passion for their work which isn't solely driven by cold hard cash. Over the course of our visit to Audiocooker, it became clear that owner/engineer Steve Eaton truly loves music and has an massive knowledge of gear. "I started at thirteen or fourteen years old, running home from school, putting my gear in my dad's car and heading out gigging," he tells us. "When I was about sixteen or seventeen my band went into a studio to record a demo and I thought, I want to be in one of these places for the rest of my life. I saved up five hundred pounds and went into the studio to record a song of my own, not because I really needed to record it but because I wanted to go and learn the process."

Audiocooker has been operating for around eighteen months and aims to offer something a little different to

the competition. Not only does Audiocooker operate as a studio, it also houses a number of rehearsal rooms and acts as a base for the business' sales and consultancy operations. "I've always found it really strange in this industry that you've got people advising you about what equipment you should be using and they've never run a proper studio session in their life."

One of the main attractions of Audiocooker is the live room arrangement, with three separate rooms catering for every need. The smallest room is heavily treated with Acousti Pro products, eliminating most of the reverberation. "It's a proper live room, not a vocal booth, so you haven't got that claustrophobic feel. We're lucky compared to a lot of places to have a three metre high ceiling." Through the second live room, a larger and more orthodox space, we head up the stairs to the main live room. "It's 4,140 cubic feet, which doesn't make it the world's biggest live room but it's



Universal Audio 1176LN

"I track most vocals through the 1176, knocking a couple of dB off. Then on mixdown usually either the bass or the vocals would route through there."

TFPro P38

"I haven't made my mind up about this yet and I've had it a number of years. It sounds so nice on some things and absolutely atrocious on others!"

RME Fireface 800

"I think they're a really really underrated piece of equipment. 56 inputs and outputs on each one simultaneously and you can run three together. If you've got a lot of money to spend there are probably slightly better converters but overall I think they're phenomenal."

Mac Pro

Eight-core Mac Pro running Nuendo, Logic and Cubase: "I switched over to Mac three or four years ago. I'm an A+-trained PC technician and PCs are all I've ever known but to be honest it's the best thing I've ever done."

Manley Massive Passive

"The smoothest, best high-mid bar none. You can do quite aggressive boosts at 2-3kHz which would make your ears bleed with other EQs and it's just smooth and crunchy."

INTRODUCING...



Steve Eaton
Studio Manager



Mics and Pres

Audiocooker is stocked full of quality mics for every occasion. "For the sales side of the business, we don't stock anything or recommend anything until we've used it ourselves in the

studio," Eaton proudly claims. "That's maybe why we end up using some mics which not a lot of people have heard of. I can't say enough about the Lautens, I'm really impressed with them.

They're not cheap mics but they're certainly not overly expensive. They only do four mics in the range and they're absolutely incredible. I also like Sontronics mics. In the price

range they sit, I defy anyone to find a better mic. "Preamp wise we've got a selection. API 512Cs have got to be one of my favourite mic preamps but I love Focusrite ISA

stuff to bits too. I very rarely use the emulation on the Liquid Channel but if you switch the emulation off and kick the transformer in it's a really nice open, clean pre."

Sontronics Sigma

"A typical ribbon mic. We often use these on guitars and occasionally for a '60s/'70s drum overhead sound."

Lauten LT-321 Horizon

"This is a mentally good mic! Lauten have managed to get hold of thousands of new old-stock valves so they've got enough to last the lifespan of the product without resorting to the new Chinese or Russian valves."

Shure Beta 52a

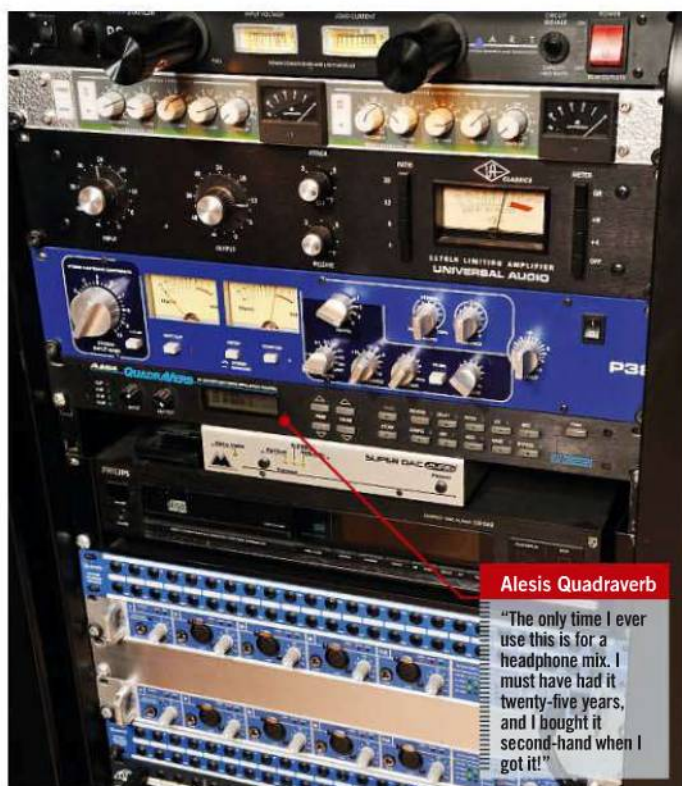
"I love this. You put it in front of a kick drum and it just sounds right without having to do vast amounts of EQing."

Lauten FC-357 Clarion

"We've got two of these for drum overheads. Not as bright as the Horizon, just a really true and natural sounding microphone."

Sontronics Helios

"This is their flagship valve mic. It's got variable polar patterns and a lovely warm sound with a clear, open top end."



enough to get some good room ambience. We tried to make the room have as few opposing walls as possible. It's a floating floor and we've got Acousti Pro treatment at one end to make it slightly deader, then Primacoustic control columns and scatter blocks at the other to make it slightly livelier."

The main live room serves multiple purposes and is equipped with a small stage and lighting rig. "It also functions as probably the best rehearsal room in Leeds," says Steve. "We've five grand's worth of PA in here, stage and floor monitors everywhere, Audix mics and a Soundcraft desk with multi-core down to the control room. It might seem a bit strange to have a lighting rig in a studio but we've tried to make the room multi-functional so it can be used by theatre or dance groups."

We try and provide facilities with top-end gear but keep it affordable

The largest of Audiocooker's many rehearsal spaces is known as the RED'y Room. "It's bright red and it's ready to go," explains Eaton. "There's two grand of new guitar amps, new drum kit, PA, bass amps, microphones... just turn up with your guitar and bass and away you go. We try and keep it as affordable as possible but keep the gear as high-end as possible." This is something of a theme for all of Audiocooker. "The main thing we try to do is provide facilities with top-end gear but keep it affordable."

Back downstairs, Eaton shows us round the enviably equipped control room, which initially appears to be based around a Soundcraft console but hides a slightly more complex setup. "As silly as it sounds, we don't really use the Soundcraft Ghost for any mixing. When I set the studio up I wanted the sound quality and signal path of an SSL Duality or an AWS 900, but I didn't have the budget. I'd already got the Ghost but it wasn't good enough for what I wanted to be doing. Then SSL released the summing module for the X-Rack and

the circuits are exactly the same as the Duality.

"When we're tracking the Ghost provides the headphone mix and a basic monitor mix for the control room. We don't use any of the channels or mic pres on it for recording. When it comes to mixdown, the Ghost effectively works as a sub-mixer for the SSL. Anything where we need to maintain phase coherency and transient response goes through the 16 SSL channels. If we need more channels then anything that has no transients and can afford a bit of smear goes through Ghost."

Monitoring is handled by Focal's Twin6 Be nearfields. "The Twins are some of the best monitors I've ever come across. I was a Genelec user but when I switched to the Twins about two years ago the amount of remixes I had to do for my own peace

of mind was scary. The Wharfedale hi-fi speakers are crap but I suppose they're my version of Auratones. They're good if you've been listening to a mix for a long time – if you play it back through them really

quietly, certain things that you haven't noticed just jump out."

Steve seems to be a particularly big fan of API's 500 series rack format. "I think 500 series hardware's starting to catch on in this country but a lot of people still haven't heard of it. Rather than having to buy an eight-way pre or EQ, you can add modules as and when you like. The API 550 EQ has to be one of the best ever. I use them on drums a lot." It's a much bigger EQ that makes his eyes light up: "The Massive Passive is just great and it has the best manual ever! You learn a lot about sound."

As well as having a loyalty points scheme for regulars, Audiocooker operate a refreshingly pragmatic approach to pricing. "We don't really have a set price as such. Just come and chat with us first, let us find out what your expectations are, what you hope to achieve and we'll try and mould something around it." **FM**

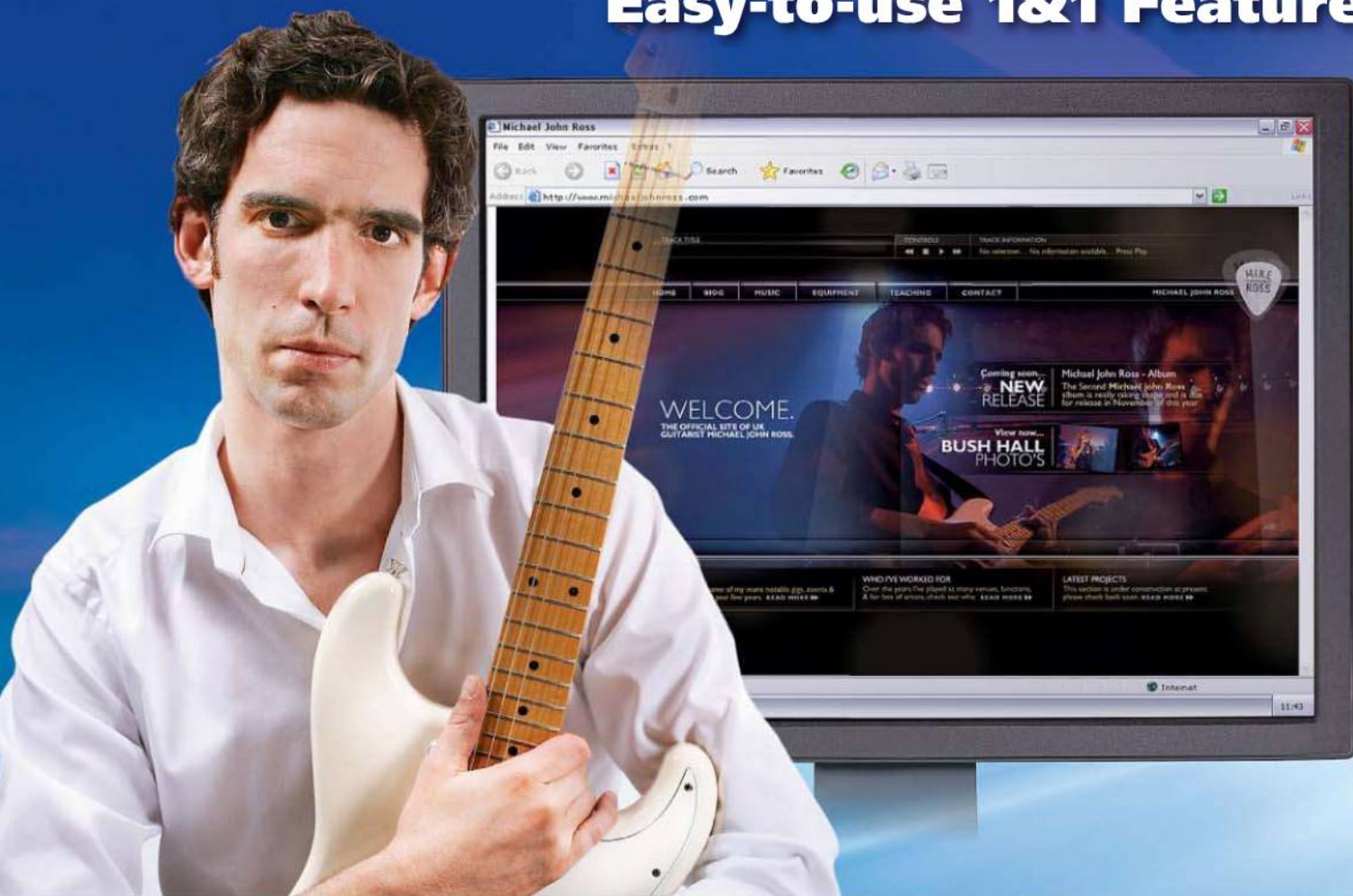
YOUR STUDIO IN HERE?

Want to show us around your studio? Drop us a line at futuremusic@futurenet.co.uk, and we'll pop round for an Appletiser.

1&1 Web Hosting

MY WEB

Easy-to-use 1&1 Features



"I need a website to showcase my music, promote my guitar tuition and team building workshops. My website does all this and more, it's the ideal platform for communicating my projects and getting bookings. 1&1 understand the importance of having a website and make the whole process easy for you, with their hosting packages you have the freedom to make your website into what you want it to be."

Michael John Ross, www.michaeljohnross.com

Go to www.1and1.co.uk for many other fantastic offers.

*Special offers available as of 01/01/2010 and for a limited time only. Get 6 months free on selected web hosting packages when you sign up for a 1 year package!
Terms and Conditions apply, please see website for further details. Prices exclude VAT.



Call **0871 641 21 21**

Calls cost 6p per minute from a BT landline, calls from other operators and mobiles may be higher.

SITE

Make Having Your Own Website Really Fun



Search Engine Marketing

Register your website with Google and many other search engines to make your site easy to find.



Photo Gallery

Showcase your pictures by having a photo gallery on your site for your friends and colleagues to check out.



24/7 Express Support

Express technical support available via phone or e-mail 24 hours a day, 7 days a week.



Showcase your projects

Upload your text, music and video projects onto your website to be downloaded or sampled by visitors.



THESE ARE SOME OF THE RECENT TRACKS THAT I HAVE EITHER PLAYED ON OR WRITTEN.

- PLAY ► ITV PLAY - SEGMENTS FROM THE ITV PLAY GAMING CHANNEL
- PLAY ► FLUNK GROOVES - SAMPLES FROM THE TUITION BOOK
- PLAY ► BLUES CONNECTION - LIVE MEDLEY
- PLAY ► BLUNTER BROTHERS - VARIOUS SAMPLES

Many packages now 6 months free!*

1&1 HOME PACKAGE

The complete solution for your perfect website:

- 1 .uk Domain **Included**
- **New:** 5 GB Web Space
- **Unlimited** Traffic
- Up to 400 IMAP/POP3 E-mail Accounts
- 1&1 DynamicSiteCreator 12 pages included

- 1&1 WebsiteBuilder 12 pages included
- 1&1 Blog
- 1&1 Photo Gallery
- 1&1 easyShop
- Search Engine Optimisation Tools
- 24/7 Express Support

£0.00

for 6 months, then only £4.99 per month*

~~£4.99~~
per month

or visit us now www.1and1.co.uk

1&1

Fedde Le Grand, DJ and Label Owner

Tell us about your three favourite bits of equipment in the studio and why?

"My three favourites are the UAD-2 card, my Waves plug-ins and my [SSL] Duende. They make life so much easier. It takes some studying to get all the possibilities – if you ever find them all – but it's really worthwhile. It definitely pays to know your equipment inside-out so you get as much out of it as possible."

Who is the biggest production geek on the label and why?

"That would either be Raf [Jansen, co-owner and producer] or me. We both go to the limit with what we're doing, we both don't know when to stop, and we always have to squeeze the last bits out of our productions. We're both perfectionists."

Is there a record you've heard where you thought 'how did they do that?'

"I rarely come across things that I don't know how they are done. I think that's one of the reasons that I'm producing such a wide variety of tracks, as I'm not limited to just one trick. Like I said, if you know your own studio like the back of your hand, you can usually figure it out or recognise the process."

Where do you see Dance music going?

"In general, when the instruments you work with get better, the goods produced will improve as well. This won't be different for producing music. If, sound-wise, we're able to produce at a higher quality, the experience for the people on the dancefloor will improve as well."

ON
THE
RADAR

Flamingo Nights

This year's ADE in Amsterdam saw the brilliant Flamingo Recordings host one of their incredible parties to a sell out crowd. Staged at the huge Escape Club in Amsterdam, all the Flamingo crew were in attendance. We fought our way backstage to grab a chat with the Flamingo DJs and find out about their favourite bits of kit in the studio...



Funkerman, DJ and Label Owner

Are you a DJ or producer first?

"Actually both. I started my career as a Hip Hop DJ and producing the beats for other people was, of course, a big part of that."

Tell us about your favourite bits of equipment in the studio?

"I can't work without a computer, that's the heart of the studio. Cubase is my main program. The speakers and amplifier are very important for me. I need to be able to hear everything as clearly and truthfully as possible. I moved from my old studio almost two years ago to the one I use now."

Whose production skills do you admire the most at Flamingo?

"Raf, definitely! Raf is my studio partner and I can tell you this guy has

such good hearing, it's beyond good! He can seriously hear if the percussive element is in key with the accuracy of one Hertz! He is the first one who knows all about the newest software products and gadgets. He always knows which product is the best for me to work with."

Is there somebody at Flamingo who has a particular piece of equipment that everyone wants to borrow?

"Actually no equipment, but I want to borrow someone else's ears sometimes. We invite people in our studio quite often before we finish a track to ask for their opinion."

"For example when someone from the office walks in, they can hear something that can be better because they have a fresh point of view."



Patric La Funk DJ, Producer

Are you a DJ or producer first?

"I think that was around the age of 15 when I started spinning the old wheels. Then around 2000 I started to build my own small studio with a JP-8000, an E-mu ESI4000, and an analogue Behringer mixing console."

Tell us about your three favourite bits of equipment in the studio?

"I love the fact that the Virus is totally integrated as a plug-in. I love the unique sound of it. [reFX] Nexus 2 is the most effective soft synth, if you need a really good sound, fast."

Whose production do you admire?

"I love Fedde's sound in general! The unique sounds he uses and the fresh ideas in arranging tracks."

Is there a record you've heard where you thought, 'how did they do that?'

"There are always new records coming out with cool and new ideas. I am really into groovy productions so I'm often asking myself how some people get a certain groove into a production. That's what I really like. A good example is Marcello V.O.R.'s remix of *Wall-E* by Synthetic"

Where do you see Dance music going?

"I am really hyped about the new Pioneer CDJ-2000 players. Furthermore, I'd really like to add more to the sets like effects, filters, loops and so on. A mixture between a live act and DJing is cool as long you are not hanging in front of a laptop the whole time."

Bjorn Wolf, DJ, Producer

Tell us about your three favourite bits of equipment in the studio and why?

"I like the ReFX Nexus a lot for synths and basslines because the quality of the samples is really good. And I prefer Native Instrument's Battery for building and creating my beats. It's just so easy to fill in the cells with samples and just keep adding them until you are satisfied."

Whose production skills do you admire the most at Flamingo?

"I can't say that I just admire one

of the guys because I learned a lot from Funkerman, Raf and Fedde! They all have a different way to achieve what they want in the studio. But the basics of building a track are the same! For vocals and chords Raf is the one I admire the most! For creating grooves and beats Funkerman and Fedde are wizards"

Is there a record where you thought how did they do that?

"It was the remix Funkerman did for Jaimy & Kenny D *Keep On Touching Me*. I really wanted to

know how he got the bleep sample in the intro which goes up and down! When I heard it for the first time it just kept coming back in my head for days!"

Where do you see Dance music in five years?

"Dance music is constantly changing, but I actually think and hope that the Tech-House sound will get more attention in the forthcoming years. Because of the major development in software and equipment I guess the sound systems will be developed too."

Hardwell, DJ, Producer

Are you a DJ or producer first?

"In my opinion I'm a producer first. DJing is a way for me to expose my new productions to the audience."

Tell us about your three favourite bits of equipment in the studio and why?

"First of all my Dynaudio monitors then secondly my Apple 30" display which was the best thing I bought last year. It really improved my workflow by having so many pixels! Then in third place my Virus TI synthesizer."

Whose production skills do you admire the most at Flamingo?

"To be honest I admire every producer at Flamingo. I admire the whole Flamingo concept. I've seen these guys follow their dreams with their own thoughts and feelings and look where they are now."

Who is the biggest production geek on the label and why?

"That should be Funkerman. I really love his workflow and thoughts about making tracks. He is a true perfectionist – he can

continue fine-tuning for weeks. But I guess in the end we're all geeks, nerds and perfectionists."

Is there somebody at Flamingo who has a particular piece of equipment everyone loves?

"I don't think so, but I guess everybody wants to borrow Fedde's entire studio [laughs]."

What would you advice be to new producers and DJs?

"Always try to make your own drum loops instead of using sampled beats." **FM**

THE LITTLE VILLAIN GROWS UP

"THE ADDED SAMPLE MEMORY AND KEYBOARD REALLY PLACE THIS WITH THE BIG BOYS." - FUTURE MUSIC 211



NEW RRP
£599
LIMITED TIME OFFER

NEW WALDORF LARGO SYNTHESIZER FREE 30 DAY TRIAL AT HANDINHAND.UK.NET

Many producers and synthesizer enthusiasts asked for a full-blown Waldorf Synthesizer for their virtual rack. Waldorf listened, and now they proudly present Largo. Largo is the first pure software synthesizer with Waldorf DNA. Largo mirrors the technology used in Blofeld and Q hardware synthesizers. As for every Waldorf instrument, ergonomics are a core feature on screen as well. Your eyes will be pleased with a clearly structured, graphical user interface.



WALDORF BLOFELD KEYBOARD INCLUDING FREE WALDORF EDITION INTEGRATED KEYBOARD AND 60 MB SAMPLE MEMORY

Not only on the outside did he gain weight, also his inner qualities have seen a remarkable step-up: besides the virtual-analog synthesis and the classic wavetables it now sports a whopping 60 megabytes of sample memory. Just imagine to add a vocal-like noise spectrum to a typical Wavetable pad, spice-up a virtual-analog solo sound with a strong attack sample or just process any other sample with the countless oscillator and filter modulations.



BLOFELD MODULE INCLUDING LICENSE SL SAMPLE UPGRADE NOW £395 INC VAT

The Waldorf Blofeld synthesizer module combines incredible-sounding analog-modeled circuitry with the power, convenience, and accessibility of modern digital features.

"LARGO IS PROBABLY THE EASIEST TO USE, BEST-SOUNDING AND MOST VERSATILE SOFT SYNTH I'VE USED TO DATE" - FUTURE MUSIC 217

NEW AUDIOFIRE PRE8 NOW SHIPPING 16 IN 16 OUT FIREWIRE AUDIO RECORDING WITH 8 BRILLIANT™ MIC PREAMPS



The AudioFire Pre8 offers the same high quality hardware and console software as the original AudioFire 8 and AudioFire 12, but with 8 auto-sensing universal inputs featuring Echo's Brilliant™ preamp technology. In addition, the AudioFire Pre8 features 8 balanced 1/4 inch analog outputs, 2 channel inserts, phantom power, 2 stereo headphone outputs with volume knob, main output volume knob, ADAT (with S/MUX for 96 kHz support), S/PDIF and MIDI I/O. Inputs 1 and 2 feature premium preamps with options for phase reversal, low impedance, direct input, 80 Hz rolloff and pad.

NEW ENHANCED AUDIOFIRE 8 ADAT 16 IN 16 OUT FIREWIRE AUDIO RECORDING WITH PREAMPS



AudioFire8 offers the same high quality hardware and software found in our popular Layla3G product, but with the addition of a FireWire interface. With the AudioFire8 you can record 24 bit 96kHz audio with low latency monitoring.

ECHO

WHEN YOU NEED TO GET THE JOB DONE



AUDIOFIRE 4: offers a compact audio interface with all the connections you need for your studio. With the flexibility of FireWire and bus power, you can also take the AudioFire4 on the road. The AudioFire4 can record 24 bit 96kHz audio with low latency monitoring.

INDIGO DJX: Finally an ExpressCard solution for the digital DJ. Indigo DJX offers two independent stereo 1/8 inch analog outputs; one for setting up your cue mix on a pair of headphones, and the other for the house mix. Each output features 24-bit/96kHz converters for the quality you deserve.



MIA MIDI: offers a pair of balanced 1/4 inch analog inputs and outputs and operates at the +4dBu levels used by pro-audio gear. It combines this with 24-bit/96kHz converters and 106 dB of dynamic range for the quality your recordings deserve. Also included is an S/PDIF digital audio interface.

GINA 3G: Gina3G is the third generation of our budget priced, professional quality digital audio recorder. The original Gina premiered seven years ago to critical acclaim and since then we've been perfecting the art of making high quality recording products at affordable prices.



ADVANCE YOUR CRAFT, STAY CONNECTED NEW CATALOG AT HANDINHAND.UK.NET

During 25+ years in operation, Hosa Technology has kept pace with the latest technological advancements. Professionals and enthusiasts alike look to Hosa for products that enable them to advance their craft. With thousands of items ranging from stage snakes, patch bays, video distribution amplifiers, and fiber optic cables to headphones, power supplies, and maintenance accessories, Hosa is committed to providing today's musicians and audio/video professionals with the right tools for the job.

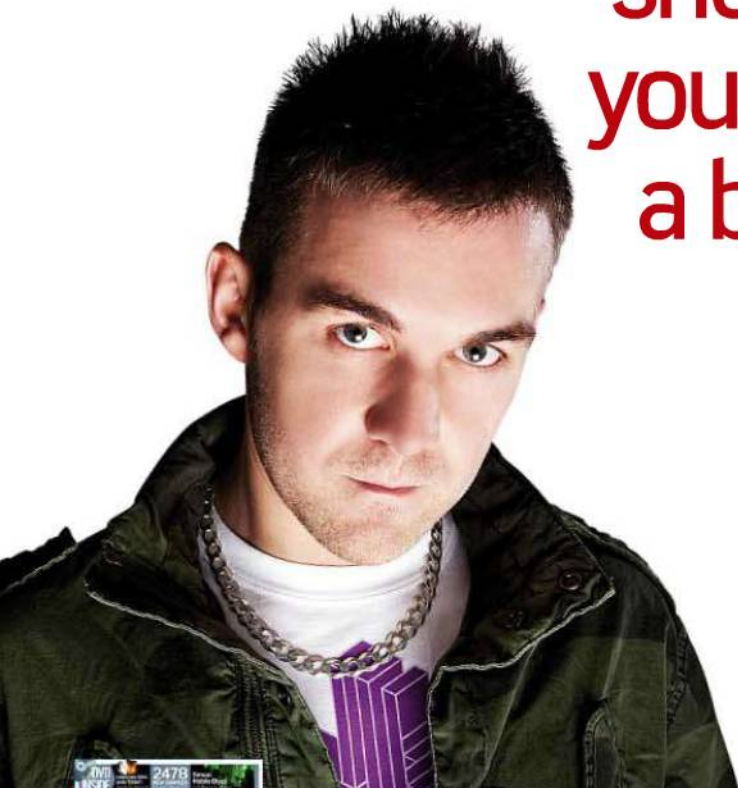


HAND IN HAND
DISTRIBUTION

For more information regarding any of the featured products, please contact us on the details below:
WWW.HANDINHAND.UK.NET - EMAIL: INFO@HANDINHAND.UK.NET - TELEPHONE: 01752 696633

If you're serious about music production, *Future Music* should ALWAYS be in your kit list. It was like a bible to me when I was starting out!

Funkagenda
Artist and Producer



WHY WE'RE NO1

Since 1991, *FM* has featured every incredible piece of new gear and been in the studio with every hi-tech recording artist who's setting the pace. Our reputation for behind-the-scenes access and in-depth analysis is second to none. No-one is better primed to help you make great new music now and into the future!

FutureMusic®
Technique and technology for making music

Save 25% on the cover price!

Save over £19 on the cover price with a 13 issue subscription
Subscribe today for **only £14.60** every 3 months by Direct Debit!*

ORDERING YOUR SUBSCRIPTION IS EASY



myfavouritemagazines.co.uk/mus/P039

Or call: 0844 848 2852

Lines are open 8.00am-9.30pm weekdays and 8.00am-4pm Saturdays (GMT). **Quote code P039**

**Outside
the UK?**
Flip to **p130** for
our special
subs offers

Terms and Conditions: *This offer is for new UK subscribers paying by Direct Debit. You will receive 13 issues a year. Minimum subscription term is 12 months. If at any time during the first 60 days you are dissatisfied in any way please notify us in writing and we will refund you for all un-mailed issues. Details of the Direct Debit guarantee are available on request.

Arturia®

MUSICAL INSTRUMENTS

Gang of groovemakers



ANALOG FACTORY
hip hop

Lounge Lizard
session

MODERNBEATS
MODERN TOOLS & HIPHOP PRODUCTION
HIPHOP SOUNDS



The Hip Hop Producer is the ideal solution for anyone with a passion for Hip Hop production. Live Life 8 Arturia Edition is the reference software environment for writing, producing and performing music. Analog Factory Hip Hop Edition brings to you 250 high quality synthesizer patches dedicated to Hip Hop (including Minimoog and ARP 2600 classic sounds). Lounge Lizard Session delivers 4 electric pianos (including Wurlitzer and

Rhodes) with outstanding sound quality, action and feel. The ModernBeats Hip Hop bank comes with more than 1200 samples and 30 MIDI loops, all dedicated to Hip Hop production and made by Los Angeles based Hip Hop masters. Four products bundled in one box. Four tools for the next generation of Hip Hop legends to pursue their passion.

www.arturia.com

Love music? Love playing music? Then log on to MusicRadar for all the best news, reviews and professional tuition

Dedicated to independent buying advice, the latest product news and expert tuition, MusicRadar is the number one website for musicians of all abilities.

MusicRadar is a community. Our reviews are enriched by user reviews, our news stories and blogs are constantly commented on and our forums are full of the banter you

would expect from musicians talking about the thing they love most.

Add all that together and you get a thriving, vibrant community of like-minded people all talking, arguing, voting, listening, watching and reading about the one thing that unites them all – making music. We hope you like it!

NEWS EXTRA! EXTRA!

Whether you're a young guitarist, a bedroom DJ, an aspiring guitarist, a laptop lover or weekend producer, MusicRadar is the only place to go for the hottest news. We've got the latest gear, software, studio and artist news from around the world, updated 24/7.

REVIEWS BUYING GEAR? READ THESE

Always written by musicians for musicians, our gear reviews are the best on the web – think expert buying advice, passionate user reviews plus studio quality audio and video clips. Only MusicRadar enables you to hear and watch a piece of gear in action before you head to the shops – all that plus the best reviews around.

PRO TUITION COME AND PLAY!

MusicRadar features step-by-step projects for beginners and experts alike. Check out our How To... walkthroughs or just grab something from our weekly Free Music Software round-ups.

COMPETITIONS WIN ££££ STUFF!

Like free stuff? MusicRadar is chocka with the best gear competitions. Over the last few months, we've given away amps, guitars, monitors and more!

EXPERTISE FROM THE MAKERS OF FUTURE MUSIC

Who writes this stuff? Experts that's who! MusicRadar boasts the same professional critics who write for Future Music plus writers from such market-leading titles as Total Guitar, Computer Music, Guitarist, Rhythm and Guitar Techniques.

NEW GEAR HOT KIT ALERT!

MusicRadar always features coverage of the coolest kit. This month, along with reviews of the latest Native Instruments releases, we feature the 10 controllers that are as cool as the Tenori-on. You'll need one of these!

IT'S UP TO YOU! WHAT YOU LIKE, HOW YOU LIKE IT

Electronica, rock, hip-hop, indie... Whatever music you like, create or play, MusicRadar has something for you. Our all-new How To series shows you how to recreate the sounds of the stars, from Justice and Kanye West to Beyonce and The Prodigy.

IN THE KNOW MUSICRADAR = FIRST FOR NEWS

MusicRadar's news section is ideal for Future Music readers. Here are just a few highlights...

- **MASH-UP!** It's Radiohead vs Jay-Z as Jaydiohead returns!
- **QUESTION!** We asked which plug-ins couldn't you live without. You replied!
- **REMIXED!** Top producers reveal the 14 greatest remixes ever!
- **FREE!** Our weekly round-up of free music software includes Krimal's Octave Kitten-inspired Felix VSTi.

Would you have voted for Armand & Tori?



Albums



If it's hot, it's here. Welcome to this month's new releases, all lovingly rated by the *FM* review crew

Album Of The Month



Four Tet There Is Love In You

Domino



Kieran Hebden, aka Four Tet, has a remarkably low profile for a man with such an impressive CV. From touring with Radiohead, producing Beth Orton and collaborating with

Burial to remixing everyone from Aphex Twin to Black Sabbath, Hebden's distinctive melodic electronic style has won him widespread critical acclaim over the last decade.

There Is Love In You is Hebden's fifth full album under the Four Tet name, the first since 2005's *Everything Ecstatic*. In that time, his style has increasingly moved towards the dancefloor, no doubt partly inspired by his residence at Shoreditch's Plastic People. On the standout nine-minute epic *Love Cry*, the shuffling beats and droning samples of the intro stay just the right side of minimal, slowly evolving until the vocal sample drops and builds to a climax.

Unfairly pigeonholed in the past as 'Folktronica', the production style on *There Is Love In You* still mixes acoustic and electronic elements to good effect but tracks such as Plastic People show how much Hebden's style has in common with the likes of emerging artists such as Joy Orbison and Darkstar, combining pulsating 130bpm beats with lush, almost organic-sounding instrumentation. This album should finally cement Four Tet's reputation as one of the most consistently interesting members of the British Electronic music scene. **Greg Scarth**

ADD THESE TO YOUR PLAYLIST:

Love Cry, This Unfolds, Plastic People

9/10

TBA_Natalie Beridze

Pending

Laboratory Instinct



Pending sees this Georgian female Electronic artist travail a variety of generic styles and moods, although no description really captures the depth, integrity and subtlety of Beridze's work.

To "Hell Risers" opens with murmuring keyboard tones that weave around Beridze's own glitch-programmed vocal. An Ambient Electronic track that becomes increasingly coherent, as if awakening from a dream – as with much of Beridze's sound, nothing is obvious – melodies are muted, rhythms understated, and the music

and lyrics merely suggestive. *Fallin Suga* is the most obvious take on the album, a straightforward Pop song featuring untampered vocals lit by bright, multifarious keys and peculiar samples. Meanwhile, the filmic *Isole* is a bizarrely off-kilter synthesiser piece – full of grace and romanticism, yet deliberately contrary to the thundery Techno of the following *Everything Pushes Me Further Away*.

Guiding the listener through a variety of ambiances and landscapes, *Pending* is a gem of an album, and Beridze a fine discovery. **Danny Turner**

ADD THESE TO YOUR PLAYLIST:

Fallin Suga, Isole, Dancing In Love Vox

8/10

Bomb The Bass

Back To Light

!K7



Bomb The Bass architect **Tim Simenon** returns with a new writing partner, Brazilian Techno producer Gui Boratto.

As neither artist is comfortable in front of a microphone, the duo enlisted a variety of contributors to vocalise their Dance-Pop collaborations. These include alternative singer Kelley Polar and long-standing Bomb the Bass collaborator Paul Conboy. Depeche Mode's Martin Gore also makes a guest appearance.

The music has a highly understated feel, the songwriting never stretching

itself beyond brooding, melancholy fare, with the tracks embroidered to create dusky atmospheres.

My main complaint is that *Back To Light* is rather repetitive and unimaginative – practically all the songs carry the same tempo and mood, with a sort of uniform nest of bubbling electronics in the background. Martin Gore's unmistakably leftfield keyboard playing on the final track, *Milakia*, is a breath of fresh air. That's not to say *Back To Light* is negligently produced, but rather lacking in dynamism, despite a few pleasant slow burners.

Danny Turner

ADD THESE TO YOUR PLAYLIST:

Milakia, Price On Your Head,

X Rays Eyes

6/10

It's On Our iPods



© Alisa Jefferson

Animal Collective

Fall Be Kind

Domino

Animal Collective's relentless work over the last decade has seen them release eight albums of huge diversity and consistent

creativity. Their current sound, showcased on last year's outstanding *Merriweather Post Pavilion*, draws heavy influence from 60s Pop and Rock, displaying due deference to classic psychedelia at all times but with an originality which means it could never be dismissed as retro rehashing. The five tracks on the *Fall Be Kind* EP pick up where Animal Collective last left off: opener *Graze*'s swirling synth and vocal intro giving way to a Beach Boys-esque refrain. The EP's standout track is *What Would I Want? Sky*, notable for featuring the first officially licensed

sample of the Grateful Dead. This one song shows off everything there is to love about Animal Collective, from the tense build-up to the awkward loping rhythm which somehow makes perfect sense in the context of a 21st century psychedelic Pop song. Beyond the instant gratification, *Fall Be Kind* offers a series of musical and lyrical elements which stand up to repeated listening.

This is the sound of a band at their peak, throwing all of their musical influences into the pot and coming up with something truly original and exciting. **Greg Scarth**

ADD THESE TO YOUR PLAYLIST:

Graze, What Would I Want? Sky, On A Highway

9/10

Bass Clef

May The Bridges I Burn Light The Way

Blank Tapes



Ralph Cumbers has a proclivity for long album titles, as his previous Bass Clef

record *A Smile Is A Curve That Straightens Most Things* ably demonstrates. The follow-up sources its ideas from a similar pool, with Cumbers assembling bass and beats on a four track cassette, then into the studio for some spit and polish.

For all its raucous energy, *May The Bridges I Burn Light The Way* is not a Dubstep or Drum 'n' Bass album, but a hotchpotch of pulsing cyber riffs set to rocking beats – sewn together by a wealth of additional percussion.

At first, *May The Bridges...* merely sounds like a boisterous street carnival, but numerous tracks develop to create more spatial dimensions. The restless Hackney Lionheart adds trombone, which fleshes the sound out to provide a muddy Jazz soup.

Other tracks do drift into Dubstep terrains, with quivering bass tones oozing low-end vibrations atop multifarious, almost tribal, drums sounds, but there's a distinct lack of memorable chord arrangements throughout, while the sporadic use of vocals is for effect only.

There are exceptions, such as *Promises*, with its welcoming piano melody, and the ambitiously ethereal 12-minute *Broken Love*, but any album with copious amounts of cowbell is always going to struggle to sound contemporary. **Danny Turner**

ADD THESE TO YOUR PLAYLIST:

Broken Love, Halliwick, Promises

5/10

John Foxx & Louis Gordon Shifting City (Re-issue)

Edsel



The prolific shadow man of Synth Pop, John Foxx, releases another series of

re-issues, this time focusing on his work with Mancunian producer Louis Gordon. Perhaps the most inspiring of these releases is *Shifting City*, Foxx's first release for a decade following early solo albums – although this record is now 12 years old itself.

Working alongside Gordon, this is perhaps the closest Foxx has come to repeating his excellent 1980 solo album *Metamatic*. *Shifting City* revisits similar styles and themes to produce static, minimalist Electronic Pop, with Foxx's disconnected vocal delivering his usual assertive proclamations amidst a product line of whirling, motoric arrangements. Three additional bonus tracks are

included alongside the original album, and a second disc – *The Omnidelic Exotour*. This 13-track collective documents new arrangements of numerous classic Foxx tracks, such as *20th Century*, *Burning Car*, and *Overpass* (renamed from the former hit single, *Underpass*). *Omnidelic Exotour* is equally listenable as the first disc, with Foxx revelling in some stealthy remixes.

Although intended for the live circuit, his reinterpretations are wholly studio-based and serve as a prescient update on former works. *20th Century* is superbly re-adapted – likewise *Overpass* and the reverberating chill of *This City*. As a double-pack, there's plenty of delight here for Electro-Pop raconteurs. **Danny Turner**

ADD THESE TO YOUR PLAYLIST:

20th Century, Here We Go, This City

8/10

FM Belfast How To Make Friends

World Champion Records



This quirky Icelandic duo of with Árni Rúnar Hlódverson and Lóa Hlin Hjálmtýsdóttir

started their musical career as a carefree whim, when they decided to write some songs as a present for a friend. It wasn't long before the duo were kicking off the FM Belfast idea as a studio project throughout 2005. Then, in 2006, the duo expanded into a fully fledged live project with their debut gig being at the Iceland Airwaves Festival.

Their debut album *How To Make Friends*, is an appealing record that

initially feels far too lo-fi and jovial to be worth any long term listening. But, after a few plays, the innocent and playful originality of the album really begins to shine through.

It's loose enough to feel organic and the catchy melodies and cheap synth sounds somehow fuse together and form a sort of musical teenage floaty gaze. Introducing loose cover versions of *Pump Up The Jam* and *Killing In The Name Of* will certainly please the HypeM crowd and they are the icing on this oddly shaped musical cake. **Chris Barker**

ADD THESE TO YOUR PLAYLIST:

Synthia, Pump, Underwear

7/10

Kasper Bjørke Standing on Top of Utopia

HFN Music



Danish export Kasper Bjørke has been doing his thing for quite some time now, with his name circling the Electronic music scene for over a decade with releases on various high-profile labels and a bucket full of remixes swinging from his belt. *Standing on Top of Utopia* is Bjørke's sophomore release, and it's filled to the brim with collaborators from Louise Foo, Jacob Bellens and Tomas Höfding from the excellent WhoMadeWho.

Standing on Top of Utopia swarms around genres, rarely settling on any in particular – attributed as much to Bjørke's choice of collaborators as it is a sign of his varied work as a producer. Stand-out track and first single *Young Again*

bounces with a Disco groove but retains a solemn feel, while *Efficient Machine* is almost Pop in its chord and song structure and melody, while maintaining a funky fresh rhythms. Almost instantly though, following track *On Melmac* jumps back to a grimy wobbly dancefloor banger.

Prancing between genres in this way can sometimes confuse and annoy due to a lack of consistency, but Bjørke does a great job of tying in a regular trait in each track, be it the arpeggiated bassline, the tongue-in-cheek vocal style or even just the analogue synth stylings lacquered across the record.

Kasper's cover of The Rolling Stones track *Heaven* is yet another example of his versatility while *Fido & The Friendly Ghost* grasps a more bouncy Minimal vibe. The one thing that is definitely consistent though, is the production.

Often deep and rounded, crisp and tight, Bjørke clearly knows his way around the studio and some of the weaker tracks are elevated because of it. All in all, *Standing on Top of Utopia* is more a catalogue of works than an album with a narrative.

That's not to say there's not a lot to like – it's a true analogue salute and fans of Trentmøller (who's label Bjørke is releasing on) and similar artists will definitely fall for the record. Bjørke has definitely done enough to remain a standout artist in a crowded scene.

Declan McGlynn

ADD THESE TO YOUR PLAYLIST:

Young Again, Alcatraz, Heaven

8/10

Compilations

PICK OF THE MONTH

Ewan Pearson We Are Proud Of Our Choices

Kompakt



A fine helping of 18 tracks from one of the finest producers around. It's broody,

deep and tinged with a grown up hipster-disco edge. Pearson proves he is still a man of impeccable taste. **Chris Barker**

Global Underground Presents

Carl Cox – Black Rock Desert

Global Underground



Taken from a set at *The Opulent Temple* in The Black Rock Desert,

this double-CD is jammed full of exclusives and is very difficult to flaw. If you like Dance music – you'll love this. **Chris Barker**

Balance Presents Electric_05

Mixed By Emerson Todd

Balance



This Antipodean DJ has been hand-picked to serve up some of

the freshest Deep, Progressive and funky rolling Techno. It's deep, tribal and cooler than a carrot on a snowman. **Chris Barker**

Bob Blank

The Blank Generation Blank Tapes 1975 – 1985

Strut Records



A selection of gems from Bob Blank's renowned Blank Tapes den. It's

cheesy Disco and horn-spatteredly sweet music won't be for everyone, but if you're into NY Disco, this is a must-buy. **Chris Barker**

Cr2 Presents Live & Direct

MYNC vs Harry Cho Cho Romero & Jose Nunez

Cr2



MYNC serve up choice tracks from Arthur Baker and Felix Da Housecat

on CD1, while CD2 delivers more House bangers. A bonus of seven unmixed tracks make it a nice package. **Chris Barker**

Retro Respect



Madonna Music

Warner Bros

A production masterpiece, served up by French master Mirwais. Based around the blueprint of Mirwais' own album, *Production*, the Parisian Electro Pop came complete with auto-tune, vocoders and hard edits that first marked Madonna's ability to cross Pop over onto tough dancefloors. Although the strange cover version of *American Pie* is very out of place, using Mirwais even gave Madge her next fast track to cool: Stuart Price. Fantastique! **Chris Barker**



© Gettyimages

Joris Voorn



In a short space of time, this young Dutch DJ and producer has become a staple fixture in the Beatport top ten and one of our most requested studio interviews. **Chris Barker** hit the canals of Amsterdam and sailed up to his impressive home studio

Even though the humble Roland MC-303 might not have been favoured by the *FM* team over the years, it's certainly a device that seems to have kick-started the careers of a few famous producers – and Joris Voorn is no exception. Starting out as a DJ in 1996,

Voorn was born into a musical family and moving from DJing to musician and producer was a natural progression. With the MC-303, he started out on a road that would eventually make him one of the most in-demand DJs and remixers of today. Recent tracks such as *Chase The Mouse* and *Sweep The Floor* saw him cross over into commercial territory and more success followed, seeing the latter track hit Beatport's No.1 spot. Voorn has also become the master of his own musical destiny, setting up his own label, Rejected, in 2006 with his friend Edwin Oosterwal. So it was with great intrigue that *FM* climbed the skinny steps to his loft studio to gain an insight into his working methods.

Inside the light and airy room was an interesting mix of hardware and software centred around some Genelec 1031a monitors and a Mac running Logic. Although predominately software based, Voorn has a healthy collection of hardware synths and outboard that seem to be used mainly for inspiration. Voorn's working methods seem to be a bi-product of his previous work and studies as an architect – creative and experimental while remaining calculated and patiently routine. So, with such a well-scheduled artist facing us, it was time to get started...

FM: What's your approach to music, gear-wise?

Joris Voorn: "I do love the real instrument part of having hardware, even just the aura of having these bits of equipment around me just makes me feel like I'm in a real studio. Having the opportunity to put signals from Ableton through nice bits of hardware and generating new sounds this way is really nice.

"I've recently reconnected my turntable and have been going through my vinyl samples again. Drum machines can be a bit dull sometimes and it's good to sample a hi-hat or some hits from old records. I try not to sample from Dance records, and if I use commercial sample CDs I always end up editing the loops or using tiny fragments from them, such as just a snare or hi-hat. I'm quite pragmatic about the way I use things in my tracks. If it's meant to be just a dance floor track that's not going to be around for eternity, then maybe I'll use loops more frivolously. But if it's for an album track, then I need to make something that I'm proud to look back on."

Has your work developed because of better equipment or experience?

"Experience counts, but definitely equipment also. Plug-ins and things like Ableton totally changed the way I work. The speed at which I can work with Ableton, trying out new ideas and manipulating audio is just fantastic."

Where do you think the future of music making is heading? Do you think new technology inspires new genres and sounds?

"Absolutely. For instance, look what a simple thing like sidechaining did to Dance music. Technology can make people lazy, where producing sometimes becomes more like making a collage of presets and samples rather than making your own melodies and arrangements. But someone like James Holden has used modern music technology to an extent where he created a new genre in the early '00s, being copied by many until today. In the end it's only about the music though. It's like the old saying, if it sounds good then it is good."

Can you talk us through the creation of your hit *Chase The Mouse*?

"Oh boy, where do I start? Well, it actually is a very simple story. I was working on this groove, very tight

beats with a driving bassline and some little effects here and there. I also had some pads and strings going that made up the melodic elements of the track. It wasn't really getting there, so I started browsing iTunes for some inspiration. This is how I stumbled upon Moroder's *The Chase*, an absolute favourite of mine. It fitted so well with the track I was working on, the bassline matched perfectly, and the pads and strings too. I used a one-minute sample that came in during the break and stopped when the beats came back. The track sounded fresh and maintained the original tightness I was looking for. I tested the mix in my summer DJ sets, and the reaction was great."

You're using a digital DJ setup now, right?

"I started playing in Traktor in early 2008 and it was the best DJing decision I ever made. I use an Allen & Heath Xone:1D and a Lemur with a four-deck set-up and I love it. I don't use CDJs at all anymore."

Will the new Pioneer CDJ-2000s not tempt you?

"No, they're not for me. I'm really happy with my setup and all the functions I need are mapped to the

Lemur. I don't see the point of jog wheels anymore and I'm very happy that I've left this really handicapped way of playing behind me. I need my four decks, otherwise I feel really limited! Even when I do a studio radio-mix, I'll use four decks just to add little loops and other grooves."

Ever considered Ableton for DJing?

"I do use Ableton when I play live, but Ableton isn't a DJ product in my opinion."

So how do you justify your fee as 'Joris Voorn Live' when you're just opening a different program on your laptop?

"[laughs] Good question. When I play live my fee is usually higher and my set will usually be shorter."

I guess Ableton is a more expensive program, right?

"[laughs] Yeah, I need to earn my money back on that! I used to use two Yamaha SQ700's MIDI sequencers and mix them with two CDJs so this felt much more live, controlling the effects and CDJs. When I switched to Ableton Live this changed the live concept completely. But the important

difference I guess is that when you see 'Joris Voorn Live', you'll only hear original material. That is the main difference between live and DJing, but I agree the line between playing live and DJing is becoming much vaguer."

Would you take synths and hardware out?

"Not anymore. What will it do for the people that are dancing? I try to keep everything transportable in hand luggage. The visuals side is the main thing that I'm working on to improve for the live show."

Would you say you've stopped buying analogue synths now?

"I guess there isn't very much that I want to buy, but I did get the Moog recently for a bit of inspiration. I sometimes try and get new gear for inspiration even if it doesn't end up on the final record. But I'm still buying effects and other outboard like the Space Echo and recently the [Musitronics] Mu-Tron."

So what's next?

"I'm trying to work on a new album, but there's too many people asking me for remixes at the moment.

I've stopped remixing for small labels to cut back on the amount, but there are always remixes that are worth doing."

How about a new album?

"I'm trying to work with a 'tabula rasa' for my coming album. I'm trying to forget all

the conventions of Tech-House and work on something new from scratch. I partly draw my inspiration from '90s Electronic albums from the Underworld, Leftfield, Orbital, DJ Shadow generation, where albums really meant something and were telling a story from beginning to end. I haven't finished a single track yet, all I'm doing now is making sketches, loops and short arrangements.

"I'm using my guitar and bass guitar quite a lot, looping and layering simple recordings. I also like using my AKG 141 mic to record shakers, claps, tingles, soundbells, you name it. It brings the human element back into Electronic music, and you get a very organic sound with lots of transients and character. One thing I love at the moment is using the piano – they have such an amazing sound spectrum, and when you loop some tones or chords it can sound very hypnotic... I'm using samples now, but later in the recording process I'd like to ask my dad to play some parts for me, which at the same time will be an interesting recording experiment.

"One of my issues with the modern day Techno or Tech-House sound is that it can be very flat and clean, even though we have more tools in our hands than ever to create the most amazing sounds. By working the way I do now I'm hoping to reinvent my own sound and learn a lot about recording."

Do you find it strange how Techno began as ridged hypnotic music based around machines, but now everyone is striving for much more wonky machines and organic sounds?

I use an Allen & Heath Xone:1D and a Lemur with a four deck set-up in Traktor and I love it. I don't use CDJs at all anymore



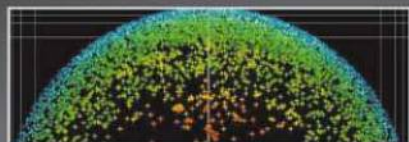
Introducing the

UltraLite^{mk3}

10x14 HYBRID FW•USB2 The world's first hybrid FireWire•USB2 mobile audio interface



It's got both FireWire and USB2
Connect the UltraLite-mk3 Hybrid to any current Mac or PC via either FireWire 400 or hi-speed USB2 and enjoy the same pristine audio quality and zero-latency on-board mixing performance either way.



Scope your audio with a full-featured oscilloscope, FFT display, "waterfall" sonogram and phase torch.



Modeled analog parametric EQ



Classic reverb with five room types



Leveling amplifier modeled after the LA-2A

Professional 192 kHz mobile recording with mixing and effects

- **Compact size** — fits easily into a backpack. Sits nicely next to a laptop.
- **Bus powered FireWire** — no power supply needed. Includes power adaptor for stand-alone operation.
- **Plenty of I/O** — 2 mic/guitar inputs with preamps, 6 TRS analog ins, 10 TRS analog outs, S/PDIF & phones.
- **On-board mixer with effects** — 10 input by 14 bus mixer with hardware DSP effects, including reverb, EQ and compression on every in/out.
- **CueMix FX software** — Advanced graphic control for on-board mixing and effects with tabbed design and precision peak/RMS metering.
- **Vintage compression** — Automatic Gain Control faithfully modeled after the legendary Teletronix® LA-2A® optical leveling amplifier.
- **British console EQ** — 7-band parametric EQ modeled after legendary British analog consoles.
- **Classic Reverb** — five room types and length up to 60 seconds.
- **Advanced signal analysis tools** — provides full-screen real-time FFT display, spectrogram "waterfall" display, oscilloscope, X-Y plot and linear or polar phase analysis.
- **Time code** — resolve to or generate time code via any analog in/out.



MOTU
motu.com

©2009 MOTU

• MOTU is a registered trademark of Mark of the Unicorn, Inc. • All other trademarks are the property of their respective owners.

Musictrack • 2 The Granary Buildings • Millow • Near Dunton • Bedfordshire • SG18 8RH
Tel: 01767 313447 • www.musictrack.co.uk

"I think it's just the natural progression really, and because everything is so ridged and digital, everybody is trying to be different."

Would you be willing to do big commercial remixes?

"Well, I was asked to do a remix for David Guetta, or was it Bob Sinclair? I can't remember [laughs], but I couldn't do it because of time. But the track really wasn't something for me anyway."

Can you see yourself ever working towards mainstream chart success?

"It would be so incredibly difficult for me to consciously make the move to the absolute mainstream. I'm a big fan of Thom Yorke from Radiohead, and he's been able to reach and touch the upper ground and commercial music mainstream with the purest music possible, and this would be the only way for me to do it."

Who are making the best dancefloor tracks at the moment in your opinion?

"The guys from the Amsterdam scene are on top of their game at the moment. I'm talking about producers such as Anton Pieete & Bart Skills, DJ Madskills, 2000 and One, Lauhaus. All have their very distinctive sound with one thing in common, the grooviest basslines and off-beat hi-hats you've ever heard!"

Are you aware of being underground – or don't you care if you're perceived within Dance music as 'cool' or not?

[Laughs] "It's cool to be cool! I think I'm pretty underground, but probably too mainstream for many. I just do what I like and what I believe in, sometimes this results in something easily digestible and other times it doesn't. It also depends what the purpose of the music is, if for the dancefloor then I want people to dance to it. I do feel some of my earlier Techno productions were a bit more abstract, and I'd like to go back to that sometime, but it has to come naturally rather than be a forced conscious decision. Things I do struggle with are remixes for mainstream tracks... I often wonder how you go about giving them a 'cool' twist without losing the original samples."

How do you keep yourself motivated?

"I love what I do at the moment and it's great travelling the world and playing great music to lovely crowds. Whenever that stops, or I want to stop travelling for other reasons, I hope I can still make music for a living. It's a shame it's so difficult surviving as an artist without performing as a DJ or live. So, maybe I'll have to work for TV, film or whatever. Or maybe I'll be rich enough to just play around in my studio for fun, not having to worry about money. I'll have to reconsider my move to the mainstream for that, though, I'm afraid." **FM**

WANT TO KNOW MORE?

For more info on Joris Voorn's live gigs and DJ sets, head to his official website at jorisvoorn.com. *Chase The Mouse* is on sale now.



Genelec 1031a

"I previously had some Spirit Absolute monitors connected to an old Sony amp and, when I was looking for some monitors, I listened to the Genelecs in a lot of my friends' studios and I really liked them. They're really crisp and clear but with enough of a clubby sound for me to hear what the tracks will sound like on the floor."

Software



Omnisphere

"This does really amazing deep and full-sounding basslines, as well as the cool big pads and the psychoacoustics kind of stuff."



Sylenth

"Even though it's focused on the cheesy Trance sounds, it's capable of making some really high-quality and big sounds."



Battery

"Next to Ableton, this is my main tool. I fill it up with my own sounds and program it with MIDI for a lot of my drums and percussion."

Roland TR-909

"When I started, Techno was still pretty big, so I decided that I needed to have a 909. I bought the 808 as well, but the 909 has a much tougher sound on the floor. I don't use it much now – apart from the odd sample here and there."



ON THE DVD

1



Sweep The Floor

Joris breaks down the track *Sweep The Floor* – from recording electric bass in Ableton to doing the final mix in Cubase.

2



Ableton Tricks

Joris shows how he uses Ableton Live to rework sampled loops to give them their own character and get them to fit into a track.

GEAR OF THE DECADE

Welcome to our definitive guide to a whole decade's worth of top tech. Some gear is hyped hard before disappearing without trace. Other bits appear without fanfare and go on to become studio stalwarts. Time to hand out awards to the precious few pieces we, and more importantly you, just can't do without

Y'know it's extraordinary to think about the impact technology has upon the music we make. 2009 is dead in the dust and as we enter the twenty-tens, it's worth remembering just how far we've all come in ten short years.

Yes, digital recording was with us as 2000 dawned but only if you had several thousand quid going spare and could make do with a few tracks of recording and playback.

However, as the decade progressed things have taken a marked turn for the easier, cheaper and better. At the start of the decade the plug-in revolution hadn't really begun and the very concept of handheld devices such as the PSP and more recently the iPhone and iPod Touch and their crossover into applications for music technology didn't feature in even our wildest dreams. So, with the year and decade closed for good, what better time to celebrate the

kit which has proved most indispensable to so many of you? Via our blog and Twitter pages, we asked you to provide details of your own personal technological revolutions and, armed with your countless thoughts and messages, we then locked ourselves in a room and fought like wild animals to sort the winners from the nearly-winners in each of the categories that follow.

Any item short-listed below can consider itself a pretty outstanding piece of kit – to rise to the top, manufacturers need to have provided something essential, balancing a cracking feature set with ease of use and value for money. And if that item has delivered the goods throughout the entire decade then more power to it.

Most importantly, we mustn't lose sight of what this gear is for – making music. Any kit that aids this process to the extent that it proves inspirational has the power not just to enhance the music we make but give rise to brand new musical genres. Time to hand out some gongs.

Best Hardware Synth



1 Access Virus TI

There's the Virus, the TI, the Snow, the Polar... Different takes on the same technology and sound that's delivered the good across the entire noughties. The original Virus blew us away in 2000 but when the TI landed in 2005 its reputation was cemented in history. Why? Well, here was one of our favourite sound engines but via a single USB connection the TI can integrate fully into your DAW, offering audio interfacing for starters but also 'itself' in plug-in form, making editing, sound building and music production with this classy kit child's play.

The concept was and remains revolutionary but the TI's endurance and flexibility are also key parts of our decision to crown it hardware king. We've seen these units everywhere – in the studios of producers, onstage at gigs, flanking pioneering DJs in their sets – and the Virus's continued development is exciting and inspiring.

2 Korg microKorg



Few synths have set the blue touch-paper alight like the microKorg. Its success just kept growing and we know that many of you lost your tech virginity to this magical box by making it your first synth purchase. Good choice too – the micro was cheap and portable and it perfectly struck the balance between future and retro. Micros became almost infamous among Indie bands in the mid-noughties and were seen as readily in the studio as onstage. Now available in original and XL form we're still using our battered release model.

3 DSI Prophet 08



Dave Smith's synths are synths we covet. Top of the tree is the Prophet 08, with its powerful analogue synth engine and sheer, glorious playability. It also gave birth to the Mopho and Tetra, which many of you voted as your favourite hardware synths.

HIGHLY COMMENDED

4 Moog Voyager

It's hard to believe it's already four years since we lost Bob Moog, synth legend and pioneer. The Voyager is a worthy legacy to his extraordinary life – a remarkable instrument. We see the racked and keys version in lucky studios.

5 Roland SH-201

We didn't know what to expect from a digital synthesizer whose name clearly wanted us to believe it had an analogue heart. However, we love it – great sounds, simple layout and computer integration too. A modern classic.

Best Monitors



1 Event Opal

It's quite rare for us to convene for our regular monitor round-up gatherings and emerge with such a clear winner but the Opals are so good, we had no such problems. These transparent speakers allow you hear an unprecedented amount of detail in your mix.

2 Focal JM Labs Twin 6 BE

Again, we were impressed by the level of detail here. Competition in the mid-price monitor market is so fierce right now that it's a great time to invest in a high-quality pair of studio speakers. Like these!

HIGHLY COMMENDED

- 3 Genelec 8040
- 4 Acoustic Energy AE22
- 5 Mackie HR824 MkII

Best Performance Gear



1 Ableton Live

It had to be Live that took the top award here. Nothing can touch it in terms of live performance. Complementing many a DJ set and gig, Live's impact has been nothing short of revolutionary. Only Ableton could turn Max/MSP into a piece of 'Live' kit!

2 Korg Kaoss Pad

Respect due. A decade old and still rocking it. DJs and Dance pioneers love it but we even saw several in Brian Eno's studio. It combines effects processing and live performance in a way more popular than Korg could have dared to dream.

HIGHLY COMMENDED

- 3 NI Traktor Pro
- 4 Pioneer CDJ-1000
- 5 JazzMutant Lemur

Best Studio Gear



1 UAD / UAD-2

So, a computer card. Sexy, eh? Well, yes actually. UAD-2 and the Version 1 card before it have allowed such a plethora of classic studio gear to be 'repackaged' and made available to such a wide range computer-based musicians that it wins this category hands-down. Seemingly every month, UAD have another plug-in to release to the world and their clever choices of collaborators now mean that alongside vintage processors cloned from the likes of Neve and SSL, you'll find studio staples such as versions of the SPL Transient Designer and the Moog Filter rubbing shoulders together. The Quad core UAD-2 card is expensive but genuinely allows you to turn each channel of your DAW into a virtual Neve channel strip if you like, which in hardware terms, is beyond the financial reach of most of us. UAD, we salute you!

2 SE Reflexion filter



Genius! While many of us might be able to just about rub the pennies together to save up for a good quality microphone, finding a space worthy of recording good vocals regularly proves much harder. Until now! The 'wrap-around' distinctive curve of the Reflexion Filter can now be seen in so many studios it's becoming an 'essential' choice – effortlessly transforming almost any space into the right one for vocal recording, in particular. Like the UAD card, this doesn't immediately strike you as a particularly 'showy' purchase, yet it could be one of the most important you'll make for your studio, if increased recording quality is your priority.

3 Focusrite Liquid Mix



With 32-channels of DSP, 60 modelled EQs and compressors, comprehensive hardware control and a very attractive price, the Liquid Mix found itself on the desks of a huge majority of our interviewees and reader's studios over the past decade. A simple and highly effective mixing solution – a real winner.

HIGHLY COMMENDED

4 Moog Moogerfooger Pedals

These are the pedals we crave the most! The list of options grows here, from Ring Modulation to Filtering to Analog delay – allowing a rich 'Moog channel' of processing to be applied to any audio you choose. Sumptuous.

5 Mackie Big Knob

One of the most common bits of kit we see in producers' studios. Gain control over multiple speakers sets, talk-back and, most importantly, the most 'I'm in control' volume dial you'll ever be lucky enough to grab.

GOING UP

1 Performance Controllers: The biggest trend is 'hands on'. From humble MIDI controllers to work surfaces dedicated to the operation of our favourite DAWs. Couple that with software/hardware hybrids that are climbing the popularity ladder and we're confident that devices that make the virtual *real* is a trend that's here to stay.

2 Classy Channel Strips: For a while there, we wanted all of our plug-ins to make a noise, but now we quite like the idea of software which takes what we've got and makes it sound **BETTER**. The number of great EQ/compression-only processors grows monthly.

3 Mastering Suites: 10 years ago, almost no one would have carried out 'mastering' at home, yet now we're all at it. Low-cost software from Brainworx and iZotope leads the charge.

4 Touch-screen Gadgets: JazzMutant are at it and so are Apple and their rival phone providers. It surely won't be long before touchscreens are everywhere and those we've seen, we love.

5 Elastic Audio: The ways in which audio can be mangled in Live, Pro Tools, Melodyne and Logic is mind-bending these days and there's no doubt that we'll push DAW manufacturers for even greater 'warp-ability' in the coming decade. Who knows where this will lead?

Trends of the Decade

GOING DOWN

1 Analogue Emulation Soft Synths: In the early- to mid-noughties, every soft synth was an analogue emulation. Some were good, some less so. Fortunately, most developers aren't just thinking 'retro' now, by offering wider feature sets and cool, 'future-retro' features.

2 Behemoth Keyboard Workstations: These arguably peaked as far back as the late 80s and their appeal continues to dwindle. Compared to a laptop and controller keyboard, what can the high-cost keyboard with sequencer/sound/effects aplenty really offer? Popular onstage but, sadly, in less studios than ever before.

3 Grooveboxes: Blame Ableton Live. For a while there, we loved MIDI sequencers running multiple channels from dedicated hardware sequencers but Ableton picked the whole thing up, turned it upside down and shook hard. The rest is history.

4 Hardware Samplers: Dying a sudden death at the beginning of the noughties, these are perhaps the biggest casualty of the software revolution. Thousand-pound hardware devices with a few MB of memory replaced by low-cost, multi-gigabyte computer-based power-houses. Only one winner. Apologies to Akai and E-mu, among others.

5 Standalone Plug-ins: Some cry foul when new software titles are released without standalone versions but we're less surprised. As computers pick up pace onstage and in the studio, there's less reason to commit your computer to a single plug-in when several can be hosted at once.

Best DAW



1 Apple Logic

We've no doubt that this will prove contentious but Logic Pro squeaks home in first place for a number of reasons. For starters, its popularity has continued to grow for musicians of all abilities. Its appeal is cross-genre, with as many film composers and Dance musicians turning to Logic as Pop and Hip Hop producers. Its bundled suite of effects plug-ins would sell for thousands of pounds if made available separately and yet Logic represents better value for money and is now arguably easier to use than it was at version 6 or 7. With the switch to Logic 9 earlier this year, technologies were emulated from the best features in Pro Tools, Live and even the likes of Melodyne to create the audio elasticity Logic users had been craving. Bundle this with its rock-solid reputation as the best MIDI sequencer around and you've got a winning package.

2 Ableton Live



No doubt many of you will think this should have won but as a studio tool, it can't quite match Logic's feature set. The great thing is that Live's approach is so unique it doesn't try to compete – instead offering a much more performance-oriented approach to track creation. Live 8 ramps the feature-set up a fair few notches and we can't wait to see what Max for Live will bring to productions through 2010. To think this DAW didn't even exist 10 years ago is extraordinary – Ableton's pace is red-hot and they'll take some catching over the next decade.

3 Cubase



Cubase kind of lost its way in the noughties. While rivals consolidated features and got more powerful, the fragmenting of Cubase and Nuendo – both Steinberg DAW products – confused some users who basically required the best of both. These days Cubase 5 is a rock-solid choice for many and perhaps THE choice for PC-based production. Its plug-ins and work-flow don't quite match Logic's feature-set, though.

HIGHLY COMMENDED

4 Reason

A cost-effective DAW that has a special place in the hearts of many of you. There's synth options aplenty and now audio via sister software Record.

5 Pro Tools

FM readers are increasingly turning to the new Pro Tools and its reputation as a 'Pro' option. V8 makes it a package to genuinely rival Logic.

HEAR THE BEST STUDIO TOOLS IN OUR NEW DEDICATED LISTENING ROOM.

Built to the highest spec, offering you a unique opportunity to test and A/B equipment in a perfect listening environment.

Call or email now to book your appointment.



www.kmraudio.com
sales@kmraudio.com

020 8445 2446

1375 High Road, Whetstone, London, N20 9LN

Best Plug-in



1 Brainworx bx_digital

Brainworx's dedication to understanding and unravelling the secrets and success of the Mid/Side approach to processing audio at its final stage, via a set of easy to use controls means that this clinches top spot in this category. Download the 14-day trial version immediately if this plug-in has passed you by.

2 PSP Vintage Warmer

Polish pioneers PSP have developed a killer suite of plug-ins but, for us, Vintage Warmer is the one. Transforming lifeless audio and plug-in instruments with an analogue, valve-like quality, this plug-in will blow you away.

HIGHLY COMMENDED

3 iZotope Ozone

4 Sugarbytes Effectrix

5 Waves Platinum

Innovation of the Decade



1 JazzMutant Lemur

Lemur looks like it's been sent from the future and seems to set the scene for how studio and performance hardware will go. We expect touch-screen vintage synths, DAWs and processors to follow in the next decade and Lemur offers an early glimpse.

2 Melodyne DNA

When Swedish sorcerers Celemony demoed their new Melodyne DNA in 2008, it set the music industry alight with speculation and excitement. It's ability to pull apart recordings to their stems for individual pitch and timing changes is still mind-blowing, two years later.

HIGHLY COMMENDED

3 Yamaha Tenori-on

4 Novation Automap

5 NI Maschine

Best Software Synth



1 Arturia Collection

This was one of our most keenly contested categories and, truth be told, the jury was a little split here. However, Arturia's synth collection has squeaked through in first place due to the sheer number of high quality synth emulations it packs into such a low-cost suite. For under £400, your system is swelled by fantastically high-quality 'versions' of the ARP 2600, CS80, Moog Modular, Jupiter 8, Prophet 5, Minimoog and Analog Factory 2, as well as tossing in the physical-modelling suite Brass. Er... Thanks. Pick any four of Arturia's individual synths and you'll have spent more than the total bundle price but, more significantly, sourcing and purchasing the original synths modelled here would bust Trump.

2 NI Komplete



Komplete 6 contains a stunning collection of NI's titles, including the irrepressible Absynth 5 and Massive, the wonderful Kontakt 4 sampler and the modular behemoth that is Reaktor 5, not forgetting Guitar Rig 4 too. NI's decision to cast aside their Prophet and B4 clones is a little sad while other original titles including the 'Piano' collections are now accessed via Kontakt. Still a kick-ass collection of production tools, mind.

3 G-Media ImpOSCar



Still going strong, with a V2 version due any day now. The hardware OSCar was a curiously uncelebrated analogue synth compared to some rivals, yet G-Media's software emulation is a must-have. Great sounds, an attractive GUI. It's one of the most enduring plug-ins of the decade.

HIGHLY COMMENDED

4 Spectrasonics Trilogy

There are plenty of plug-ins dedicated to bass, so why this one? Well, sheer class, quality and flexibility. Trilogy had us captivated and with the release of Trillian, Spectrasonics have shown they're not resting on former glories.

5 Lennar Digital Sylenth

Fatter than phat, Sylenth packs a great sound engine and killer arpeggiator into a package which also tosses great value-for-money in – lucky us and lucky you. An unbeatable combination!

And The Next Ten Years...?

We've seen the rise of the laptop, the digitisation of the DJ and (who'd have thought it) software turning to hardware. But what's next?

How about MIDI-sync'd Slankets or plug-ins that can predict your royalty share when you run a mix through it? Joking aside, it's easy to imagine gear that more tightly integrates with the whole concept of online. A DAW which simultaneously manages production and video editing/design with direct rendering to all required formats for e-retailers, YouTube and blogs seems likely, as does an online DAW which will allow access to your work in progress anywhere, anytime, across platforms. Meanwhile, our desire to get our gear onstage continues to develop, meaning more dedicated software to rival Ableton Live and the CDJ-2000 will mean that more and more DJs will carry a USB stick to their gigs. Could the twenty-tens be the decade we see a total rethink of live performance in Electronic music? We think so... **FM**

LET YOUR MUSIC BREAK FREE

POD Studio™

Legendary tone for recording guitarists.

24-bit/96 kHz compatibility, the lowest noise for recording guitar and near-zero latency are some of the crucial pro differences of POD Studio™. Plus, POD Farm™ plug-in provides the essential POD tones every recording guitarist deserves.

 line6.co.uk/podstudio



Includes

POD
Farm

LINE 6

LOGIC ESSENTIALS



The Perfect Vocal Strip in Logic Studio 9

So, you've got a great sounding vocalist who's doing wonders performing the top lines on your tracks. Problem is – you can't get the results to sit. **Jono Buchanan** helps you turn performances around and mixes to perfection...

A few issues ago, I had fun writing a piece all about how to produce 'vocal tracks', even if you couldn't sing. Only a small part of that article was dedicated to channel strip settings designed to get the most from

a well-sung performance and yet it's a common problem trying to turn a great vocal session into an even better lead line.

Another month, I'll focus on vocal comping, offering you some insight into how you go about choosing the very best takes

THE EXPERT

Jono Buchanan
composer,
producer



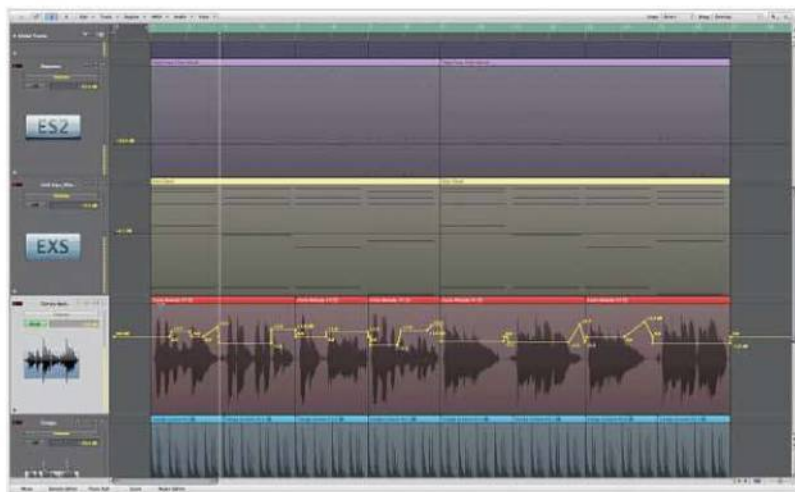
Jono Buchanan is a song-writer, producer and composer whose relationship with Logic might as well have been written into freshly drying concrete – it'll be there forever.

from a multi-track recording session and then using Logic's tricks to maximise those performances but for now, I'll assume you've got a vocal take you'd be happy with if only you could get it to sit in your track.

Ask questions first

First things first – what do you want your vocal to sound like? This might seem an odd question to pose once you've actually recorded a performance and yet, it's relevant as so much can still be done, post-recording. Think about tone for a start – are you looking for something up-front and 'super-present', or something which irons out all irregularities to produce something smooth and seductive?

Space too – is this a vocal which should sound like someone whispering in your ear, shouting at you from a few feet away, or someone performing on a concert hall stage? Are there backing vocals to add too? Do you want something dynamic which sits comfortably through a verse before kicking hard on the chorus?



Sometimes good old automation will work a lot better than compression to keep your vocals in check

The Effects

Ask your average music technologist what compressors do and you'll be told that they even out dynamic range. This tends to lead to the assumption that if you slap a compressor over a vocal part you'll effortlessly rein in the parts which are too loud while increasing the volume of other bits which are too quiet. Often, though, compression creates as many problems as it solves, as you'll find that rather than simply adjusting volume in a linear way, levels bob around according to whether a sound is rich in bass or treble at any given moment. Compressors do adjust volume by analysing an input signal and dropping the volume of any signal which breach a user-determined point called the Threshold.

Above this point, you can decide how dramatically volume will be reduced by setting a ratio (a ratio of 2:1 meaning that volumes above the threshold are halved from their original values, for example), while you can also set the rate at which compression and 'recovery from compression', once the signal drops back below the Threshold point are controlled, using Attack and Release. Compressors can sound 'unnatural' as users understandably tend to set Thresholds on the cusp of signals being 'the right volume'

and uncomfortably just above, which in turn means compression constantly switching in and out, leading to pumping effects.

So why do compressors seem so frequency sensitive? Simply because signals which are bass-rich tend to be louder and therefore subjected to more compression than signals which are bass-light. So, if your vocalist changes tone or

suddenly has a bass-ier passage to sing, it's possible that you'll need a modified compression setting. But isn't there a simpler way? There is – volume automation! If you want a note to get louder, why not simply draw a volume ramp? If another is drowning, why not draw a little box around it and drag its level up? Automating volume is, to be honest, the only accurate way to make sure that a vocal is

the volume you want it to be at any given moment through your vocal track.

That's not to say that compression won't play its part as it will, providing a characteristic sound all of its own but it's nigh on impossible that you'll get the precise volume control you crave from compression alone. You can hear the results of both of these processes, with compression

first and then compression and volume automation in tandem on the DVD.

Also on the Automation tip, you can hear the final mixes use a one-bar delay on a couple of phrases towards the end, for which I've automated the send level to Bus 3 with delay. Lastly, this auxiliary buss is panned left and right to spin the delays out to contrasting sides of the stereo spectrum.



Gain Reduction

If gain is reducing by more than 6dB on the loudest peaks, there's no way your vocal will sound 'natural'. If you want a special effect, then no problem, but if natural dynamic treatment is your goal, your Threshold is set too low!

Ratio

The higher this number, the harder a signal has to work to gain volume. A ratio of 6:1 means that for every 6dB your signal would have increased before compression, it'll only get 1dB louder after it.

Threshold

The lower the level of this slider, the more signal is compressed and the more gain reduction will be applied to louder signal levels.



Automated delays keep your vocal moving and can build towards key moments in your track

It might sound odd but writing these questions down and keeping them in front of you through the mix isn't a bad idea. Working these things out in advance will stop you getting distracted as you mix, as few things remove your objectivity like having the same three minutes of music blaring at you for an extended period.



Effects setup

Throughout this tutorial, you'll be able to hear the development of a track I've made as I slowly work the vocal into shape over a backing track I've written. The vocal is

1. No Pitch Correction – here's the original track with the vocal benefiting from a little reverb and delay only. No other processing has been used.

2. Autotune effect – here's the same part but with Pitch Correction employed, using A sharp major as the tuning scale. I've set the response time to 0ms, producing the famous autotune like effect.

Writing questions down and keeping them in front of you isn't a bad idea

taken from the samples within Logic's own Loop Browser library so I can't take credit for having recorded it. However, it's by no means perfect and you'll find that all vocal bits taken from that library require some

work to get them to fit comfortably into a track of your own. Think of a channel strip and you'll tend to think of EQ and compression first. While Logic doesn't offer an all-in-one channel strip solution, its

separate Channel EQ and Compression plug-ins are perfectly capable of doing a great job in tandem, so I'm going to pop those directly onto inserts two and three of my vocal channel. I'm leaving the first one empty as a quick listen to the vocal part I've put together tells me that

some remedial tuning is in order, so before the EQ, I'm inserting Pitch Correction. Why does this come first? Remember that Pitch Correction analyses an input signal to determine its frequency/pitch. So, it's in

Vocal Frequencies

Our ears are trained to find some frequencies perfectly pleasant, while others can leap out and hurt us, even when their levels are low.

The human voice, whether spoken, sung or screamed, is so rich in frequency content that it's hugely likely that even in warm, soulful performances, there'll be some frequencies whose volumes you'll want to adjust.

There are no definitive rules I can give you here, as so much depends on the individual frequency response of your singer, the microphone and room you've used for recording and the result you're striving for, all of

which equate to a different EQ treatment.

However, there are some trouble spots to listen out for, in particular. Frequencies between 1 and 2.5kHz are commonly referred to as the 'telephone frequencies' and these can be seriously unpleasant at high volumes.

Vocalise

When vocalists power through a sustained note and you find yourself cringing or reaching for the volume dial or the 'Stop' button, this is your first port of call. Use the Channel EQ's Analyser function if you can't identify the frequencies causing trouble in this area

as, often, a thin bandwidth and fairly dramatic volume cut can eradicate anything too painful here fairly easily.

Next, have a look at frequencies around 400 to 500Hz. These can get big too and can often create a clattery, unruly sound which, again, benefits from a more general level reduction.

If a sweet and light vocal is your goal, boosting around 5kHz will often provide warmth, while boosts over 10kHz provide 'air' – the staple of the Pop ballad. This should also help lift your vocal above the mix, provided there isn't too much high-frequency content.

Harmonic EQ

Remember harmonics are generated in multiples



your interest to make sure that as much 'signal' is there for this process to happen accurately. As I'm likely to strip some frequencies away in volume once I get to work with my EQ, I want the full dry sound to have its pitch analysed – so this plug-in comes first. I'm also setting up two auxiliaries from the off – the first featuring a Space Designer medium Plate reverb and the second carrying a Tape Delay set to a quarter note with medium feedback levels and the bottom end removed – no frequencies below 300Hz allowed!

EQ and compression

The nature of my backing track is quite laid back, yet the vocal is quite edgy, with plenty of level around 500Hz and more again around 1kHz. This shouldn't be a surprise – remember that all sounds are made up of harmonics, with these occurring whenever a lower frequency is doubled. Check the EQ grab (above) and you'll see that the Analyser

displays this – you can see regular peaks and troughs in the signal, with each peak occurring each time the frequency doubles.

The 'over-rich' nature of the vocal in my track extends down to 450Hz, so I'm applying cuts here and just above 1kHz before sweetening the vocal with boosts at 4kHz and at 10kHz. See the box on *Vocal Frequencies* above to learn more about which frequencies tend to cause trouble if you're brand new to this. Once EQ'd, the vocal suits the track much better but the dynamics are too inconsistent and we're going to need two tools – compression and volume automation to sort them out. Which to use? Turn to the *The Effects* box to find out more. **FM**

LOGIC TIPS NEXT ISSUE

Be sure to tune in next month when Jono returns in video form with more Logic-based knowledge nuggets – don't miss it. **FM223 on sale 23rd February**



ON THE DVD

3. Natural tuning

– this is the same scale but this time the response time has been backed away to 73mS meaning that each note has time to establish itself before it's tuning, producing a more natural result.

4. Vocal EQ – Post-tuning

the vocal now gets EQ'd – I've taken out a lot of the natural 'harshness' by backing off the level at a range of frequencies.

5. Vocal Compression

– I've pulled back the volume of the peaks using Logic's Compressor.

6. Vocal Automation

– However, it's only when I start working with volume Automation that I'm fully in control of each moment of my vocal part.

7. One Bar Delay FX

– Here, I've added a delay of one whole bar to a couple of repeating phrases in the second half of the track via Auxiliary 3.

8. One Bar Delay With Pan

– Finally, I've, panned these two repeats – one to the left and one to the right.

Sons of Pitches

Vocal tuning is a curious thing. Singers were initially highly skeptical and sometimes offended when Autotune first appeared and were often appalled that technology could 'take over' such a natural process in this way.

Fast-forward 10 years and I can't remember the last time I worked with a vocalist who wasn't reassured by the possibility I could help out on problem notes – they don't all need it but those that do no longer seem to mind! Logic's Pitch Corrector is simple to use. Either select the specific scale you want at the top, or click to select which notes you want from the default chromatic scale.

If you don't know which notes you want on or off, simply press play and take note of which notes are being 'detected' in real-time. Keep these activated and switch off any which produce unwanted results and you're there. Then, simply adjust the Response slider to set how quickly the notes will tune – the faster the response, the more Cher-like the result!

Bear in mind too that the notes you select can be 'recorded' as Automation data which is particularly useful if the track you're tuning the vocal for changes key on the chorus. Simply drop into Latch mode and switch on/off the notes you need, which will appear in separate automation lanes.

Also, it's amazing what happens when you take a spoken vocal and 'tune it' to a single pitch. We don't tend to think of spoken voices as being tuned but of course they are, even if the tuning doesn't adhere to a specific scale.

So, you can create some amazing results this way, with some spoken words sounding quite 'close' to the pitch you specify while others will be completely alien.

Perfect Pitch

Pitch Correction can be as subtle or as harsh as you like



Imogen Heap is famous for her impressive vocal processing techniques

© Getty Images

Vocal Tools

Beyond EQ and compression...

So, besides tuning, EQ and compression, what other tools regularly make their way into the average channel strip? Well, much depends on the singer concerned. DeEssing is a popular technique for vocalists whose natural tendency is to sing 's' sounds 'too loudly'. If you're boosting treble via your EQ treatment, certain frequencies are sometimes boosted to a fault, and DeEssers can help by dropping the volume of a specific, user-defined frequency group.

Again, if you don't like the result they produce, remember that your goal is to drop the volume of certain sounds, which careful volume automation can also help you achieve. Also, the right reverb and/or delay treatments will be

crucial. These are again determined by the sound you're after in your head as well as by whether or not the vocal needs help 'sitting' in the mix.

If you're working on a ballad with strings and pianos which have been recorded or sampled in a big hall, your vocalist will only sound 'there' too by using a similar reverb. Equally, some vocalists sound more intimate and pleasingly 'exposed' in a near-dry acoustic. If you want a little ambience but don't like the 'wash' of a reverb, a small amount of a tempo-sync'd delay can also work wonders. This will help 'place' the vocal by providing a quiet 'ghost echo' behind the original dry signal and is favoured by plenty of artists including Imogen Heap.



Harmonics Part Two: Distortion

Manufacturers always boast low harmonic distortion, but what would music be without it? **Robbie Stamp** squares up to the dirty truth...

Last month, we examined what harmonics are, how they affect our perception of timbre and how critical bandwidth determines pitch dissonance/consonance. In this second part we shall investigate how harmonics are themselves affected by the common processes involved in audio production. Let's start with a basic premise: altering the structure and interrelationships of harmonics is defined as 'harmonic distortion'. Harmonic distortion comes in two distinct forms: linear and non-linear.

The former refers to changes in the amplitudes of harmonics while the latter refers to the creation of harmonics that were not previously present within a signal. The occurrence and effect of these distortions shall be considered with relation to three groups of audio processes: EQ/enhancers, compression/limiting and amplification (including dedicated distortion effects).

EQ and enhancers

EQs are static with regard to frequency and create linear harmonic distortion by cutting/boosting the amplitude of a fixed frequency bandwidth. This bandwidth is usually specified as the Q factor and is most commonly found in adjustable form on parametric designs. It is Q that has the most relevance with regard to harmonics and the distortion thereof.

When shaping or altering the tone of a source the choice of EQ type has major implications for linear harmonic distortion. Sources with limited harmonic content (i.e. tend towards a sine waveform) will respond less overtly to EQ cut/boosts unless its amplitude varies with frequency, in which case a simple shelving EQ can be used to even out this amplitude vs frequency shift. Sources with rich harmonic content exist over a large bandwidth which further increases if they possess a wide

fundamental pitch variance, such as in a melodic phrase or chords. If a source is sounding too bright or too dull then its harmonics are either too dominant or too quiet and thus a shelving EQ or filter is a good choice to cut/boost the harmonics as a whole. When trying to lift the presence of a source in a mix (i.e. bring it forward without just lifting the fader) a parametric or bell curve EQ can be a better choice for zoning in on those critical first few harmonics we use to identify an instrument.

If the instrument varies in pitch or plays chords then the bandwidth within which the first few harmonics exist can be large. A Q equal to the range of the second and third harmonics (three octaves or a Q of 0.4) is a good starting point to make sure the relevant harmonics do not fall outside the bandwidth of the EQ filter. A narrower Q will begin to display a more uneven harmonic adjustment response. One method to bring a bass source out in a mix without just increasing gain is to lift or even create harmonics that will cue the hearing system to its presence.

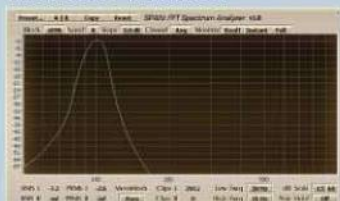
Bass enhancers or exciters do exactly this job, enhancing and creating harmonics from the fundamental frequencies present within a specified bandwidth. The effect of this can be observed when a simple sine wave is processed by an enhancer. A series of harmonics are produced that the brain uses to identify the fundamental frequency that they are produced from. If used excessively these harmonics become highly audible and make the instrument sound closer to a sawtooth waveform and therefore distorted, which may or may not be desired.

Compression and limiting

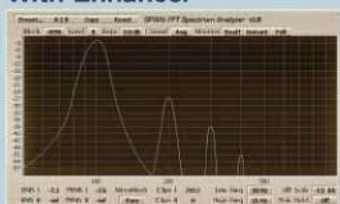
Compression and limiting primarily affect the dynamic range of a signal to either

ENHANCER

Without Enhancer



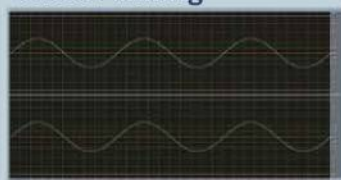
With Enhancer



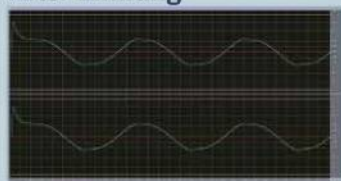
Waves Renaissance Bass enhancer applied to a 100Hz sine wave producing a series of even- and odd-numbered harmonics.

LIMITER

Before Limiting



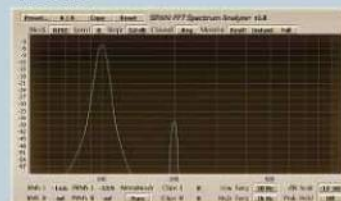
After Limiting



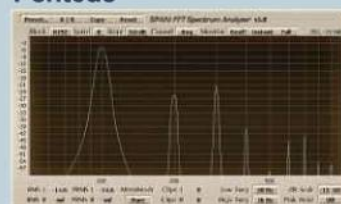
A 50Hz sine wave before and after hard limiting showing the creation of a transient (non-linear) harmonic distortion and squaring of the wave. The limited product has been gain compensated for illustration purposes.

TRIODES & PENTODES

Triode



Pentode



A 100Hz sine overdriven through triode and pentode valve amps. The triode produces a second harmonic while the pentode creates a dominant third.

Odd and Even Harmonics

Even numbered harmonics, i.e. those whose frequency is an even numbered multiple of the fundamental (x2, x4, x6...) are commonly felt to be more pleasing to the human ear than their odd-numbered siblings, but why? Even numbered harmonics are spaced at exact octave intervals and thus remain purely consonant however high they get in the frequency spectrum. Odd numbered

harmonics (x3, x5, x7...) do not have this same interval consonance and therefore become increasingly inharmonic as they get higher in the frequency spectrum.

For example, for a fundamental frequency of 200Hz the third harmonic is 600Hz which is a perfect fifth interval and therefore consonant. The fifth harmonic (1000Hz) falls just flat of a two octave and a

major 3rd interval (1007.93Hz) by 7Hz. This difference is just over 6% of the critical bandwidth and therefore would be heard as slightly dissonant. The seventh harmonic (1400Hz) falls between three octaves plus a whole tone, which would be perceived as very dissonant as it is 30% and 15.7% of the critical bandwidth with respect to the two other intervals.

increase their perceived loudness or control transients that might distort a proceeding amplifier stage. Though these processors come in many types and topologies (valve, solid state etc.) they all have one thing in common: by altering the relationship of the onset of a waveform to its steady state via the attack, threshold and ratio controls, the harmonic characteristic is distorted.

For most instruments the initial onset of a note, i.e. its attack or transient portion, is

compressor/limiter can chop off or flatten the rounded peak of a waveform, the effect of which is to produce a waveform approaching a square shape. This in turn produces odd numbered harmonics which are perceived by the brain as harsh.

A very fast attack speed can also contribute to this effect. If the attack time is set to below a quarter of a wavelength, for instance 3ms on a 60Hz bass note (1/4 wavelength = 4.2ms based on 60Hz being

equal to 1/60th of a second), the gain reduction will occur before the initial onset of the wave has completed and thus square off the waveform, again producing odd numbered harmonics. This 'clipping' distortion is often used to add 'bite' to kick drums but can also be heard as the inevitable by-product of excessive hard limiting used in mastering over the last decade.

Amplification

Amplifiers are, on the whole, designed to incur as little harmonic distortion as possible, but despite this all amplifiers can and will distort harmonics in both linear and non-linear fashions when driven hard enough or starved of electrons. Let's look at a two basic building blocks and what distortion effects they produce to understand what our humble harmonics can be subjected to. The daddy of all distortions is the valve guitar amplifier, a legendary producer of harmonic distortions that started life as a bastardised hi-fi amp.

Nearly every stage of a valve guitar amplifier contributes some degree of harmonic distortion, from the saturation of transformers to the physical limitations of the moving coil loudspeaker, but it is the valves themselves that have received the most attention with regard to their sonic

“As a signal incurs harmonic distortion, it tends towards a squarer waveform”

critical to how we perceive its character or timbre. The faster the attack setting on a compressor or limiter, the faster the transient is reduced in amplitude, which then translates as a loss of high frequency response making the source seem duller or less 'present'. The fast attack also defeats the onset of the fundamental frequency and results in a loss of low frequency perception.

To prevent this loss of transient and low frequency perception the attack speed should be set slow enough that the transient is not totally lost, the fundamental frequency can develop but the total dynamic range is still reduced. As the brain uses the attack characteristic to identify an instruments timbre it follows that the release setting on a compressor/limiter has a less substantive effect on the perception of harmonic structure. The harmonic distortion effects of compressor and limiter attack times as well as ratio/threshold settings can also produce non-linear effects. With a limiting ratio (i.e. 10:1 or above) and a low enough threshold a

ON THE DVD

100Hz Sine RBass

01.wav: Our perception of the fundamental tone remains unchanged as the enhancer effect is faded in.

100Hz Sine RBass

02.wav: The original sine wave is faded out to reveal what the enhancer is producing.

Drums and enhanced bass

01.wav: The enhancer on the bass guitar is set to 55Hz, the lowest fundamental of the bassline. The effect is faded in and is at its highest point from the fourth bar.

Drums and enhanced bass

02.wav: The enhancer on the bass guitar is set an octave higher (110Hz). This produces a less 'subby' increase.

Compression attack

on sine.wav: A 10:1 ratio compressor is applied to a 50Hz pulsed sine wave and the attack time reduced from 100ms to 5ms.

Non-linear harmonic distortion increases and the low frequency tone is attenuated.

Compression attack

on snare.wav: A snare drum with the same attack speed increase. Non-linear harmonic distortion creates a false transient and the low frequencies are attenuated.

Sine pulse and hard

limiting.wav: A pulsed sine wave (50Hz) is subjected to hard limiting (the first four pulses are pure, the second four are limited).

imprint. There are two types of valve commonly found in the guitar amplifier, the low power triodes used in the preamp stages and the high power pentodes used in the power output stages. Both triodes and pentodes can produce linear harmonic distortions within their normal operating regions but when driven by high inputs or starved of operating voltage they become quite unruly and non-linear.

Triodes, due to their internal topology, produce mostly even numbered harmonic distortions, both linear and non-linear, while pentodes will also produce some dominant odd-numbered harmonic distortions, making their effect harsher. One characteristic of valves that makes them a favoured device for imparting harmonic distortion is that the transition from 'clean' to distorted is gradual and thus relatively simple to control for small degrees of harmonic 'excitement'.

The valve was superseded by the smaller and cheaper transistor, which are either single components or set out in a specific circuit and miniaturised into an Integrated Circuit (IC). The slew of transistors that appeared during the 1960s and 1970s became commonplace in many audio amplifier circuits. Most transistors display a less forgiving behaviour than valves.

As a signal incurs more harmonic distortion it tends towards a squarer waveform. This is perceived as an increasingly harsh and unpleasant tone as the amplitudes of harmonics rise and their numbers increase. Extreme distortion will become more and more like white noise as non-linear harmonic distortion produces harmonics from harmonics to create a wholly inharmonic mess.

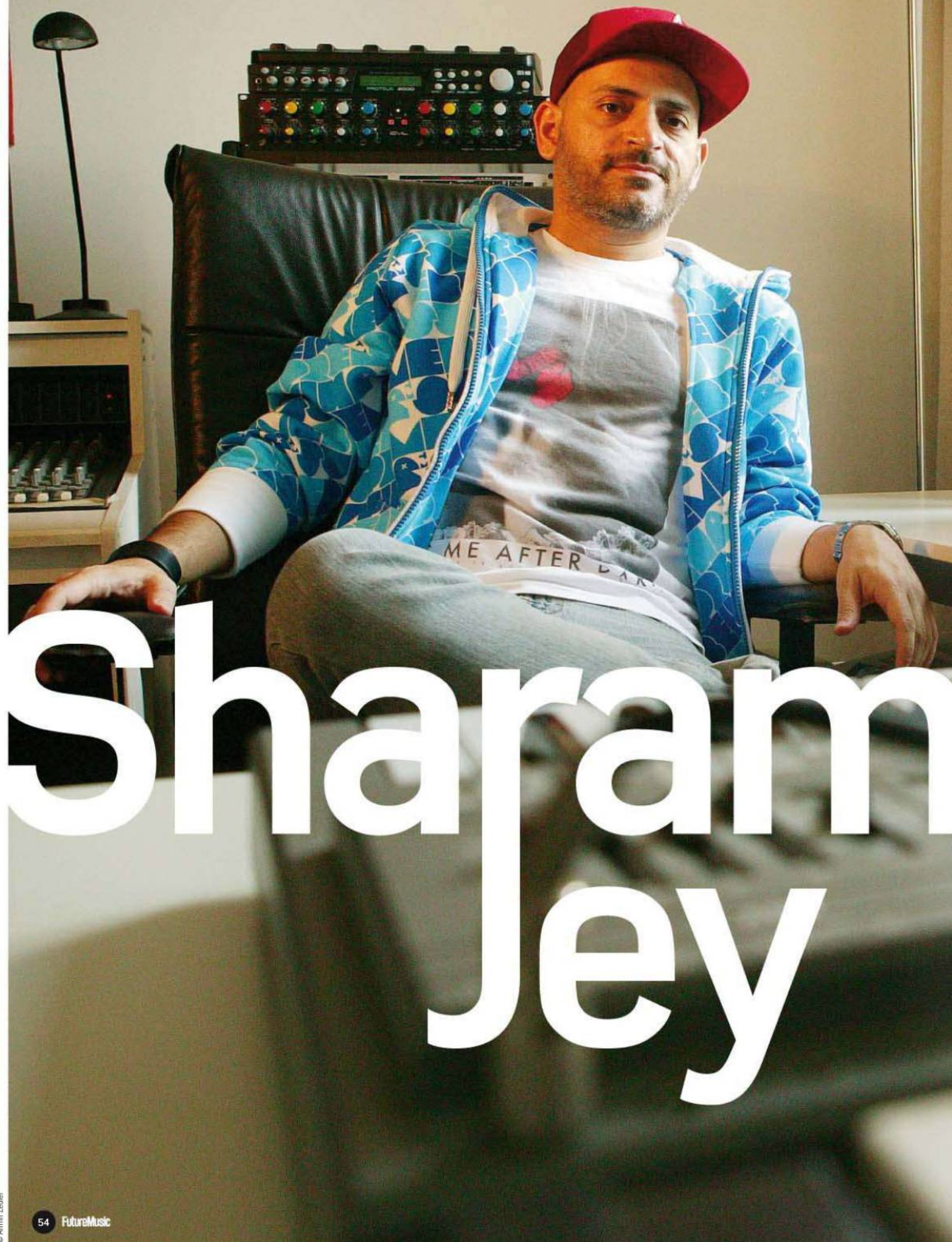
Harmonic Distortion – Angel or Devil?

Harmonic distortion can make an instrument come to life, it can also ruin the fidelity of an amplifier, it can make a guitar sing and it can trash a perfectly good mix in mastering.

An awareness of where harmonic distortion is occurring, what effect it may be having and how it may be reduced/increased can make a huge difference to how you record and how you treat your mix. I would highly recommend the study of harmonic structures of signals before and after processing with a spectrum analyser to identify the characteristics of both good and bad distortion, be it due to EQ, compression, fuzz pedals or amplifier stages. **FM**

KNOWLEDGE BASE NEXT ISSUE

In our next *Knowledge Base* feature, we lift the lid on sound design and studio fundamentals. **FM224** on sale 23rd February



Sharam Jey

Producing everything from vocal Electro House to trashy Indie Disco, Sharam Jey is a man who's difficult to categorise. **Chris Barker** took a trip to Cologne to meet the Rock singer turned DJ, producer and label owner

From his successful remixing of *Café Del Mar* in 1997 as Three N One, to signing on Darren Emmerson's Underwater records to starting his own label, King Kong, in 2001 – Sharam Khosroji, aka Sharam Jey, has become one of the most eclectic and respected producers in clubland. He's remixed mammoth names including Moby, Mylo and Faithless, on top of helping launch the careers of acts such as Lou Lou Players.

Born in Iran but raised in Germany, Jey began his musical endeavours in the clubs as a raver, before becoming a DJ on the local party scene. With over 15 years in the business under his belt and successful albums, remixes and mixes all on his CV, we thought it was about time we tracked him down. We were lucky enough to be invited to Jey's trendy loft apartment in Cologne to see his studio and pick his music-making brains to find out what kit inspires him to make his eclectic signature sound.

If snazzy boutique hotels offered rooms with attached studios, we're pretty certain that those studios would look something like Sharam Jey's. Racks of synths sit in front of drapes that cover the walls and hang from the ceiling. There's a mixture of classic outboard, synths and even a console with two sets of Tannoy monitors. So while the rest of the *FM* crew set up for the *In The Studio* video, we headed to Jey's second favourite room of the house, the kitchen, for a chat.

FM: How did you feel when you got asked to do the *Café Del Mar* remix?

Sharam Jey: "When I got asked to remix the *Café Del Mar* track I was really concerned about doing a

good job of it. Myself and André Strässer did the project under the name Three N One because it was three styles of music in the end: House, Techno and Trance. But we aimed to do something totally new with this track because the original record had such great parts, we knew it had to be more than a Trance remix. The first part of the track is House-sounding and I think worked well. I used my Nord to play the classic blip riff and still have the preset stored on it."

Your label has been going for close to a decade, what were you signing back when you started?

"I was signing a lot of stuff that was sent to me as demos or promos. The biggest act was probably Lou Lou Players, who I really supported over the last few years, and Kolombo from Lou Lou Players has now become a major international producer, working for Turbo, Kompakt, Cocoon and more."

Does it frustrate you when acts you've supported grow and leave your label for bigger success?

"No, not at all, you have to expect it and I think it's really cool when you see somebody having the success they deserve."

So what's happening with the label now?

"I had a lot of unknown artist releases on the label in the last two years, but now I've tried to concentrate on just releasing my own material on the label because it's so much harder to sell records now. Saying that, the label is still going strong and I'm really excited about continuing it in 2010."

Do you still get demos? Is it worth people sending demos to labels like King Kong now?

"We get so many demos now, maybe about 50 a day in fact. What people need to do is just have fun with

what they do and follow their heart. All the labels get hundreds of demos a week, so it's hard to get noticed these days, but you just have to keep going. Three or four years ago, if I played a track in a club and it went down really well, then maybe I would consider signing it. But now you have to look at the bigger picture and the fact that there are thousands of new records every week."

So do you see the music industry surviving in its present state?

"If you still want to do what you have loved doing for the last 15 years then you have to change. It's no good just moaning about sales, you have to look at other ways of doing what you do. That's why big labels are doing 360 deals where they earn from live gigs, merchandise and such."

And do you still get excited when DJing and making music?

"Yeah, I definitely still get really excited when I hear a track that I've done. I often just think, 'wow, I can't believe that I've done that!' The same goes for DJing too, I can't stand it when I play, because I really try to just go with the people. You won't see me as one of those DJs who stand frozen looking miserable, just pressing the buttons."

How did you hook up with Princess Superstar?

"I was DJing all over the world and I played the same night as her and we got chatting. She was supporting some of my stuff and really liked the instrumental version of *Monday Morning*, which I did with Lou Lou Players and which was only out on vinyl at the time. So when I started to work on my album, I asked if she wanted to try and do something with *Monday Morning* and fortunately she agreed."

What have been your most recent purchases for the studio and have you discovered any new production techniques you want to share?

"I've just discovered the plug-ins from TAL [Togu Audio Line]. They feature quite a lot of great instruments that are based on old Roland synths and sound quite a lot like the original models. There's the U-NO-62, which emulates the Juno-60, and the TAL-baseline, which is built on the SH-101, and



Roland's familiar classic SH-101 with the rare Realistic (AKA Tandy) Moog synth above



managed to find it after searching for something similar for so long."

How do you think Dance music will change in the future? It seems like people are more open minded now? Why is that?

"I don't actually know why, but maybe because for some time, tracks were mainly based on minimal

What records are coming up for you and what's the future of the label looking like?

"The highlight of 2010 will definitely be the release of my new artist album, *In My Blood*, on which I've been working for one and a half years. It features some great guest-vocalists such as Princess Superstar, Tommie Sunshine, Andreas Hogby – from Swedish rock band Torpedo – and Nik

Valentino, who is the singer from Australian Indie band Lost Valentinos. Not forgetting Cornelia, who contributes her sweet vocals for the upcoming single, *Army Of Men*. The single will be remixed, among others, by legendary New York DJ/producer Arthur Baker,

Analog People In A Digital World and TAI from the Boys Noize Records stable.

Will you be touring heavily this year?

"Yes, I'll present the album on a huge world tour that will take me to America, Australia and all over Europe. So I guess it's all about the album this year. But we will of course also have some other fresh

I definitely still get really excited when I hear a track that I've done. I often just think, 'wow, I can't believe that I've done that!'

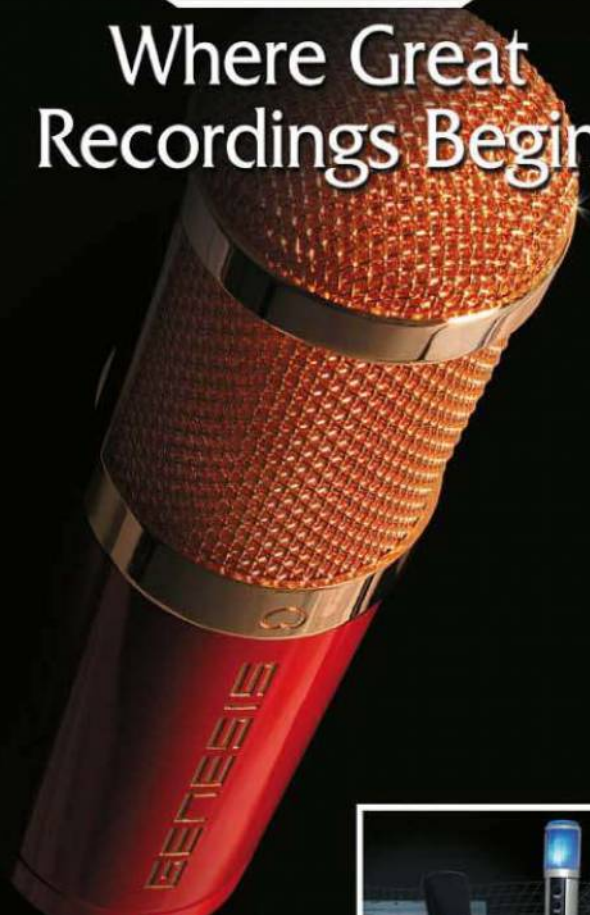
the TAL-Elek7pro-AU and Chorus-60, which also features the classic sound of the Juno-60.

"I'm also using Sylenth from Lennar Digital, although I'm sure this plug-in is already familiar to the majority of your readers. What I was finding really difficult to get were good and broad-sounding reverb plug-ins. But recently I found the Toraverb from D16 Group and I'm really happy that I

beats and sounds. So people have been craving to listen to energetic and melodic songs again. I've found the people really want to party and dance to huge tracks. For me, I think this began four or five years ago and has filtered through. At my DJ gigs, I'm always trying to get people dancing and it seems like a decent mixture of styles and tracks is what people are looking for."



Where Great Recordings Begin



MXL Microphones are available at the following dealers :

West End DJ
London
020 8208 6988

Nevada Music
Portsmouth
023 9220 5100

ElectroMusic
Doncaster
01302 369 999

Music Street
Huntingdon
01480 431 222

One Man Band
Banbury
01295 266 788

Red Dog Music
Edinburgh
0131 229 8211

Sounds Live
Newcastle
0191 491 3185

StudioXchange
Letchworth
01462 677 333

Musicland
Cardiff
02920 621 715

Giggear
Harlow/Hertford
01279 432 900

The Music Den
Milton Keynes
01908 969 141

Counterpoint MTC
(Education)
01903 538 844

BEM
London
020 7733 682

Nilam Music
Hereford
01432 278 227

The Music King
Birmingham
0845 200 5464



USB



Project Studio



Ribbon & Tube

Distributed in the UK by Musictrack Ltd

2 The Granary Buildings • Millow • Bedfordshire • SG18 8RH
01767 313447

www.musictrack.co.uk • www.mxlmics.com



www.timespace.com/downloads

th tonehammer

Forgotten Voices: Francesca
Kontakt, Wav
840Mb

Propanium
Highly emotive, metal based, tongue drum.
Kontakt, Wav
1.67Gb

"...the haunting alto voice and the phrase-sculpting features make this a unique, flexible and spiritual-sounding library that's also superb value for money." - Sound on Sound

Producer Loops Electro Tip Trixxx
Multiformat
460Mb

Loopmasters Meat Katie Tech Funk Producer
Multiformat
800Mb

22 MEAT KATIE TECH FUNK PRODUCER

Toontrack Monster Midi Pack 4: Fills - Odd Meters
450 individually played files

Wave Alchemy African Rhythms
Wav
159Mb

NEW AFRICAN RHYTHMS

Dubstep and Grime SM15
Aggressive beats and abrasive basslines at 140bpm

Apple Loops, Rex or Wav

Sample Magic

Rob Papan RP-Verb
Algorithmic reverb plug-in

Zero G Soundclash
Multiformat
1.42Gb

07 Digital Redux Dubstep Plates Pack 1
Wav, Rex
255Mb

Big Fish Audio The Best of Breakbeat
Multiformat
750Mb

Urban Inspiration
Multiformat
2.62Gb

Bluezone Minimal Charge
Wav
94Mb

SOULS CLASH

BREAKBEAT THE BEST OF
ABSOLUTELY AUTHENTIC BREAKS

MINIMAL CHARGE



Musical Inspiration

releases coming on King Kong later this year, plus a certain amount of Sharam Jey remixes.”

Does technology influence the way you work?

“Well, yes and no. I didn’t change my equipment for about ten years. I just used all these old analogue keyboards, old synths, Logic 4.7 and the desk. I produced my music in a kind of old-fashioned way I suppose. Technology wasn’t that important for me. But now that I’ve completely updated my equipment, I’m absolutely happy with all the gadgets, even though moving from Logic 4.7 to Logic 8 was such a massive leap! [laughs]. It took me a while to change because everything was working and I knew how to get the sounds I wanted using the old gear and my old working methods.”

“I knew I had to upgrade to change my sound, and I think the new album is a reflection of the new gear I got and my new approach to making records. I still think it’s really important to get a good mixture of both old and new sounds using a mixture of equipment and how you do that is a way to make sure you don’t just end up sounding like everyone else. So I’m still using these older synths like my Roland Juno-60, my Nord and Roland Super Jupiter and so on.”

Who are your favourite producers at the moment?

“Well that’s obviously a difficult question as there are quite a lot of good ones out there. But if I would have to pick some, I guess it would be Alex Gopher, Boys Noize and Alex Metric.”

What remixes have you got coming up?

“I was quite busy lately with my album so I didn’t want to take remix jobs. I wanted to use my ideas and creativity just for my own stuff. But now the album is about to be released I’ve again taken some time to do some remixes. I did one for one of Arthur Baker’s projects. Plus there will be one out for my buddy Malente & Jay Robinson called *What A Bass* on Southern Fried. I did one for an Australian Indie band called Cassette Kids: a great band who I really like, especially the voice of the singer. And I did one lately for Alex Gopher.”

What is your method of working on a remix?

“I actually don’t have a special method: sometimes it is a part of the vocals, sometimes it’s a bassline or a beat or a specific sample of the song. I’m building my remix on that and take it further to make it more into my style of track.”

Any words of advice for new producers and DJs?

“They should enjoy all different kinds of styles and musical genres – this helps to broaden your horizons. They should get inspired, but it’s important not to just copy others, instead take something and make it your own. And, of course, stay true to yourself and stick to your ideas.” **FM**

WANT TO KNOW MORE?

For more info on Sharam Jey’s tour dates and releases on King Kong records, visit the official websites at: sharamjey.com and kingkongrecords.de

Roland Juno-60

“For the last ten years, I’ve probably used this synth in every single one of my tracks. When I bought it I was so excited because I’d often used it in other people’s studios and heard it on so many records.”

Super Jupiter

“The Super Jupiter was also one of my favourites that I bought over the years, although it’s not connected at the moment.”

OSCar

“I bought some of this stuff as a package from a guy who retired from music and told me that he was selling some old gear. When I went to see him, I couldn’t believe what he had and I bought the OSCar, the Realistic Moog, SH-101 and the Roland TR909.”



Tannoy Reveal 5s

"These are very old school, and they're always the first thing people go on about when they see my studio. I've used them for so long and I know them so well. I used to use them in conjunction with NS10s, which I loved, but when my NS10s broke, I really had to learn the Tannoys to be able to continue mixing."

Akai S3000

"I have so many demos and ideas that used this kit over the last ten years that I keep them and often dig out the sounds from the Akai's and so on. But really, over the last two years most of this stuff is rarely used."

Mackie Console

"Of course, you don't need a big desk nowadays, but I've done music for so long and it's always been about having a big mixing desk. I think you hear the difference when you mix on a real board. I can hear and feel a much fuller mid and low end using a console, plus it's a much more hands-on experience."

**ON THE DVD****1****In My Blood**

Sharam takes us through *In My Blood*, with vocalist Nick Valentino, showing us how he created the sounds behind it.

2**Vocals**

Working with vocals in Dance music is no simple task – Sharam talks about the various techniques he uses.

3**Track 2 Breakdown**

Sharam walks us through an unnamed album track and shows us the synths, samples and the mixing process he used.

4**Synth Tour**

FM gets a quick tour around the impressive range of synths that Sharam has collected over the years – each has a story to tell.



BEST
SELLER

AURALEX MOPADS

- SPEAKER ISOLATION PUNTHS
- RESTS ON ANY FLAT SURFACE, FOR ANY SIZE SPEAKER
- DECOUPLES SPEAKER FROM RESTING SURFACE
- PREVENTS RESONANCE, SOUND CONDUCTION & VIBRATIONS

MR263586 **£33.95**



apollo

STUDIO SPEAKER STANDS (1M)

- PROFESSIONAL-GRADE ISOLATED MONITOR STANDS
- 1000MM (H), TRI-POLE DESIGN FOR INCREASED STABILITY
- 178MM X 178MM SOLID METAL MOUNTING PLATE
- INCLUDES FOOT SPIKES & NEOPRENE PADS FOR EXTENDED ISOLATION

MR314673 **£119.00**



ACTIVE
NO AMP
REQUIRED

Wharfedale

WHARFEDALE DIAMOND 8.1 PRO ACTIVE

- 75 WATTS RMS PER SPEAKER
- 5" WOVEN KEVLAR WOOFER, 1" TEXTILE DOME HF DRIVER
- SELF-POWERED, BI-AMPLIFIED
- WHAT HI-FI AWARD WINNING MODEL

MR266129 **£169.00**



ACTIVE
NO AMP
REQUIRED

Wharfedale

WHARFEDALE DIAMOND 8.2 PRO ACTIVE

- 100 WATTS RMS PER SPEAKER
- 6.5" WOVEN KEVLAR WOOFER, 1" TEXTILE DOME HF DRIVER
- SELF-POWERED, BI-AMPLIFIED
- WHAT HI-FI AWARD WINNING MODEL

MR238071 **£199.00**



KORG

KORG KAOSILLATOR LE

- PORTABLE TOUCH SENSITIVE SYNTHESIZER
- 31 MUSICAL SCALE PATTERNS & 100 PROGRAMS
- 50 ARPEGGIATOR TYPES
- POWERED BY 4 X 'AA' BATTERIES (INCLUDED)

MR297542 **£119.00**



KRK

KRK 10S LE (WHITE)

- 160 WATTS RMS SUBWOOFER
- 10" HIGH-EXCURSION GLASS ARAMID COMPOSITE WOOFER
- VARIABLE CROSSOVER (36-130Hz)
- XLR, JACK INPUTS & PHONO INPUTS
- HTFR EXCLUSIVE WHITE FINISH

MR318237 **£319.00**



KRK

KRK VXT 4 (WHITE)

- 45 WATTS RMS PER SPEAKER
- 4" KEVLAR WOOFERS, 1" TRUE SILK DOME HF DRIVER
- SELF-POWERED, BI-AMPLIFIED
- HTFR EXCLUSIVE WHITE FINISH

MR266604 **£469.00**



ALLEN & HEATH

ALLEN & HEATH XONE 4D

- 4-CHANNEL DJ / MIDI MIXING CONSOLE
- 8-CHANNEL AUDIO & MIDI INTERFACE, 24-BIT / 96KHZ
- FULLY FUNCTIONING XONE FILTERS
- 105 MIDI CONTROLS & 2 CUSTOM JOG WHEEL

MR265105 **£1395.00**



stanton

STANTON FINAL SCRATCH OPEN DVS

- FIREWIRE AUDIO & MIDI INTERFACE, 24-BIT / 96KHZ
- 31 MUSICAL SCALE PATTERNS & 100 PROGRAMS
- INCLUDES DJ SOFTWARE & TIME-CODE CDS
- THE BEST DJ AUDIO INTERFACE - WORKS WITH ANY SOFTWARE

MR320834 **£199.00**



INTIMIDATION

INTIMIDATION TOUCH

- DVS SYSTEM WITH USB AUDIO INTERFACE
- INCLUDES 2 X TIME-CODE VINYL & 2 X CDS
- VISUAL WAVEFORMS & ULTRA-LOW LATENCY
- 4 HOT-CUE POINTS PER TRACK & LOOP FUNCTIONS

MR297484 **£199.00**



Pioneer Dj

PIONEER CDJ 900

- PLAYS MUSIC FROM CD OR USB & SD DEVICE
- CONTROLS SOFTWARE VIA MIDI / USB
- VINYL EMULATION TOUCH-SENSITIVE JOG WHEEL
- LCD PANEL AND GRAPHIC USER INTERFACE
- AUTO BEAT-LOOP FUNCTION WITH BEAT DIVIDE
- SLIP / LOOP FUNCTION
- INCLUDES SOFTWARE: PREPARE MUSIC PRE-GIG

MR324742 **£1099.00**



Vestax

VESTAX VCI 300

- 2 CHANNEL USB / MIDI DJ CONTROLLER
- 3 BAND CHANNEL EQ, BUILT-IN AUDIO INTERFACE
- DEDICATED HEADPHONE & MASTER OUTPUTS
- INCLUDES SERATO ITCH DJ SOFTWARE

MR266242 **£589.00**



gemiini

GEMINI PS 828 X

- 4-CHANNEL MIXER, 9 INPUTS INCLUDING 2 MIC
- 3 BAND CHANNEL EQ WITH KILL, 2 BAND MIC EQ
- ASSIGNABLE CROSSFADER
- BALANCED XLR / RCA OUTPUTS & RECORD OUT

MR266227 **£129.00**



EKS

EKS OTUS

- USB TURNABLE CONTROLLER & AUDIO INTERFACE
- 2 VIRTUAL DECK LAYERS, 7.5" JOG WHEEL, 28 BUTTONS, 10 KNOBS
- 2 X STEREO OUTPUTS, INDEPENDENT HEADPHONE OUT
- INCLUDES TRAKTOR DJ SOFTWARE ONLY @ HTFR

MR248596 **£499.00**



Pioneer Dj

PIONEER CDJ 2000

- PLAYS MUSIC FROM CD OR USB & SD DEVICE
- CONTROLS SOFTWARE VIA MIDI / USB
- VINYL EMULATION JOG WHEEL, 3 HOT-CUE POINTS & LOOP FUNCTION
- INCLUDES SOFTWARE: PREPARE MUSIC PRE-GIG

MR322763 **£1499.00**

WE ARE THE MOST
COMPETITIVE
PRO AUDIO
STORE IN THE UK!

HTFR
PRICE
PROMISE

AND THAT'S A PROMISE!
www.htfr.com/price-promise

why not visit
the HTFR store?

NEW
REVAMPED
LAYOUT

- EXCLUSIVE: HTFR ONLY PRODUCTS
- LATEST PRODUCTS IN STOCK - FIRST
- MASSIVE 5,000 sq ft CITY CENTRE STORE
- EX-DISPLAY & B-STOCK BARGAINS AREA
- DEDICATED SPEAKER DEMO ROOM
- DEDICATED LIGHTING & LASER DEMO BOOTH
- CHILL OUT AREA - BRING THE FAMILY
- HOT & COLD DRINKS + SNACKS
- FREE 20 CAR CUSTOMER CAR PARK

OPENING HOURS: MONDAY - FRIDAY 10am - 6pm SATURDAY 10am - 5pm

DIRECTIONS: www.htfr.com/map

NEW LOOK STORE: www.HTFR.com/htfr-store

website
also
accepts

PayPal

all orders
despatched
within 24 hours

24hr

WE HAVE WEEKLY IN-STORE EVENTS AT HTFR
VISIT OUR WEBSITE DIARY FOR DETAILS - www.HTFR.com/events

Order before 4pm for Next Day Delivery (subject to availability)



Open Labs

OPENLABS DBEAT CONSOLE

- ALL-IN-ONE PRODUCTION & DJ CONSOLE
- INTERNAL COMPUTER, 3 GHZ CORE2 DUO WITH 4GB RAM
- 320 GB HARDDRIVE, CD / DVD BURNER
- 12" TOUCH SENSITIVE DISPLAY, PADS, FADERS, ETC
- INCLUDES DECKADANCE, RIFF REAPER & GURU SOFTWARE
- MORE THAN 4 BILLION HIGH-QUALITY SOUNDS

MR319141 **£2599.00**



stanton

STANTON UBERSTAND

- FOLDABLE LAPTOP DJ STAND
- AIRCRAFT GRADE LIGHT-WEIGHT ALUMINIUM
- 2 EQUIPMENT SHELVES
- 2 MINUTES ASSEMBLY / DISASSEMBLY TIME
- SUITABLE FOR MOBILE OR FIXED PURPOSE

MR222850 **£59.00**



VINYL FILE

19" RACK EQUIPMENT STAND (4U)

- HOLDS ANY 19" EQUIPMENT (UP TO 4U)
- SIMPLE 3 PIECE CONSTRUCTION - EASY TO ASSEMBLE
- COLLAPSIBLE, CABLE TIDY CHANNEL
- WEIGHTED CROSS PIECE FOR ULTRA STURDY OPERATION
- INCLUDES RACK FIXINGS & SCREWS
- POLISHED BLACK FINISH

MR272743 **£59.00**



Kam

STUDIO DESK

- SELF-ASSEMBLY STUDIO WORKSTATION
- HOLDS MIXING DESK, MIDI KEYBOARD, SAMPLERS ETC
- COMPUTER MONITOR & SEPARATE SPEAKER MOUNTS
- EASY ASSEMBLY
- AMAZING VALUE PROFESSIONAL STUDIO FURNITURE

MR248335 **£159.00**

FREE catalogue



NEW YEAR 2010 CATALOGUE
www.HTFR.com

02121 687 7777

call 0121-687 7777, email:

catalogue@htfr.com

for a free copy of our

Full Colour 84 page catalogue

Starting Out With Max/MSP

This month, ***Richard Wentk*** explains how to move past basic MIDI processing into the audio realm and how to create a custom switchable looper patch in Max/MSP...

Part Two: Audio

For the first few years of its long life, Max was mute. Back in the '80s, computers were slow and stupid and it was impossible to

imagine processing audio in real time with anything smaller than a room full of supercomputers, staffed by minions.

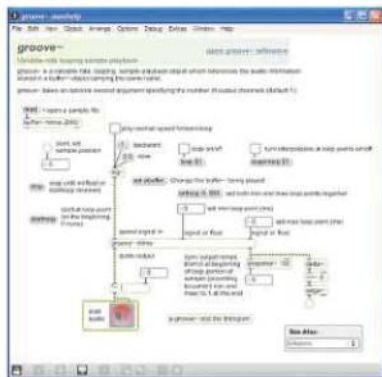
Then PCs and Macs arrived and started to become cheaper and faster. After a while live audio stopped being exotic and impossible, and became affordable and mainstream. To support the change, Max developed an add-on called MSP, which bolted on a sidecar full of audio features, although, if you don't want audio, you can still buy Max on its own for \$250.

Audacity of audio

Audio runs faster than MIDI, and needs to have priority. So, like most soft synths, Max/MSP processes it separately. To keep a stream of audio playing without stuttering, Max processes a complete block – called a vector – every time it updates. The vector is the same size as the default buffer setting for your soundcard – usually 256 samples,

128 or even 64 samplers if you have monster top-quality hardware, 512 or 1024 if you have a slower clunker.

Max/MSP supports most driver formats. To select one, take a look under Options -> DSP Status. It goes without saying that you need to use the fastest and best drivers you can find, to give the lowest latency. By default audio/DSP is turned off, so you'll need to turn it on here to make any noise. What can you do with audio? Almost



The groove~ object makes a good basis for a looper

THE EXPERT

Richard Wentk
Developer



 With an occasional sideline writing music for ads, Richard was last seen working on ideas for new controllers and control surfaces for Max, as well as some novel experimental synthesis techniques. He built his first hardware synth aged sixteen, and hasn't stopped since.

anything you like. MSP includes a huge selection of objects that make and process sound. There are the usual analogue-styled oscillators and filters – various delay, sampling, recording and playback features – and more exotic options like fourier analysis and resynthesis.

You can connect more or less how you like, so you're not limited to conventional synth and effect designs. This month, we'll get you started with a very simple looper, built around the record~, buffer~ and groove~ audio objects, and triggered by a footswitch.

Tilde of change

Audio objects look like MIDI objects, but have a tilde (~) character on the end. You can do basic maths on audio too, to mix and scale it. There's an adc~ (analogue/digital conversion) object for input, a dac~ (digital/analogue conversion) object for output – you'll need to connect something to the DAC to hear anything at all – and also simplified versions of both objects if you want to ignore their less interesting

Build A Simple Audio Looper

This is more complex than last month's patch, but it shouldn't be too hard to see what's happening, especially if you load it and try it out...

Object Key

toggle switch: switches between 1 and 0 when clicked or triggered with a bang

if: as it says on the tin, tests if a condition is true, and let's you define what happens next if it is

message: sends preset text message to an object, usually used to change its settings

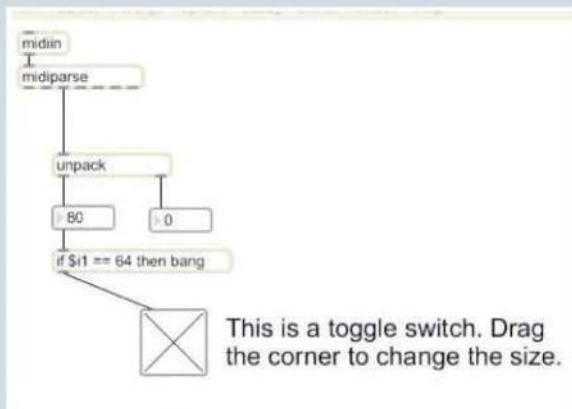
buffer~: stores a block of audio in memory. You don't connect buffer~ to other objects directly, but it needs to be included so other objects can reference it.

record~: records audio into a named buffer~.

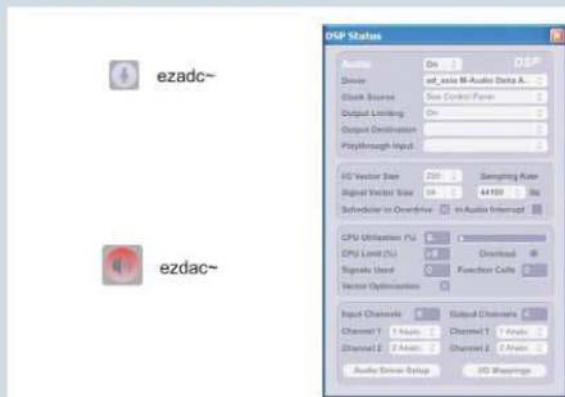
groove~: plays audio from a named buffer~, with optional looping and pitch changes. See the groove~ help page for more tricks.

ezadc~ and ezdac~: soundcard input and output connections.

sig~: converts a number into an audio signal, so you can patch it into an audio object.



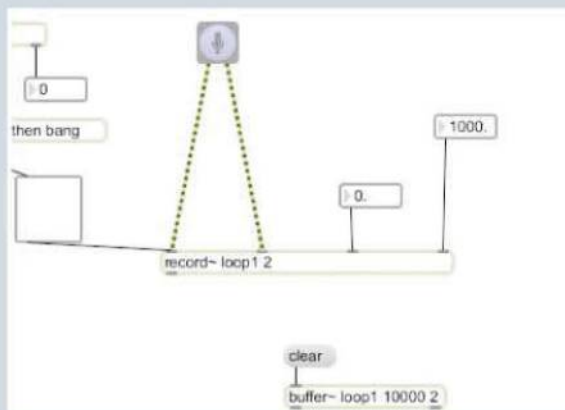
1 Load Max, select File > Open > FootSwitch (which you can find on the DVD). It toggles a Max switch – the box with the cross in it – when you step on a sustain pedal. Double-click on midin to select your MIDI source. If you don't have a pedal, use the mouse to click on the switch.



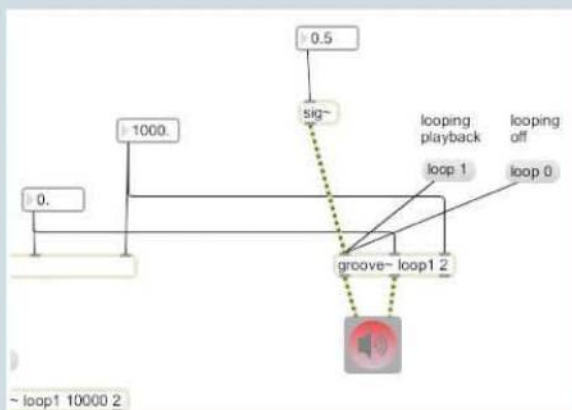
2 Next, we need an audio in and audio out. Double-click anywhere in the window to load the object menu, and click on the 'ezadc~' microphone icon. Likewise, add the 'ezdac~' speaker icon. Click on Options -> DSP Status to select your soundcard and drivers, and turn audio on.



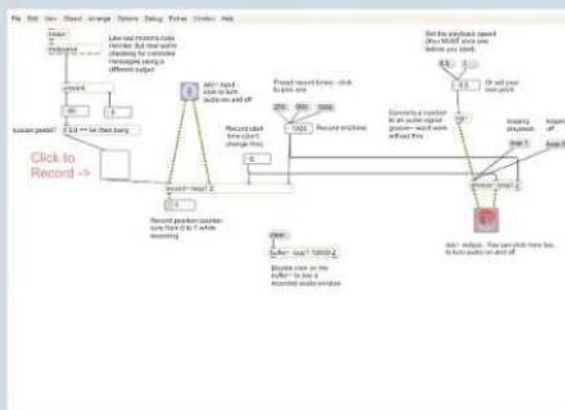
3 To record audio, we need a buffer object. Double-click on the object menu, and add the object as shown. This creates a ten-second two-channel audio buffer called 'loop1'. Next, create a message object. Double-click on it, enter 'clear', and connect it to the buffer's first inlet.



4 Next, add a record~ object, and some numbers, as shown. The record~ object writes audio into the buffer. The two numbers set the start and end record time in milliseconds. Connect record~ to the ezadc~, also as shown in the screenshot.



5 Finally, add a groove~ object, which plays audio from the buffer. You'll also need to link it to the same numbers used by record~. groove~ has many options – loop 1 turns on loop playback, loop 0 turns it off. The sig~ object converts a number to an audio signal, which sets groove~'s pitch.



6 Putting it all together, hit the footswitch, and inject some audio. The patch should grab the audio and loop it. It's primitive – a real looper would have more refinements and options – but it works. We've added extra comments here so you can see what each object is doing.

settings. There's also a `vst~` object you can load with any external VST effect or soft synth, so you don't have to reinvent a favourite effect or synth if it already exists.

patch cables, shown on the screen with yellow and black stripes. The other is that most audio objects can read conventional text and MIDI messages.

Some objects also output text and MIDI messages, to keep you updated on their status. So a typical audio patch uses an audio signal chain, surrounded by Max control objects that keep it in hand and tell it what to do, and when to do it.

There's also an audio `number~` object that converts audio levels into a message you can test, monitor and display, and a `sig~` object that works in the other

There's also an audio `number~` object that converts audio levels into a message

To assemble an audio patch in the usual way, patch objects together in the usual Max way – with two differences. The first is that audio uses special virtual audio-only

direction, converting numbers to an audio stream.

Most of the time, anything goes when it comes to patch design. You're limited only by your computer processor speed, so if you want to build a delay system with twenty-seven independent delays, you can do it – and add filtering, EQ or whatever it is you want for each.

The only rule is 'no feedback' – Max/MSP won't let you take the output from an audio chain and connect it back to the input. So, now you know the basics of audio in Max – open the patch on the DVD and get to work! **FM**



ON THE DVD

You can find a copy of the `simpleLooper`.

To run it, go to cycling74.com/downloads/max5, select your platform, and download the Max Runtime version, which loads patches, but doesn't allow editing.

There's the simple tempo patch – load the patch, load the global time controller, and experiment with the tempo, and the note value options.

NEXT ISSUE

We'll be back to explain how to make MIDI and audio interact with each other, to create unique processing effects. **FM224** on sale 23rd Feb

Time and Space

Understanding Timing Formats and Differences in Max

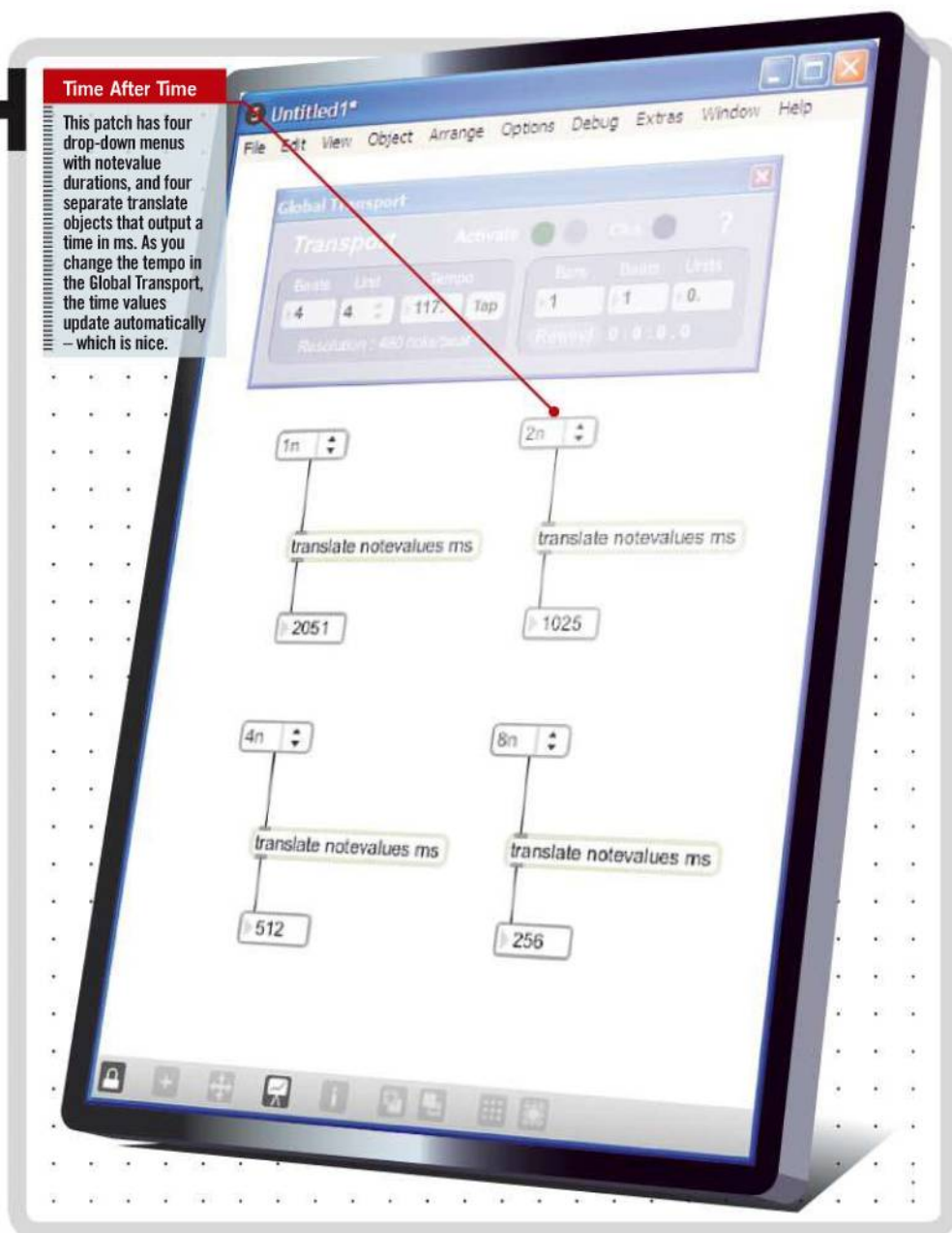
There are two basic kinds of time in Max – absolute time, which is an absolute number of milliseconds, and clock time, which comes in various time units, and refers to a tempo setting. Clock time is more complex, but is usually more useful. You can specify bars, beats and pulses per beat, or what's called a notevalue duration – e.g. '1n' means a whole note, '16n' means a sixteenth note, and so on.

Some objects can read both units, some need a time in milliseconds. To translate any format to any other use the `translate` object, and specify the input and output format when you create the object. e.g. 'translate notevalues ms' reads notevalues and spits out milliseconds.

To set the tempo and time signature, select `Window -> Global Transport` to show Max's transport bar. If you're syncing to an external sequencer, Max will of course use the external tempo and time sig settings whenever it does time-based calculations.

Time After Time

This patch has four drop-down menus with notevalue durations, and four separate `translate` objects that output a time in ms. As you change the tempo in the Global Transport, the time values update automatically – which is nice.



Zoom Q3

Handy Video Recorder



$$\frac{\text{H}^{\text{igh}} \text{Q}^{\text{uality}} \text{V}^{\text{ideo}} + \text{H}^{\text{igh}} \text{Q}^{\text{uality}} \text{A}^{\text{udio}^2}}{\text{V}^{\text{alue}} \text{F}^{\text{or}} \text{M}^{\text{oney}}} = \text{Q}^3$$

Tel: +44-1462-791100

www.handyvideorecorder.com

info@zoomcorp.co.uk



Zoom UK, 15 Weston Barns, Hitchin Road, Weston, Hertfordshire, SG4 7AX, UNITED KINGDOM
4-4-3, Kanda Surugadai, Chiyoda Ku, Tokyo 101-0062, JAPAN

Crystal's Scott Kirkland (left) and Ken Jordan (right) live in Mexico

The Crystal Method have created some of the most dynamic Electronic music over the past two decades. **Declan McGlynn** travelled to Guadalajara, Mexico, to crack open their impressive live setup...

Since the early '90s, the Crystal Method have been sending crowds across the world into Big Beat frenzies and have risen to legendary status. Their list of collaborators from their debut album *Vegas* right up to their new stomper, *Divided By Night*, ranges from Tom Morello and Eric B & Rakim to Milla Jovovich and Peter Hook. Add that to their CV of soundtracks for movies and videogames, as well as their multi-platinum records, Grammy award nominations and energetic live shows, and it's no surprise TCM are still on top of their game almost 20 years after their formation.

We caught up with Crystal's Ken Jordan and Scott Kirkland backstage at a sweaty festival in mainland Mexico and, after a quick tour of the rider we got down to talking the talk...

FM: What did your live show consist of originally?

Ken Jordan: "Some parts of the process have always been the same – we'd work up live versions of our tracks in the studio and take out the parts that we could play live on stage. It started as a DAT tape and then we had a Fostex D90."

Scott Kirkland: "The main problem we had in the very beginning was that most of our music was based around us running a synth through three pedals and sampling it, running that from a DAT tape, and then sampling that too. And we had no way to recall anything, so we'd work on a mix until we felt like it was done and, even when we took photos of all the settings on the gear, it was never the same from one time to the next. So playing live at first, we had a lot to think about."

"In 1994, we were about to release *Keep Hope Alive* and we got a phone call asking us if we wanted to open for the Dust Brothers for two shows. We had

a Juno-106, an EMAX II, an EPS16 and a Nord. We grew up going to see big shows like Van Halen and AC/DC, and there was a moment where you saw the artist play the parts and saw the drummer hit the drums. Some of the first Electronic shows we went to in LA, there was always some element of mystery as to what was happening."

KJ: "There were knobs being turned and things were happening, but there wasn't actually too much interaction with the crowd. So we really wanted to use as much gear as we could and get as close to the crowd as possible."

"For the Dust Brothers show we spent a long time planning it and we were at the side of the stage nervous as hell, thinking about how it was gonna go – and the whole show got cancelled. We used to have racks and racks of gear, and we'd show up at LAX (Los Angeles Airport) and give a baggage handler, like, \$20 to check it all in for us."

The Crystal Method

Was playing live a big part of the beginnings of the Crystal Method?

SK: "The way that you break through in the States is playing live – there isn't the kind of market like in the UK where one DJ can play one track on one show and the whole country can hear it. So we knew we had to play live as much as possible and we did that relentlessly for two years until we were lucky enough to get tour support."

KJ: "We eventually got to the point that we were carrying a rack-mounted Mac tower computer and an interface and it was more like we had our studio with us on the road, we were using Digital Performer live and in the studio."

SK: "We had MPCs, Ken had two [E-mu] E4XTs and I had maybe two or three more on my side. We used the DX7 MkIIs as our controllers because they were cheap, they were sturdy and you could throw them around and they would keep working. So after

a while our backline engineer, Harry, would set up a droid factory backstage and have four broken DX7s that were just for parts. He'd take out the sound board and everything we didn't need and put glue over the components that we did need in case someone spilled something on it or threw it somewhere. We thought about building a table out of all our old DX parts. We had various different rack-mounted effects and such too. For the new album we decided we wanted to change things up and make things even more complicated."

How does it work now?

KJ: "It was a very serious undertaking – we've got two MacBook Pros, running Pro Tools LE, with a word clock and MIDI Timecode synced via a [MOTU] MIDI Time Piece. When you use the MIDI timecode out of the [Digi] 003s, you can't get a true lock so we need the MOTU. Pro Tools has

backing tracks but it's also spitting out MIDI to external gear. We have lots of cue points so we can change things up on the fly, but there can be moments where it's 15 minutes before the set and we're still in our dressing room working on the show and adapting it. My laptop is the master computer and Scott's clock goes out of the 003 into my 003, but both are synced to the Time Piece. I've also got a number of Trigger Fingers and the new M-Audio Axiom Pro 49. I use Kore with a lot of stuff loaded into Kontakt."

SK: "I use a little bit of Kontakt too – there's a sound on one of the tracks that's from a Jupiter 6 and the 6 has that weird cross-path filter that's unique to that synth, so we sampled the whole synth in every velocity into Kontakt. I've got an Effectrix delay, Mackie 16 for submixing, Nord Lead 2, Rat pedal, [Alesis] Andromeda A6, [M-Audio] Axiom Pro 25 for the sampler, Arturia Origin and the

[Studio Electronics] SE-1 for bass stuff. I have the M13 from Line 6 and I used to have a Moog filter but I think the Line 6 does a really good job. I trigger lots of stuff from the Andromeda too.

"We had this huge steel circle lighting truss custom built for this tour too, so it's a really sexy, really streamlined setup and all the gear sits on it."

Syncing two Pro Tools setups seems risky – it's not exactly made for live performance. Why are you avoiding Ableton Live?

KJ: "Well, Ableton Live has a huge flaw. Ableton doesn't use MIDI time code, it uses MIDI beat lock, so it's not a great lock. Plus, when we were trying it, if you went over bar 1,024 and stopped, you lost the lock. We were using [Openlabs] Miko at the time, though, so it could have been a problem with that."

SK: "I think that was in the PC world, though, we are really used to Macs but we loved the idea of the Miko so we tried it out. But even so, the main thing was that it wasn't an accurate sync – especially if you were using a lot of arpeggios. I would be triggering a lot of soft synths and they would be drifting and it wouldn't work for us."

"On this tour, we wanted to update a lot of the classic gear and update the classic tracks. We're Pro Tools based in the studio and we're very reliant on TDM plug-ins – for example, the vocoder on *Divided By Night* on the new album is the Moog Modular from Arturia with Vokator and Sonalksis TBK3 Über Compressor and some Waves Neve plugs. There are times, though, where it's the other way around and you're playing on stage and do something different, and you think, 'God, why didn't I play it like that on the record?'"

So your studio is on Pro Tools HD?

SK: "Pro Tools HD, yeah. In our old studio we didn't have enough room to put any of our analogue gear so we had to store it all away. This one has racks and racks of synths."

What else have you got filling your studio? Any favourite bits of kit?

SK: "We actually have a CS80, but we just lent it to our friend Jon Brion for when he was working on the Kanye [West] record – he would have eight of them if he could find them. I bought it for \$900 about ten years ago, and Jon put MIDI in and spent a lot more than I bought it for fixing it up. He has this showcase thing he does on a weekly basis and all he wanted to play was that and no other synth, so he spent a lot of time making it perfect. We also have an OSCar, but we use the impOSCar a lot too."

So you're not precious about the gear.

KJ: "We used to be, but plug-ins have just got so much better. As long as we open the plug-in and it's in tune and it works, and it doesn't make a load of white noise, then it's fine by us!" **FM**

WANT TO KNOW MORE?

The Crystal Method's new album *Divided By Night* is on sale now. Visit their official website for more information: thecrystalmethod.com

Synth Rack

"This rack is in our machine room and it always holds keyboards and synths that are ready to be pulled into the studio but aren't currently wired in. At the top is a great keyboard, Yamaha CS40M, which we've used a lot – it's the first sound you hear on *Trip Like I Do*. Under that is a Roland Jupiter-4 and below that is one of our favourite bass units – the Moog Source. Below that is a Korg MonoPoly. On the bottom-right you can see a modified Roland SH-101 that is just flawless."



The guys in their LA-based studio, Crystalworks.



© Dave Bullock

PROFESSIONAL
AUDIO PRODUCTS



"We use the ESP1010e on tour and the functionality is fantastic."
- Nick Warren, DJ and Producer, Way Out West



ESP1010e

8-in/8-out PCIe based multi channel recording interface

The new version of the famous ESP1010 is now PCIe based for extremely fast and reliable data transfer. Perfect for your home studio.

"...the 08s represent excellent value for money..."
- Music Tech



nEar08 eXperience

8" near field monitors

Studio near field reference monitors developed to generate a near perfect sonic reproduction in any studio environment.



Maya 44e

4-in/4-out PCIe based audio interface

High quality 24-bit / 96 kHz 4-in/4-out PCIe audio interface, providing a number of powerful and amazing features optimized for home recording on a professional quality level and for various DJ applications.

Wall of Sound

"This is one of our keyboard walls in our Studio A room. We have two walls like this - there's a similar wall on the other side of the room and all of these keyboards are always available to be patched through - audio and MIDI. At the top is the original microKorg, but we use the new XL now. Below that is a Korg Prophecy, while under that is the much-used Nord Lead 3 and the Dave Smith Poly Evolver - compliments of Byron Wong - and sitting on the floor is an MPC3000 and our beloved ARP 2600."



call us on 01837 55200

www.timespace.com/esi

GAK PRO AUDIO



01273
665400

CALL OUR SALES HOTLINE NOW!!

0% FINANCE AVAILABLE OVER THE PHONE
NEXT DAY DELIVERY*

SAMSON NEW GO Mic Ultra portable USB condenser microphone with laptop clip! £39	NOVATION Launch Pad Seamless Ableton integration, Live Lite included!! £149 NEW	ELEKTRON Machine Drum SPS-1UWMKII Gritty 12-bit drum machine & sampler!! £1295	AKAI MEGA DEAL APC 40 & FREE Fusion Gigbag !!! £379	NATIVE INSTRUMENTS Maschine Hardware & software in perfect harmony! £489
MACKIE Onyx 820i Pro Tools compatible Firewire audio interface & mixer £486	YAMAHA Pocketrak CX The latest version of this high spec portable recorder!! £159	KORG KP3 Live effects / sampling performance tool! £298	KORG NEW SV-1 73/88 Fingertip access to the sounds that defined a generation! £1499/£1599	APOGEE One Awesome portable audio interface. With built-in mic! £187
CELEMONY Melodyne EDITOR !!! Groundbreaking polyphonic pitch/time correction. £289 NEW	DCAM Synth Squad Three highly versatile analogue modelling synths in one box!! £149 FREE DELIVERY	MOOG Voyager Electric Blue Legendary monophonic monster synth!! £2299	ARTURIA Origin Massive modular synthesis meltdown £1899 FREE DELIVERY	WALDORF Blofeld Keyboard Virtual analogue, classic wavetable beast! £594
NEUMANN TLM 102 NEW Classic Neumann sound at an unbelievable price. £499	RODE FREE DELIVERY NT 1000 Now with FREE NT-SM2 Shockmount! £199 MEGA DEAL	ZOOM Q3 Ground breaking portable audio/video recorder! £199	DAVE SMITH Prophet 8 The classic vintage sound with a modern edge!! £1499	SENNHEISER HD 25 MKII Industry standard closed back studio headphones! £149
STEINBERG CC121 The ultimate Cubase controller!! £312	EDIROL R-4 Ultra portable high quality digital recorder. £1549	MACKIE Big Knob The ultimate monitor controller! Now back in stock! £218	AUDIO TECHNICA AT2020 High SPL handling & wide dynamic range provide unmatched versatility. £89	ADAM PAIR A7 Clarity, detail and spectacular imaging! £649 FREE DELIVERY
AUDIO TECHNICA ATH-M50 Exceptional audio quality for professional monitoring and mixing. £99	ALESIS NEW Micron Blue Ltd Ed 8-Voice, 3-Octave mini synth! £299	MOTO BPM Advanced urban rhythm beat production! £219	M-AUDIO PAIR DSM 3 High-Resolution DSP Studio Monitor! £1090 NEW	NOTATION Progression Compact 4 track portable digital pocket studio. £56
AKAI NEW MINIAK Mini synth & Vocoder with arpeggiator! £479	AKG C414 B-XL II Five switchable polar patterns for placement and application flexibility. £698	FOCUSRITE Octo Pre MKII Eight channels of Focusrite pre-amplification £329	AKAI MPC 2500 SE Now in limited edition white. SUPER FLY!! £949 NEW	NATIVE INSTRUMENTS Audio 2 DJ The worlds smallest audio interface for DJ's £79
M-AUDIO M Box 2 Award winning Pro Tools LE 2 channel audio interface. £264	KORG Kaossillator Handheld Kaoss! Portable synth mayhem! £129 FREE DELIVERY	MACKIE SRM 450 V2 FREE Stand! FREE Bag! FREE Cable! £431 MEGA DEAL	SAMSON PAIR Studio Dock 3i Record, mix, sync and take your music with you! £83	TASCAM DP 004 Compact 4 track portable digital pocket studio. £165 FREE 4 GB CARD

78 - 81 NORTH ROAD, BRIGHTON, EAST SUSSEX, BN1 1YD.

FROM LONDON VICTORIA TO BRIGHTON IN LESS THAN AN HOUR. WE'RE JUST 5 MINS WALK FROM BRIGHTON STATION. OPEN MON - SAT 9.30 - 5.30 • SUN 11 - 4

FOR THE BEST PRICES..CALL OUR SALES HOTLINE NOW!!

HAPPY NEW YEAR!!

From the nations **NO.1** Musical Instrument Retailer.
GAK, Home of the MEGA DEAL!

AKAI NEW

LPK 25
25 miniature, velocity-sensitive keyboard keys with built in arpeggiator

£44



SAMSON IN STOCK NOW

Stage 5 Q7 Handheld

Handheld wireless mic for this crazy price!

£79



PROPELLERHEAD

Record Duo

Finally you can work with audio in Reason!!

£359



GENELEC

8020A PAIR
Compact but powerful, don't be fooled by their size!

£494



NATIVE INSTRUMENTS

Komplete 6
All your synth & sampler needs in one bundle.

£419



MACKIE

Thump 15H
Deep low-end and real power from Mackie's new Thump

£250



KORG

MicroSampler
Now you can sample anytime, anywhere.

£379



NOVATION

Nocturn 25
Automap powered intelligent plug-in/sequencer controller.

£164 FREE DELIVERY



FOCUSRITE

Saffire 6
The most affordable and best-sounding interface in its class!

£139 NEW



TASCAM

US 122 Mk2
Updated version of this popular audio interface.

£119 FREE DELIVERY



STEINBERG

Cubase 5
The latest version of legendary this DAW!

£427



SPECTRASONICS

Trillian Total Bass Module
The bass solution from Spectrasonics.

£199



DIGIDESIGN NEW

Eleven Rack
Revolutionary new guitar recording and effects processing system.

£709



RODE

NT1-A
FREE! Pop shield
FREE! Stand
FREE! Cable
FREE! Shockmount

£151



CAKEWALK

UA-25EX
High Quality 24-bit/96 kHz USB Audio Interface.

£159



EDIROL FREE DELIVERY

R-09HR
Highly innovative multi application personal recorder.

£239 FREE 4 GB CARD



NATIVE INSTRUMENTS

X-1
The perfect controller for Traktor Pro DJ software.

£179 NEW



NORD FREE DELIVERY

Electro 73

Updated & updated version of this killer synth!

£1379



APPLE

Logic Studio 9
The latest instalment of the mighty Logic Studio.

£332



KORG

MicroKorg XL
Updated & improved version of the famous MicroKorg

£339 FREE DELIVERY



MACKIE

MR-8 PAIR
The perfect match of amplifier & monitor design!!

£398



JBL

Eon 315
FREE Bag!
FREE Stand!
FREE Cable!

£399 FREE DELIVERY



MOOG

Voyager Performer Edition
OUTSTANDING!

£2212



BOSS

BR 600
Streamlined, feature-rich 8 track studio.

£245 FREE DELIVERY



KRK

RP 6 G2
Featuring refined voicing and a new curved baffle!

£329 FREE DELIVERY



REBEAT

Rebeat
Wanna get your music on iTunes, Amazon & More? Do it the easy way!

£89



M-AUDIO

Oxygen 25 3rd Generation
Next generation MIDI controller.

£69 NEW



AKG

WMS 40 Pro Flexx Vocal
Unique high definition audio performance technology ensures the best possible sound.

£142



MOTU NEW

UltraLite MK3 Hybrid
Compact and portable FireWire audio interface.

£429



FOCUSRITE

ISA One
Prestigious ISA transformer-based pre-amp

£499



AKAI

MPK-88
Professional performance keyboard controller!

£599



COMPETITION

Join our mailing list for your chance to win these **Samson Studio Dock 3i monitors!!!**

It couldn't be easier, just email your name to:
futurecomp@gak.co.uk

**WIN!!
SAMSON
STUDIO DOCK
3i**



ORDER ON LINE NOW!!

MASSIVE STOCKS!!

WWW.GAK.CO.UK

**Next working day delivery. We are a licensed credit broker. All prices include VAT. All monthly repayments are based on no deposit & are paid over 6,12,24 OR 36 months at 0% or 19.9% APR. Credit subject to status. Written quotations available on request. Prices correct at time of going to press. £80E *PLEASE NOTE GAK.CO.UK LTD IS A SISTER COMPANY & AS SUCH PRICES, STOCK & DELIVERY MAY DIFFER. 0% FINANCE IS NOT AVAILABLE ONLINE.

CUBASE ESSENTIALS



Prologue Programming in Cubase 5

This month, **Bruce Aisher** and his fountain of Cubase knowledge revisit Prologue, part of Cubase 5's in-the-box synth armoury. Join him as he rustles-up some useful sonic nuggets and delves deep so you don't have to...

Given that we live in age dominated by an ongoing and ever increasing profusion of virtual instrument plug-ins, it is sometimes easy to dismiss those that come with Cubase 5 itself.

They may be stark to look at, but they are well designed and easy to use once you spend some time getting to know them. In fact, Prologue, Steinberg's very own analogue-style synth is capable of wide range of solid and interesting sounds.

At its heart, Prologue features three oscillators (each with a selection of single-cycle waveforms) that can interact with each other in a number of interesting

ways (FM, Sync, Ring Modulation and PWM) as well as a noise source. All these are then fed into a flexible multimode filter.

Alongside these, we also have a two LFOs, four Envelope sources and an effects section, which provide a range of interesting modulation and sound mangling opportunities. Below, we'll explore different aspects of Prologue's functionality in ten different steps and put them to use in creating a range of potentially useful sounds. Don't forget there's also ten tutorial videos to help you along on the *Future Music* DVD too.

Hopefully this will set you on the path to true C5 synth enlightenment.

THE EXPERT

Bruce Aisher,
producer,
engineer



Bruce has been using Cubase since its arrival on the Atari ST in 1989. He's grown up alongside his favourite piece of software, sharing the ups (and downs) of the professional music world. The two are now inseparable.

Using the filters to create a synth stab

1 If we take a three oscillator sawtooth preset as a starting point, it is quite simple to shape it into something more interesting with the use of the Prologue filters. A classic synth stab can be built from a rich sound source by using the filters to move from open to closed in a quick sweeping motion. This is best achieved by pressing the Envelope generators into service as a modulation source, and Prologue has four of these.

By default Env 1 is configured to modulate the volume level of any given note (called master volume in Steinberg parlance). In other words it is an Amplitude Envelope, and shapes the loudness. To manipulate the timbre of a sound – in this case by using on of the various filters – Env 2 needs to be pressed into action.

By setting the modulation destination (mod dest) to cutoff the envelope will open and close the filter based on the attack, decay, sustain and release settings of Env 2.



Modulating filter cutoff with Env 2



Prologue Noise source is great for snare and hi-hat creation

For the synth stab, try Sustain to zero in both Env 1 & 2, and trying a fast attack and moderate decay.



ON THE DVD

> Using Env 2 to control filter cutoff.

Snares and hi-hats

2 As well as creating partially pitched drum sounds, Prologue's noise generator is a great source of snare, hi-hat and cymbal sounds. If the oscillators are out of the picture, the main issue now is how to alter the timbre over time.

As we did for the synth stab we turn to the filter section, but this time it's worth exploring the Emphasis and Shift parameters. Emphasis is often labelled as Resonance on other synth, and increases the gain around the cutoff of frequency of the chosen filter. Shift, gives extra possible flavour to any of the filters with a greater than 12dB/octave slope and is worth exploring for a wider range of tones, as is the Drive parameter.

For a satisfactory snare sound Env 2 should be set to modulate the filter cutoff of a low-pass filter and the noise generator should be set for 'Pink Noise' (it's the small light above the noise knob). Hi-hats are more obtainable with 'White Noise' and a band-pass filter.

You could also experiment with the Punch button on the envelope generators to give the sounds more, well, punch!



ON THE DVD

> Filtering and modulating noise for snare and hi-hat creation.

Rich pads, vibrato and PWM

3 Detuning oscillators is a useful way of beefing up a sound, but sometimes a degree of extra movement and thickness is

Oscillator

Choose your oscillator with the oscillator waveform selection drop-down



Oscillators and Synth Bass

4 Prologue uses subtractive synthesis for it's sound generation, this is 'analogue' in style, as it has it's root in the

non-digital past with a more basic but most popular type of synthesis.

Subtractive synthesis, as its name suggests, relies on taking harmonically interesting audio sources and removing particular frequency elements – with the use of one or more filters. Although

there are ways of manipulating the raw sounds with the use of effects and by applying various types of modulation, one of the most important aspects of all this is the oscillators themselves.

Prologue has range of waveforms available for each oscillator including the most common analogue types – saw (the fattest of the lot), to square, triangle and sine (the purest wave, with no additional harmonics). However, there are also a number of other more complex

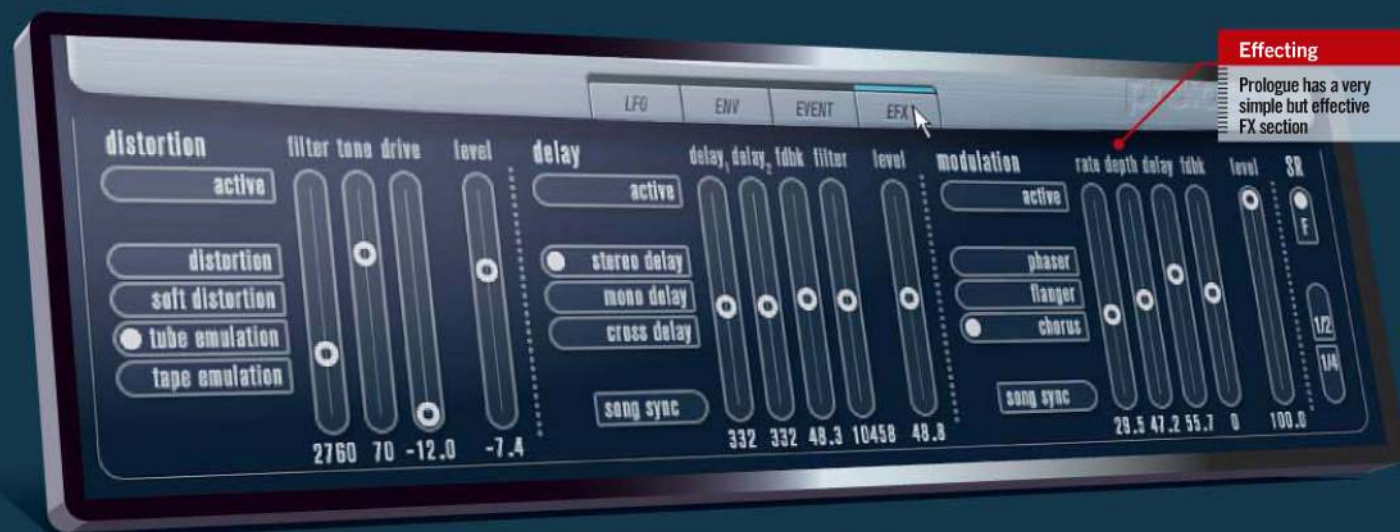
waveforms such as the Formant and Vocal varieties, and a series of 'analogue' variants.

If fat bass sounds are your bag, then it's worth putting all the oscillators to work – maybe start with the Sawtooth wave for each – and then detune oscillators two and three by a few cents using the Fine tuning parameter.



ON THE DVD

> Taking a look at the Prologue oscillators.



Finessing Your Creations with Effects

5 Even with modulation and timbral complexity there will be times when you want that bit more. This is where Prologue's modest but effective effects section comes into play, called up via the EFX tab. First we have the distortion section

which extends from the subtle harmonic warming of the tape emulation to the more ballsy creations of the distortion setting.

The key here is to push the drive parameter and tweak the filter, tone and level controls to avoid harshness – unless that is what you are looking for of course.

The delay section of Prologue is a great way to add space – try using the stereo or cross delay settings with different times set for delay 1 & 2.

The modulation setting can conjure up anything from gentle chorus to full-on metallic flange or whoosy phase action. Be careful not to overcook modulation on bass sounds.

Finally, the SR parameter reduces the sample rate to emulate the less hi-fi digital converters of older digital synths and samplers – sometimes lo-fi is king.



> A guided video tour of Prologue's EFX section.

required. This is easily achieved adding vibrato (pitch modulation) and altering the wave shape in real-time (wave modulation), often found on analogue synths in the guise of Pulse Width Modulation (PWM) – essentially a square wave where its width is varied. Vibrato is achieved by using one of Prologue's two LFOs as a modulation source (set to a sine or triangle wave) and setting each oscillator as modulation destination. With the right speed and not too much depth, a subtle pitch wavering can be added that works particularly well on pads.

Next up we use LFO 2 routed to each oscillator's Wave Mod parameter – make sure the Wave Mod button is turned on for each oscillator. The trick here is sometimes to modulate one or two oscillators and not the other, or use different LFOs to modulate the pitch of alternate oscillators. With the right amount of vibrato and wave modulation, it's possible to create some very warm pads.



> Thickening pads with pitch and wave modulation.

Creating kick drums and toms

6 As we've already pointed out Prologue isn't just useful for obviously pitched sounds such as basses and pads. Why not use it

for drum sounds – after all weren't some of the best-loved drum sounds in Electronic music originally generated by analogue circuitry, with a not dissimilar architecture to Prologue?

OK – so where to begin? Most tom and kick sounds have both tuned and untuned elements. Luckily, in Prologue we have three oscillators (for the pitched elements) and a noise source (for the un-pitched part of the sound). We will need control over both these elements independently in terms of amplitude and timbre. Once again, as luck would have it, we have four envelopes that can be routed to modulate parameters in interesting ways. If we keep things

simple, we can use Env 1 to control the amplitude of Oscillator 1 (via Osc1 Mix) and Env 2 to modulate its pitch for a fast sweep from high to low. Env 3 can be used to shape the Noise source's amplitude. Putting these three together and tweaking the depth and attack/decay parameters of the various envelopes should allow you to generate a decent (artificial) tom or kick drum.



> Combining oscillators and noise to produce kick and tom sounds.

Sync lead

7 Another useful way of creating timbral change is through the use of the oscillator sync button (available on Oscillators 1 and 2).

What this does is synchronise the start of a synced oscillator's waveform cycle, and makes it easy to generate a growling lead synth sound. In itself, oscillator static sync is useful, but comes into its own, like so many other parameters, when some form of modulation is involved.

In this case, if we alter the pitch of Oscillator 2 (with sync enabled) by using Env 2 as a modulation source then we can arrive at swept growling lead sound. Try playing around with the pitch of Osc 2 and see what turning off Tracking does. You



Use the Sync button for great lead sounds



FM is an easy way to create metallic tones

could also try adding a synced Osc 3 to the palette, but with a different modulation source – Env 3 or an LFO for example.



ON THE DVD

> A guide to using oscillator sync for synth lead creation.

Bell tones using Frequency and Ring Modulation

8 Prologue can also be tweaked to provide a range of bell-like and metallic tones that have a more complex and enharmonic tonal structure by using frequency modulation (FM) and ring modulation techniques. FM was the basis of the now legendary Yamaha DX7 and, although possible in a simple form on some analogue synths, was not really practical on a repeatable and playable basis until the arrival of sufficient DSP (Digital Signal Processing) processing power in the 1980s. Its implementation in Prologue loses some of the unpredictability of a true analogue synth – which is a good thing when creating pitched tones – but is a lot simpler to program, although with less flexibility than the DX range.

The key to getting to grips with FM in Prologue is to start with the first two oscillators set to Sine waveforms, turning down Osc 1 and enabling FM on Osc 2. The Pitch and Ratio controls will now alter the final timbre. Modulating this with envelopes provided dynamic timbral change. You might also want to experiment with Ring Modulation via the R.Mod knob for more clangorous tones.



ON THE DVD

> Getting to grips with Frequency Modulation and Ring Modulation.

Clocking LFOs and effects to song tempo

9 The final piece of the Prologue puzzle is the process for allowing you to have some real-time control over the sounds. This is taken care of in the Events page. The most obvious place to start is with the modulation wheel, and just as with the LFOs and Envelopes there are plenty of modulation

Real-time Control

10 One of the great things about VST/DAW integration is the ease with which tempo information can be passed to instruments. This means that any time-based part of the architecture can in theory be linked to clock tempo. In the case of Prologue this applies to LFOs, Delay times and

the Modulation section rate control. Both LFOs can take tempo as their timing reference by switching sync mode to MIDI. This can be done independently for LFO 1 and 2, and if enabled, switches the LFO Speed control to note value display mode. This mode opens up some interesting options, such as linking extreme pitch or filter cutoff changes to tempo for crazy sweeps.

The EFX section doesn't miss out either, as delay time can be linked

to tempo in a similar manner, (using the Song Sync button) making it useful for delay time selection. One of the issues with effects such as phasing or flanging is getting it in time with a track to provide the requisite sweep at the right moment. Switching to Song Sync mode solves this problem.



ON THE DVD

> A look at Prologue's clocking options. **FM**



destinations. Often the mod wheel is mapped to LFO 1 depth, which might be routed to Oscillator pitch. This would mean that as the wheel was pushed up, you'd hear more vibrato. However, there's no reason why not to direct the mod wheel to a number of destinations simultaneously.

In this section, you will also be able to determine which parameters are velocity sensitive and respond to MIDI aftertouch.

Finally, key pitch tracking allows you to alter Prologue parameters based on the position of played notes on the keyboard.



ON THE DVD

> The Events tab in detail.

NEXT ISSUE

Make sure you pick up *FM* next month for more Cubase tips. *FM224* on sale 23rd February

The Science of Stereo: Mixing

This month **Greg Scarth** rounds off our investigation of stereo with a thorough look at stereo mixing techniques...

This month in *Knowledge Base*, we tackle a small chunk of the huge topic of stereo mixing. Whether you're mixing a three-piece band, a

Progressive Techno masterpiece or a full orchestra, you need to know how stereo works if you want to get the most out of your music. We'll look at the aims of stereo mixing, how the technical sides of things work, a few basic ground rules and how we can use stereo to complement our mixes.

Why stereo?

The reasons for choosing stereo reproduction over mono are quite clear: stereo allows us to hear a more realistic, more accurate representation of a three-dimensional sound than mono ever could. However, there are a number of further reasons why the ability to adjust stereo balance while mixing is highly beneficial. Primarily, mixing in stereo (i.e. the delicate art of positioning each sound from left to right in the stereo image) allows us to create a more powerful mix by making space for each element. Where two parts (say, a synth lead and a guitar part) might

clash if they were both panned centrally, pushing one to the left and one to the right can give each one a bit of room, increasing the impact of both.

As such, stereo mixing techniques not only affect the obvious left-right placement of sounds, but can also increase clarity and add a sense of space around each instrument or part.

How does panning work?

For now, let's consider a mono sound source rather than a stereo recording. Take a mono snare drum track – if we start off with it panned centrally, the sound is sent to the left channel and the right channel of the mixer output in equal amounts. The volume of the snare coming out of the left hand speaker is identical to the volume coming out of the right hand speaker, which tricks us into thinking that the sound is coming from the midpoint of the two speakers.

This phenomenon is known as the phantom centre, and is crucial to the way panning works. As we pan from the centre position towards the left, the level of the

signal sent to the right hand speaker is reduced. As a result, the snare appears to move from the right hand side to the left. At the extreme left position, none of the signal is sent to the right hand speaker, and so the snare appears to be situated at the far left hand side of the stereo image. This is a slightly simplified explanation, not taking into account a principle known as pan law. See the *Pan Law* box on the next page for the implications.

The rules of stereo

As we continually point out in *Knowledge Base*, there are very few hard and fast rules when it comes to making music. The old adage that if it sound right, it is right applies yet again in the case of stereo mixing techniques. Having said that, there are a couple of rules of thumb which mix engineers tend to follow and they're worth bearing in mind while you work because they'll probably save you time in achieving a good stereo balance.

The first rule of thumb relates to the way that human ear has difficulty pinpointing the direction which lower frequencies are coming from. As a result, it's common practice to keep lower frequencies closer to the middle of the stereo image, only getting more heavy-handed with the pan pot as you approach the upper-midrange and high frequency elements. This is also, to some extent, a throwback to the vinyl days, when wide-panned bass frequencies would tend to make the needle jump out of the groove.

Nevertheless, it's still a useful guideline to follow in the digital era. In fact, just by following this rule you'll usually find yourself with a reasonably good rough stereo balance, as the lowest frequencies of the mix, kick drum and bass, will be panned to the centre and should hold the mix together nicely. If you also pan the vocal and snare to the centre (the most important elements of a mix will logically sit in the middle in most cases), you'll find more often than not that you've created a good platform from which to experiment. Higher-frequency elements like percussion parts can handle extreme panning, then as you work your way down the frequency range you can get a bit more subtle, carving out space for guitars, synth parts and other instruments as you go.

The second rule of thumb is simply that extreme panning should be avoided unless you have a very good reason to do it. Whenever you pan anything hard left or hard right it's going to stick out, so you need to be sure that you really want it there. Often it's easy to say to yourself, 'I want this synth on the right' and crank the pan pot all the way round to the right. A lot of the time, what you really meant was, 'I want this synth right of centre' and a smaller pan would have

Stereo Spread splits the signal into a series of frequency bands and pans different frequencies left and right in order to add a sense of width.



What Is Pan Law?

Pan law is a principle which explains the way the perceived volume of an audio signal will be affected by panning it around the stereo image. If we think of a centrally panned signal, the levels of the left and right channels are equal. Simply muting the right hand channel in order to shift the sound to the left would also have the effect of reducing the overall volume. For the levels of the hard-panned and centred signals to match, we'd need to boost the hard-panned (single channel) signal or attenuate both channels of the centred signal.

DAWs and mixing consoles usually minimise this difference in volume by attenuating the signal the closer it is to the centre, a process known as pan law compensation. This avoids a scenario where you set the

overall balance of your mix but have to keep adjusting levels as you change pan settings.

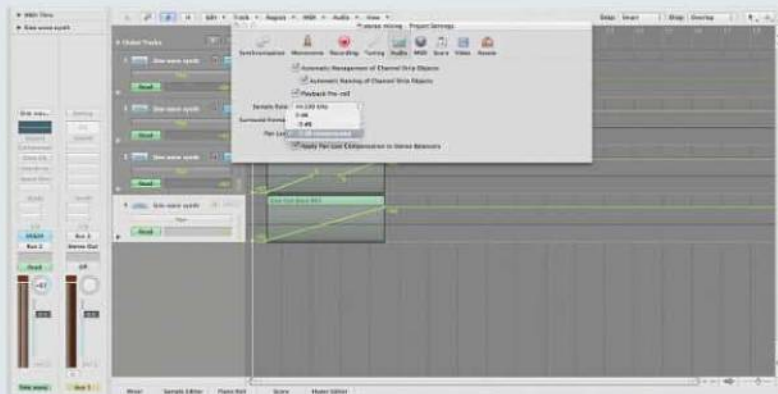
Without getting too deep into the science behind it all, the

good news is that we wouldn't say pan law is something you need to worry about per se. Mixing consoles and DAWs tend to have a default pan law

compensation of -3dB, meaning that a sound panned towards the centre is reduced in amplitude in order to minimise the volume change as you move from left to

centre and then to right. In practice, this usually works perfectly well for the majority of mixing environments. However, it's also usually possible to change the pan law setting of your DAW, and this is where a little caution must be exercised. In a rare case of software developers giving us too many options for our own good, pan law compensation is probably best left at its default settings unless you have a very good reason to change them (usually based on analysis of your monitoring environment's acoustic characteristics).

Switching from one pan law setting to another during the mixing process will have a particularly dramatic and damaging effect, so we reckon you're best off resisting the urge to mess with this one.



This screenshot from Logic shows how one DAW makes up for the perceived volume drop in a panned signal. The -3dB setting applies a 3dB attenuation to centrally panned signals, whereas the -3dB Compensated setting achieves the same effect by applying a 3dB boost to hard-panned signals. You can also choose whether or not to apply pan law compensation to the balance pots on stereo channels. Selecting the 0dB setting in the pop-up menu means that pan law compensation is not applied.

been more appropriate. To some extent, this is also true of placing sounds smack bang in the centre of the stereo field. Ask yourself whether you're placing something in the centre because it sounds best or just because that's the easy choice.

Stereo balance

We recently looked at stereo recording techniques in Knowledge Base and these are an incredibly useful addition to simple mono sources when it comes to creating a

balanced, realistic stereo mix. In the case of a true stereo recording captured using a pair of microphones, the left and right channel will contain waveforms which differ in terms of timing, harmonic content and relative levels. Compare this to a panned mono signal, where the left and right channels sent to the mixer's stereo output are exactly the same waveform but at different volumes.

As we discussed previously, stereo mic techniques are most useful when attempting to create an accurate representation of a stereo source, so they're most commonly employed for live recordings of acoustic

Stereo effects

At this point, let's take a look at how stereo effects can be used in order to add interest to a mono source. The most obvious effect can be achieved by turning a pan pot by hand, moving a sound around the stereo image as the music plays. This kind of heavy-handed dynamic panning has largely gone out of fashion since its heyday in the 1960s. Effects like stereo delays work along similar lines, taking a mono source and bouncing it around the stereo image to provide excitement and interest.

Other effects, such as widening plug-ins, are most useful for dealing with sources that are already mixed. For example, a busy mono drum loop with lots of percussion and multiple hits on each beat might be impossible to split into its component parts in order to process them individually. Adding a widener like Logic's built-in Stereo Spread



ON THE DVD

panning.aif: Test tones to demonstrate the effects of panning. First we hear a tone in the left channel only, then in the right channel only, then we hear the same tone panned centrally. The next tone sweeps evenly from right-to-left in a linear fashion. Finally, the same tone sweeps from right to left but sits in the centre for approximately three seconds on the way.

mono.aif: In this example, the stereo channels are bounced to mono to demonstrate the effects of -3dB pan law compensation. Note how the volume shift over the course of the sweep is minimal as a result of the attenuation applied to the signal when the pan pot nears the centre of its rotation.

plug-in can add a pseudo-stereo feel to a mono part, making it seem wider than it really is. One important thing to bear in mind is that just because a synth or VST can output a stereo signal doesn't necessarily make it worth using. In many cases, a mono signal will keep your options open further into the mix stage, and care should be taken to avoid committing to stereo effects early on in the mixing process. The worst case scenario is that your stereo synth part doesn't fit the final mix so you have to bounce it back to mono and then start adding stereo all over again.

What about mono?

Finally, no matter how fancy you get with the stereo mix, don't forget that it's still crucial to ensure that your tracks are mono compatible. Historically one of the main reasons for checking your mix in mono was to make sure it would sound good on the single-speaker record players, radios and televisions it would be heard on.

These days, the majority of home listeners will have stereo equipment but there's another important reason to check mono mixes. Even a badly set-up multi-speaker stereo system in a club can effectively sum your mixes so it's still well worth paying attention to what happens when it all gets added together. **FM**

KNOWLEDGE BASE NEXT ISSUE

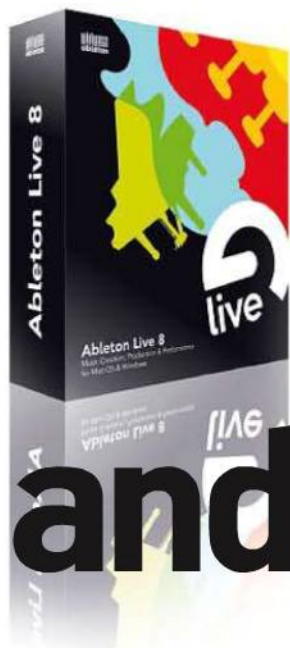
Make sure you pick up *FM* next month for our expert's guide to professionally mastering your track. *FM224* on sale 23rd February

“Stereo not only affects placement of sounds, it also increases clarity”

balanced, realistic stereo mix. In the case of a true stereo recording captured using a pair of microphones, the left and right channel will contain waveforms which differ in terms of timing, harmonic content and relative levels. Compare this to a panned mono signal, where the left and right channels sent to the mixer's stereo output are exactly the same waveform but at different volumes.

As we discussed previously, stereo mic techniques are most useful when attempting to create an accurate representation of a stereo source, so they're most commonly employed for live recordings of acoustic

ABLETON LIVE ESSENTIALS



Basic DJing Techniques and Skills **Live 8**

Just like everything else in Live, there's no one way to DJ – everybody has a different setup. But if you're starting out on your Live DJing career, there are some obvious starting points. **Martin Delaney** talks you through your first Live DJ set

There are about a million ways you can create DJing setups with Ableton Live - and they all work. When you're starting out, the challenge is to figure out what will work for you, and to keep it simple – don't saturate yourself with things to remember during your

first-ever DJ set. DJing with Live isn't like DJing with vinyl or CDs – the ways you can edit the songs, working with hardware control and easily add other synced material, puts the emphasis on different places. A song isn't something you play faithfully, and it can be more about the preparation.

THE EXPERT

Martin Delaney
performer,
educator,
producer



Martin, aka mindlobster, has produced Live training material for MacProVideo and PC Publishing, and has personally taught Live to musicians, DJs, kids, and prisoners. He also designed the Kenton Killamix Mini MIDI controller and is one of the UK's first certified Ableton Live trainers.

Preparing your songs

When you load a song for the first time, you have to wait while Live analyses it for warping. If you're working on a lot of songs, use the Browser to find the folder containing your songs, and then use the Context Menu to choose 'Analyse Audio'. This runs that first analysis before you load anything. Now when you drop those songs into your Live set, they're ready instantly.

Organise your tracks

The biggest change when you're DJing with Live, is that you can use as many tracks ('decks') as you like. Having said that, let's keep it simple. Create four audio tracks, and use the Context Menu to rename them like this (left-to-right): Deck A, Deck B, Spare 1, Spare 2 – then create three Return tracks. Shift-click on the audio tracks to highlight them all, then drag them wider, to make more use of the screen space (by the way you'll see all of this in the movie on the DVD). You can take this a step further and apply colour coding too. Some DJs will rename their clips to show tempo and key, or



Colour-coding and labelling are very useful tools for visually organising your DJ set – but keep it functional



It's useful to have control over EQ3 kill switches – if you don't have enough buttons on your controller, use Key Map Mode

use colour coding to indicate different keys. Forget that for now – if it's sounding OK to you for the moment, let's move on.

Finesse and destroy

Your DJ set will sound pretty dry if you don't use some fun audio effects to create some changes. This is another area where anything goes, but here are some standard suggestions. Add an EQ3 and Beat Repeat to Decks A and B, and drop Redux, Flanger, and Ping Pong into the Return tracks. Put an Auto Filter, and a Limiter on the Master track (just to save you from yourself, in volume terms).

Take control

Now for the hardware control. If you're using the Akai APC, you don't have much to do – it just picks up control of whatever's in your set. One thing I map when I'm using the APC, is the Lo/Mid/Hi kill switches on the EQs – I use Key Map Mode to assign these to six letters on my computer keyboard. If you're using other controllers, MIDI Map Mode makes it pretty easy to set things up. See the separate walkthrough about using the crossfader. Hint: a hardware knob can control more than one effect at the same time, and can even raise one value while it lowers another – this is very useful for setting up transitory effects.

Look around you

Don't forget to look at Live's excellent built-in lessons, and make sure you look at how other DJs are using Live (online or in person), but also at how performers and producers of all kinds are using it – you can learn from everybody. Check out the separate walkthroughs on these pages about cueing, song preparation, the crossfader, and hardware control – and don't forget to hit 'record' before you start your set – it's easier than ever to make DJ mixes! **FM**

LIVE ESSENTIALS NEXT ISSUE

Make sure you pick up *Future Music* next month for more on Live 8-based wisdom. **FM224** on sale 23rd February

Live's Crossfader

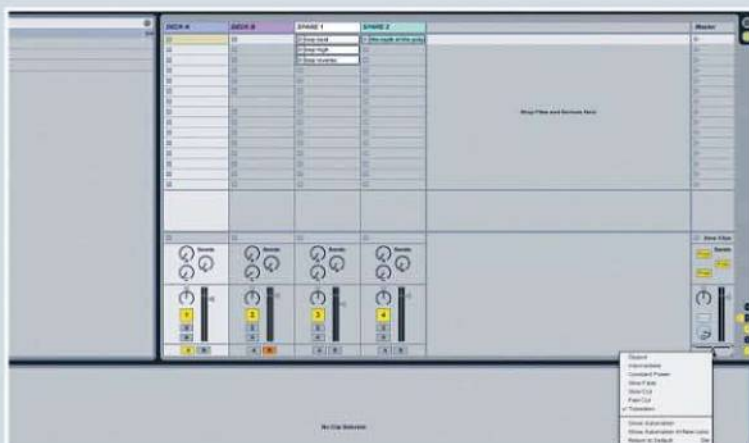
Live's crossfader is the obvious tool for an instant DJ experience – and it's flexible too



1 Start by mapping the 'real' crossfader on your hardware controller to Live's crossfader. Choose View/Crossfader, and you'll see it at the bottom of the Master track. Use cmd/ctrl-M to enter MIDI Map Mode, click on the fader, then move your 'real' fader.



2 The fader can be mapped in three different places – you can assign buttons to the extreme left/right, for fast switching between decks, and the fader to the middle. Exit MIDI Map Mode and you'll be able to control Live's fader with your real one.



3 Set your deck tracks to A and B. You can assign as many tracks as you want like this. Any track that isn't assigned ignores the crossfader. Ctrl-right-click on the crossfader to view different crossfade curves, if you like that kind of thing.

Getting Tracks Ready for DJing

Load it, warp it, loop it, brace it, slice it, copy it, name it, launch it... and the club goes wild!



1 Drag a song into Track 1. There's no room to cover warping again here, read our recent warping tutorial (*FM216* and *217*) for that! If you're working with Electronic songs, then Live can usually warp them automatically – though it sometimes needs help with identifying the first downbeat at the start of the song.



2 These songs are *Ain't Gonna Take It No More* by Kraak and Smaak, and *La La Land* by Green Velvet. Set them to Complex Warp Mode. Once a song is warped properly, make sure it's set to Loop. Move the start marker and the start of the loop brace to the beginning of the song.



3 Set the loop brace to two bars – align it with the song start. Launch the clip and you'll get a smooth two-bar loop. If you don't like that part, change the loop's length using cmd/ctrl-up/down arrow on your keyboard, or move it to the right using cmd/ctrl-right arrow.



4 When that's done, hit cmd/ctrl-D to copy the clip to the slot below. Launch the new copy, and move the loop brace again to identify another song section you want to use. You're doing this to isolate song sections so you can change the length and sequence of song parts during your set.



5 Repeat with the other song – you don't need too many clips, focus on having good loops to begin and end songs with. This is the basic version – when you're working with songs that are straightforward in their beats and structure – it's not always so simple! Use the context menu to name and colour-code the clips.



6 Use the other two tracks as 'bins' to keep spare samples in – these could be parts of other songs, alternative versions of your main clips (reversed or transposed for example), speech from movies, vocal acapellas, percussion loops – whatever you want to throw in your set during those spontaneous moments

Previewing Songs

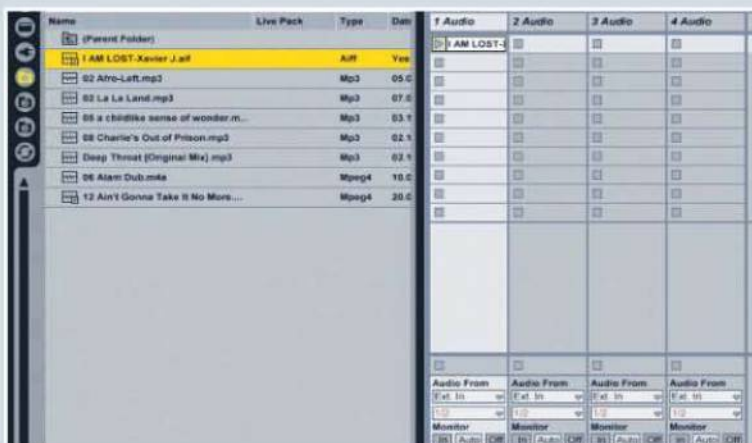
Preview any track you haven't prepared in advance with a multi-out soundcard...



1 I've talked about preparing songs in advance. You can also drop songs from the Browser into your set at any time, if you prefer. You can also cue up any track on the fly, as long as you have an audio interface with more than two outputs. Here's how.



2 Connect your audio interface, and in Preferences, use the 'Output Config' button to ensure two stereo pairs are enabled. Close Preferences, open the In/Out View. At the bottom of the Master track, choose 1/2 as Master Out, and 3/4 as Cue Out.



3 Now, whenever you select an audio sample in the Browser, it'll preview through 3/4 (if you've connected some headphones to that output), while your mix goes through outputs 1/2. The samples preview in sync with your set – click 'Raw' to hear them at their original BPM.



ON THE DVD

A Live set based on the setup from the text. The songs aren't included, for copyright reasons, but the .asd files are there – add the song files and you're ready. If you don't have Live 8, download the demo from ableton.com.

DJ Hardware

One of the most important aspects of DJing with Live is the controller hardware that you use to interact with the software – live sets just aren't the same when you're using a mouse or trackpad for crossfades or effect control! There are more controllers than ever on the market, and we should be grateful for that, even though it makes choosing between them a headache. Ableton's long-awaited collaboration with Serato will appear in 2010, which will bring some level of vinyl/scratching type control (if that's what you want).

Until then, I'd rate Akai's APC40 as the best all-in-one, out-of-the-box DJing tool – it's not the cheapest item around, at just under £400, but it'll do everything you need, with the absolute minimum of setup time. It even comes with a stripped-down version of Live, so if you're truly starting from scratch, you won't need to buy anything else except an audio interface (you've got to have one of those for proper DJing).

APC40

The APC40 has clip launch pads, knobs, faders, buttons, and a dedicated crossfader, which can even be replaced via the panel under the APC, if you get over-excited and break it, or just have strong preferences about crossfaders. In the few months since its launch, the APC40 has become incredibly popular, and there's an expanding community of APC40 users online, sharing ideas for hacks, goofy paint jobs, and tips regarding customisation, stands, and so on. There are various bags and hard cases to help you move it in safety, and of course it integrates with Max for Live, so it works well as a step sequencer input too! The APC40 won't be for everybody – if you want something more portable, or maybe something more customisable, then look elsewhere – but the APC40 is true plug'n'play, thanks to Akai's joint development with Ableton. At the moment it's the only Ableton-endorsed hardware controller that has knobs and faders on it.

APC40

For some, it's the ultimate MIDI controlling solution for Ableton Live.



[Home](#)
[Labels](#)
[Genres](#)
[Formats](#)
[News](#)

Latest Release

ESSENTIAL MINIMAL TECHNO

Essential Minimal Techno is a powerful collection of samples presented in construction kit format for techno and minimal producers looking for up to the minute royalty free sounds to complement and crystallize their productions for the dance floor.

This pristine collection of razor sharp sounds from the artist Danmad aka Dan Mardan includes 7 huge Minimal Techno construction kits which include fantastic drum, bass, synth, fx and separated grooves to give producers total flexibility to remix and create new dance anthems and underground mixes with ease and enjoyment.



Best Sellers



Tribal Tech



Fidget House 2



Dubstep



D'n'B Rough Connections vol 3



Meat Katie Tech Funk Producer



Rise Push Button Bang

Featured Products



Artist Series Download Packs



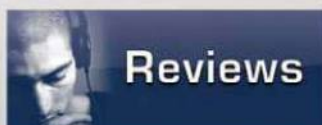
Sounds and inspiration from some of the world's best known music producers and artists directly to your desktop.



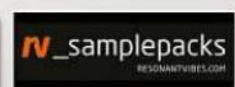
Loopmasters Sample Boutique

Loopmasters are proud to bring you some of the best collections of sounds and samples in multiple formats from some of the most cutting edge labels and producers on the planet. Visit our brand new website today and experience a new way of buying royalty free sounds, samples and patches to inspire your productions!

- Earn 10% virtual cash with every purchase
- 1Gb+ free sounds and samples
- Independent reviews and user ratings
- Super fast server and downloads
- My profile including product registration
- Tech articles and industry knowledge
- Cutting edge labels
- Artist sample collections
- Search by label, genre or format



Featured Labels



WAV : REX2 : ACID : REASON REFILLS : LIVE PRESETS : APPLE LOOPS : AKAI MULTITRACKS : HALION : MPC : EMU : EXS : RMX : SFZ : MAC / PC

www.LOOPMASTERS.com

The source for sounds

Call +44 (0) 1273 692313 or visit the website

Reviews

The month's studio essentials
on the *FM* test bench...



Highlights this issue...

Pioneer
CDJ-2000

84 After a trio of Mk revisions we finally get the full-on '2000' reworking of the CDJ classic. Result!

Doepfer Dark
Energy

88 Classic analogue synthesis in an all-new, super-compact, wooden-cheeked pod

Korg Wavedrum

92 It's back! It's cheaper and it's a belter! Our exclusive review gives it a thorough beating.

Nord C2

96 The latest version of Nord's classic (and classy) twin-decked organ rocks the *FM* review zone

NI Kontrol X1

102 An official Traktor controller at last – but is it the solution that you were looking for?

Pioneer CDJ-2000 | £1,500

They've tagged it as the dawn of a new species but will it save the CDJ? **Chris Barker** takes it for a spin

WHAT IS IT?

Pioneer's new flagship CDJ with advanced, multi-format support

CONTACT

Who: Pioneer UK
Tel: +44 (0)870 600 1539
Web: pioneerdj.com

HIGHLIGHTS

- 1 New 6.1" screen
- 2 Touch-sensitive needle search function
- 3 Rekordbox software

Pioneer made their first major stamp on the club industry in 2001 with the CDJ-1000, and steadily the 1000's have become the industry standard DJ device. There have been the updates to the CDJ-1000 design with the MkI and MkII versions, but with laptops becoming more and more popular in the

clubs, it seemed that Pioneer were in need of something special to keep them on top. So this is their answer – a fully-fledged digital media player, retaining the robust looks and feel of the original CDJ while providing all the connectivity and modern features that the new generation of DJs demand.

The first thing that strikes you when

you take the CDJ-2000 out of its packaging is the sheer size of the unit – it's more comparable to larger Pioneer's DVJ device. The size increase is mainly due to the huge WQVGA screen (480x234) which has been included without compromising on standard button sizes, or indeed, the size of the platter. Inside, the unit has been improved with a brand new Wolfson DAC processor that when hooked up digitally to a mixer, does sound better at high volume levels than the CDJ-1000.

Lights and music

Switching on the unit, there's the usual backlit buttons but with the added benefit of a back-lit jogwheel and huge glowing screen – you're not going to have any problems navigating your way around the unit in a dark club. Plus, if the screens or the jogwheel glow too bright for your taste you can tweak the brightness in the settings page very easily. So, when it comes to the more exciting new features, the CDJ-2000's





main focus is managing your digital music library and integrating seamlessly with laptops, MIDI and other new technologies making their way into the DJ booth. The backbone of this is the included Rekordbox software collaboration between Pioneer and MixVibes – a sort of an iTunes for DJs.

tag it, set cue and loops points and analyse and prepare your music similarly to when you import tracks into Traktor or other DJ software.

This is a breeze, simply dragging tracks into Rekordbox starts the analysing, works out the BPM and allows you to tag tracks and rate your

recalling the tracks easier. At the top of the software, you can view the analysed waveform and click it to set hot cue and loop points, which again are saved on export to USB key or SD card, allowing any CDJ-2000 or 900 to be able to recall them. In use, this is quite special as it also works in reverse, enabling you

to record cue points made when playing live and recall them in Rekordbox later. If you quantise within the CDJ-2000 then the Rekordbox

makes loop and cue points snap to the nearest transient, making beat-perfect loops and drops becomes easy. Working with Rekordbox also means that when tracks are exported to a USB key or SD card, they will load much faster on the CDJ-2000 than if the key was loaded with MP3s that were drag and dropped. That said, I was able to plug a 120GB hard drive full of MP3s that had not been through the Rekordbox software and it worked perfectly well too.

Hard drive way

One thing that is worth mentioning though is that once the drive has been through Rekordbox, you're unable to access other folders that have been drag and dropped onto the same key, so, a hybrid key isn't possible. Finding your tracks from the USB or SD card is simple, using a simple rotary button that can be pressed to navigate between folders and tracks with a back button above. Overall the usability is pretty foolproof and even without the advanced work in Rekordbox, you can happily show up with a hard drive and navigate around its folders easily.

Even without Rekordbox, you can happily show up with a hard drive and navigate around its folders

Once installed on your Mac or PC the software enables you to import your MP3 collection (either manually or existing iTunes Libraries and playlists),

music collection for recall on the CDJ-2000 later. You can colour code your music and add all the ID3 information you might need to help

SPECS

Compatible Media: Music CD, CD-R, CD-RW, USB Devices

Compatible Files: MP3, AAC, WAV, AIFF

File Systems Compatible with USB Storage: FAT12, FAT16, FAT32, HFS+

Frequency Range: 4Hz - 20kHz

Signal-to-Noise Ratio: 115dB or higher

Total Harmonic Distortion: 0.0003%

Audio Output Terminals: AUDIO OUT (RCA) x1, DIGITAL OUT (COAXIAL) x1

Other Terminals: CONTROL (3.5mm mini plug) x1

Audio Output Voltage: 2.0Vrms

Dimensions:

320 x 405 x 106mm

Weight:

4.7Kg

Traktor Compatibility

One way Pioneer have made sure that they are not pushed out of the DJ booth by laptops and controllers is to embrace the software revolution. The CDJ-2000s work with Traktor, Serato and MixVibes Cross2 using the HID protocol. This means that these applications can be controlled without any extra equipment. Testing this feature out with Traktor was fantastic with the Pioneer jumping into link mode at the push of a rotary controller and Traktor quickly finding the CDJ-2000 as an interface and HID controller. Once connected, you are able to assign the CDJ-2000 to a



deck in Traktor. The mapping controls are obvious and the 'feel' of DJing like this is exactly the same as when using CDs. Probably the coolest feature is that track information is pulled from Traktor onto the screen

and you can navigate around your Traktor browser, selecting new tracks using the controls on the CDJ. It did make me wonder if we'll see more information being pulled from Traktor through in future updates.

ALTERNATIVES



Numark iCDX

£595

The bang-for-buck ratio on the iCDX is excellent, with easy to use built-in effects and easy to master scratching tools. The major drawback being that the plastic casing and buttons aren't something you'd want to rely on outside the bedroom or house party.

numark.com



DN-S3700

£899

This is the closet competitor to the Pioneer flagship. The Denon also sports music management software and comes with the added bonus of fully motorised platter and a stack of extra features compared to the 2000. But, the Pioneers are more likely to be found in your local club which makes the DN-S3700 a slightly more niche purchase.

denondj.com

Other new performance features include a Needle Search function [see the *Needle Search* boxout below] and a one button four-beat loop, similar to the one found on the CDJ-400. Tapping this initially sets up a four-beat loop, while further taps shorten the loop by half and half again. Initially, it was difficult to figure out how to increase the loop from a shortened two beat loop back to the original four beat loop again. A trip to the manual explained that by holding the yellow loop out button and tapping the four-beat loop button, the reverse could be achieved, if a little clumsily.

Connectivity

The addition of an Ethernet port and Pioneers Pro DJ Link technology means that now up to four CDJ-2000s (using an Ethernet hub) can be connected together and will share a connected USB key, hard drive or inserted SD card. This means one large USB key can serve all four decks and DJs would be able to show up to gigs with nothing more than a keyring and some



Rekordbox, the new DJ library organiser software from Pioneer and MixVibes

headphones. It's a shame the new link up technology doesn't extend to being able to physically sync tracks like Ableton or Traktor can, but it's likely that software and firmware updates for the CDJ-2000 might allow for enhanced communication over Ethernet and USB. As far as pushing the boundaries of traditional track-to-track DJing goes, the

CDJ-2000 has clearly been designed by DJs for DJs and it's very hard to fault. The price is high and with the majority of club DJs still using CDs it will probably take a while before we see these are the smaller venues. One thing is for sure – if the future of DJing lies in devices like the CDJ-2000, DJs will have to do much more work organising and preparing their music. But with 10,000 tracks in your pocket, it's something to do on the plane, eh? **FM**

Needle Search

A simple but fantastically useful feature is the addition of a new needle search feature. This is a touch sensitive strip that runs below the screen, similar to a ribbon controller on a synth.

Touching this strip lets you instantly drop on different parts of the loaded track, with real time feedback on the screen. This makes quickly finding cue points so much easier and a

clever needle lock feature during playback ensures that there are no accidents. Once you're used to this method, navigating around your waveform is as easy as it is with any DJ software.

FutureMusic VERDICT

STABILITY

VALUE

EASE OF USE

VERSATILITY

RESULTS

A brilliant leap forward and undoubtedly the next industry standard, whether you like it or not.





The ultimate DJ players at
the ultimate DJ supplier.

Pioneer DJ
Platinum Dealer

Main store: 10-12 Hanway Street, London, W1T 1UB - 020 7637 3293 - *Open 7 days!*

Also: 256 Tottenham Court Road, London, W1T 7 RD - 020 7631 1935

Mail order / service : 970 North Circular Road, London, NW2 7JR - 020 8208 6988

email and international sales: info@westenddj.co.uk

Doepfer Dark Energy | €398

The king of eurorack modular has spawned a child.
Marc '01' witnesses the power of the dark side...



WHAT IS IT?

Analogue mono synth in a box

CONTACT

Who: Schneiders Bureau
Tel: +49 (0)30 9789 4136
Web: doepfer.de

HIGHLIGHTS

- 1 Looks good
- 2 Sounds good
- 3 Feels good

Being the black sheep of the family has its perks – for one, you tend to stand out against your siblings, especially when they are all silver and live in a silver tower, and you are jet black and ready to go it alone. In more technical prose, Dark Energy is a single oscillator analogue mono synth, with built-in MIDI-to-CV convertor and a USB port, to integrate it in to the twentieth century digital studio.

Deep, dark and handsome

Cosmetically speaking, Doepfer have managed to build a very attractive little

box, with its dark black steel, cherry red wooden ends, elegant rows of knobs and compact switches. The components feel nice and sturdy to tweak, but as there isn't that much real estate their careful arrangement means there's just enough room to wiggle switches without accidentally hitting another.

Also in the box are half a dozen short mini-jack cables to patch with, a USB cable and mini-jack to ¼" for the main audio output. You can plug in a keyboard or sequencer through the Midi In port round the back, connect the USB for MIDI over USB (plug and play), or trigger it analogue via the CV/Gate

through the inputs on the top panel. Also round the back are four CV and one Gate output, PSU and Learn button.

Energy core

While Doepfer list this synth as having a 'triangle based core', with a choice of the aforementioned triangle, or a saw wave, there's actually a little bit more going on than first meets the eye. When the three-position selector switch is in the central 'off' position you are left with a pulse oscillator, while the PW knob adjusts the symmetry of the square. It produces an even square with PM in the middle, and this means you can effectively switch off the pulse wave by turning the PW dial to either its max or minimum position. Without the pulse in the mix, you can choose to go with either a pure saw or triangle waveform, or dial some of the pulse back into the equation. Below it is a dial for PWM, sources are either ADSR or LFO2, and in case you are wondering, both LFOs' modulation is bi-polar and the red/yellow flash indicates positive and negative direction.

The VCO switch selects the range between three octaves, and the basic tuning can be set with the VCO knob, which smoothly sweeps over an 11 semi-tone range. Dark Energy has a few tricks up its sleeve for expanding its





UAD Trident A-Range EQ | \$249

The Trident A-Range console has achieved legendary status. Not a surprise to **Jono Buchanan** that it's swerved into UAD's emulation sight-line

ON THE DVD

WHAT IS IT?

UAD's latest EQ recreation

CONTACT

Who: Source Distribution
Tel: +44 (0)20 8962 5080
Web: uaudio.com

HIGHLIGHTS

- 1 Simultaneously selectable filter curves
- 2 Rare and sought after sound
- 3 Unique features

SPECS

System Requirements

PC: Microsoft Windows XP, or Vista (x86 or x64)

Mac: OS X 10.4 or 10.5

All Platforms: UAD card, 256MB RAM, 200MB HDD space, VST, RTAS, or AU plug-in host software

Parameters:

High Shelf Filter: +/-15dB gain (15k, 12k, 10k, 8k)

High-Mid Bell Filter: +/-15dB gain (9k, 7k, 5k, 3k)

Low-Mid Bell Filter: +/-15dB gain (2k, 1k, 500, 250Hz)

Low Shelf Filter: +/-15dB gain (150, 100, 80, 50Hz)

UAD now preside over an extraordinary range of modelled EQs, compressors and effects processors.

Having addressed the hardware restrictions of their original cards last year, they've spent 2009 steadily building recreations of truly classic studio gear to an extremely high spec. The latest of these is the EQ from the Trident A-Range console.

Only 13 of these were ever built with Malcolm Toft (now of Toft Audio Designs) the chief designer on the A-Range project. The results are there for all to hear as, among other records, Lou Reed's *Transformer*, *The Rise And Fall of Ziggy Stardust* by David Bowie and Queen's *Sheer Heart Attack* were all recorded through the A-Range. Now, its EQ section is available to all UAD card owners.

Equipped

The A-Range EQ is noteworthy for a number of reasons. For a start, the architecture is unique, as the EQ is an inductor-based system. Three high-pass and three low-pass filters are employed at the 'extreme' ends of the frequency spectrum but what's unique

is that the default cutoff points of each of these can be activated simultaneously, to provide weird and wonderful curves. The EQ itself is four-band with high-shelf, hi-mid bell, low-mid bell and low shelf sliders supported by four selectable, fixed frequencies per band.

There's little or no overlap – the low-mid band's highest frequency is 2kHz, while the lowest frequency of the high-mid band is 3kHz for instance – but up to 15dB of cut or boost can be applied to any of the bands via long-throw faders. And that's pretty much it.

Aside from a phase inversion button on the left and an output gain dial on the right, there are no extra parameters with which to noodle.

Equality

So what's the big deal? I can think of several EQs which are much more comprehensively 'stacked' in terms of features and as an EQ solution to fix any possible frequencies problems, it's clear that the A-Range might not be a go-to processor.

That, however, is to miss the point. As ever, UAD have painstakingly recreated the A-Range sound here and

in doing so, they've offered the EQ response of another classic processor to us mere mortals unlikely ever to get regular access to the real thing.

The sound is wonderful – warm and smooth but unafraid to get involved and really do something to the audio part you're working on, whether it's to provide extra bite in a sound or roll the aggression out of another.

Conclusion

Is this the EQ for you? I'd say that depends very much on how equipped you are with processors already and what sound you're looking to bring to your mixes. Common 'fix-it' style EQs are available natively in nearly all DAWs these days and if you're an existing UAD card owner, you're more than likely to have additional models.

The A-Range EQ certainly sounds different to anything in UAD's existing product range and genuinely sounds 'of its time', before sweepable frequencies were available in each EQ band and before anyone might mistakenly question the logic of having simultaneously selectable filter curves. If you're looking to add something rare sounding to your mixes as well as a unique approach, this would be an excellent place to start. **FM**

FutureMusic VERDICT

STABILITY ☐

VALUE ☐

EASE OF USE ☐

VERSATILITY ☐

RESULTS ☐

A rare and acclaimed sound caught perfectly. Specific, limited but colourful.

ESSENTIAL READING FOR THE CUTTING-EDGE PRODUCER



Get **Computer Music: Make Music Now, Volumes 1 and 2** for iPhone and iPod Touch free in the App Store now!



EVERY MONTH IN CM



In-depth, jargon-free tutorials to help you make better music



No-nonsense reviews of the latest computer music gear



Technical advice, production tips, producer interviews and more!

ON SALE NOW!

Featuring a full virtual music studio on the DVD-ROM every month
Computer Music is all you need to make incredible music on your PC and Mac

Korg Wavedrum

| £459

The innovative percussion module returns. Can it take on the HandSonic range, wonders **TJ Glover**



WHAT IS IT?

Acoustic/algorithmic/
PCM-based percussion
instrument

CONTACT

Who: Korg UK Ltd
Tel: +44 (0)1908 857100
Web: korg.co.uk

HIGHLIGHTS

- 1 Mind-blowingly playable
- 2 Excellent sounds
- 3 Powerful, organic approach to sound generation

In the world of digital hand percussion, the current roost is pretty much ruled by Roland's HPD-15 and HPD-10 HandSonic instruments, with very little in the way of contention from the other big music technology houses. Until now, that is, because Korg's magnificent Wavedrum has returned!

The original Wavedrum, released in 1994, was a stunning technical accomplishment but a much-lamented commercial failure. A boutique physical modelling drum synth capable of

extraordinary sonic subtlety and depth, it came with a £1,500 tag that put it thoroughly out of reach of all but the wealthiest of forward-thinking percussionists. It also had a rather hilarious wooden rim that made it look a lot like a toilet seat, but we can probably assume that that didn't contribute to its eventual discontinuation, after only about 3,000 of them had been built.

No, it was that hefty price tag wot dunnit, and this is just one of many areas in which the all-new Wavedrum

gets it very, very right. At less than a third of the price of the original, it's at the bottom of the 'mid-range synth' bracket, which is exactly where it should be.

Sensor drama

The second generation Wavedrum comprises a 13.5" wide metal rim around a regular, tunable 10" drum head, and a plastic base. It outputs via 1/4" jacks and a headphone mini-jack, and features a mini-jack auxiliary input for jamming along with your iPod. It's designed to be mounted on a snare drum stand or played in the lap, and at only 2kg, its weight belies an impressive level of solidity and sturdiness. The curved rim is very comfortable under the hand, clearly strong enough to withstand a limitless amount of battering, and features two rows of bumps – one fine, one coarse – for scraping, guiro-style. Incidentally, unlike the two HandSonics, the Wavedrum isn't meant to be played with bare hands only – sticks, mallets and brushes are all welcome.

Three contact sensors are built into the interior body of the Wavedrum – piezo microphones, essentially – one under the head and two under the rim.





These pick up the acoustic sounds of the head and rim being struck, rubbed, scratched or played in any other way you can think of, capturing all the dynamics, elaborations and manual tone-shaping of your performance.

There's also a pressure sensor, which turns pressure applied to the head into pitchbend and various control and triggering parameters. The sensors pass their audio signals and info on to the sound engine, which is where things get really interesting.

Sound construction

A Wavedrum patch is made up of two PCM sounds and a DSP algorithm combining various methods of synthesis, including analogue, physical modelling, additive and non-linear. There are 100 head samples, 100 rim

12 patches – preset and/or user – to the Wavedrum's programming buttons (three banks of four) for instant recall.

The 36 algorithms come in single- and double-size varieties (see *Feel the Algorithm* box), and each one has eight editable parameters specifically tailored to the instrument sound that it synthesises. For example, the *Tabla* algorithm offers *Bend Curve*, *Shell Pitch* and *Shell Decay*, among others, while *Bonga* (used for conga and bongo sounds) gives you control over such attributes as *Shell Size*, *Brightness*, *Slap Decay* and *Sub Harmonics*.

The PCM sounds are triggered via the head and rim and mixed with the algorithm. As you'd expect, they boast a lower level of editability than the synthesised algorithms, with tweaking limited to tuning, decay, level and pan.

display, which doesn't even try to give proper names to anything. Generic abbreviations are used throughout, so keeping the manual (which names and describes every algorithm parameter) handy is a must when programming. That rather irritating 'feature' aside, the adjustable options on offer are salient, well thought-out and suitably profound in terms of their impact on the sound of each algorithm, while the five buttons and single data entry knob do an adequate job of keeping navigation relatively straightforward.

Effects-wise, the action's limited to reverb (ten types) and delay (0.01-2 seconds, with feedback and HF damp) – a tad disappointing, perhaps, particularly in comparison to the extensive and colourful array of processors in the two *HandSonics*.

Unusually for this day and age, the Wavedrum has no MIDI implementation whatsoever. Consider the way the instrument works, though: it's

taking an audio input and processing it – it's not triggering multiple samples via note data in the same way that the *HandSonics* do, so the amount of MIDI it could output would be limited to two notes (head and rim) and their accompanying velocity, and pitchbend. It's just not that kind of device, so if you're after a percussion-orientated MIDI controller, look elsewhere.

Just like its predecessor before it, the new Wavedrum is never less than a joy to play

samples and 36 DSP algorithms onboard, combined in various ways across 100 read-only presets and 100 user patches, the latter of which mirror the former by default but can be fully edited and overwritten. The very handy *Live mode* enables the assignment of

Thanks to the comprehensive programmability of the algorithms, a staggering wealth of sonic possibilities awaits those prepared to put the effort in and design their own drums. And actually, the only thing that really makes it an effort is the three-character LED

SPECS

Synthesis: DSP + PCM Combination
DSP Algorithms: 36 Total
PCM Instruments: 100 Head, 100 Rim
Programs: 100 Preset, 100 User
Loop Phrases: 100
Effects: Reverb, Delay
Panel Controls: Volume, Bank/Mode/Page select, Program/Parameter select, Value control, Write
Output: 2x ¼" unbalanced jack, headphones mini-jack
Input: Stereo mini-jack
Display: 3-character 7-segment LED
Sampling frequency: 48kHz
A/D, D/A conversion: 24-bit
Dimensions: 350 x 344 x 75mm
Weight: 2kg

Feel the Algorithm

The Wavedrum's 36 algorithms are divided into 'single-size' and 'double-size' varieties.

Essentially, double-size algorithms are more realistic than single-size ones, enabling more effective stroke variation and combining the rim and head into one fully integrated instrument, rather than generating

separate sounds from each. The two PCM sounds that accompany each double-size algorithm are hardwired and can't be swapped out, but single-size algorithms and the rest of the PCMs can be mixed and matched freely.

This is because the double-size algorithm itself actually controls the

response of its accompanying PCMs, so they're specifically designed to work together in the interest of creating as convincing an emulation as possible, as opposed to the straight triggering of PCMs in single-size algorithm patches, which doesn't involve the same ultra-tight relationship.

Playability: the critical factor

Just like its predecessor before it, the new Wavedrum is never less than a joy to play – a performance instrument in every sense of the word, with almost all the dynamism and tonal flexibility of an acoustic drum. Adjustable sensitivity levels and an input-shaping EQ enable the engine to be tuned to hands or sticks, and both are equally effective. Using the pressure sensor, all manner of modulation and clever melodic control

£969

rolanduk.com



£579

rolanduk.com



£999

akaipro.com



Sonnox ELITE

SPECIAL PROMOTION..

25% off !

25% off the Sonnox ELITE Collection until the end of February 2010.

Oxford plug-ins have become the first choice for professionals all over the world, who rely on Sonnox daily to produce highly polished mixes with a touch of class.

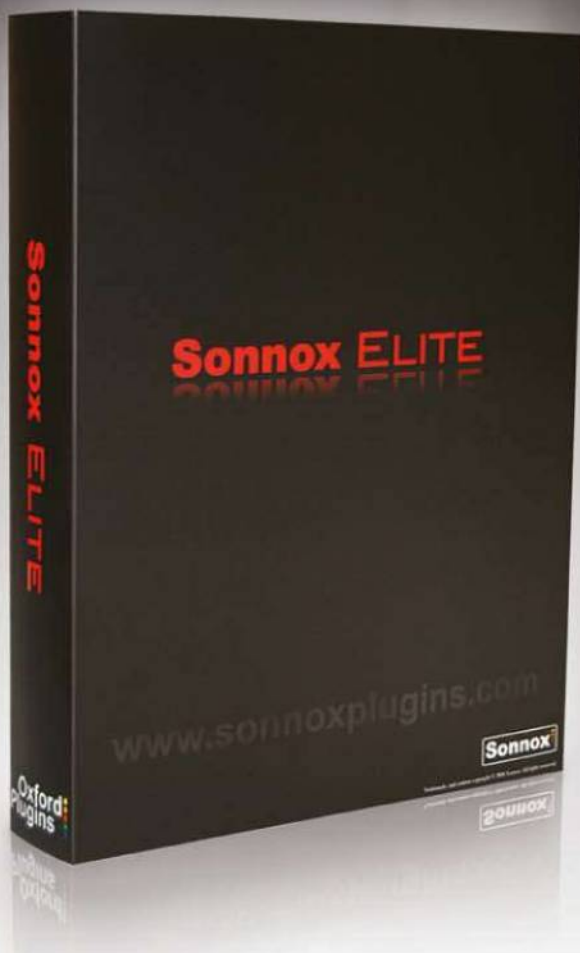
You too can breathe life into your mix..

Don't waste time and money collecting Oxford plug-ins one by one..

Make huge savings when purchasing the seven world class Oxford plug-ins in the Sonnox Elite collection, as a single bundle.

Sonnox ELITE includes:

Oxford EQ, Oxford Dynamics, Inflator, Transient Modulator, Oxford Reverb, Oxford Limiter, SuprEsser



Promo prices:

HD - ~~\$2,640~~ **\$1,980**

Native - ~~\$1,260~~ **\$945**

www.sonnoxplugins.com

**Oxford
Plugins**

Clavia Nord C2 | £2,311

Now with added pipe organs and extras, Nord bring us the C2. **Dan JD73** Goldman pipes up!



WHAT IS IT?

Second generation Nord Combo Organ with B3, Vox Farfisa and now Pipe Organ emulation

CONTACT

Who: Sound Technology
Tel: +44 (0)1462 480000
Web: nordkeyboards.com

HIGHLIGHTS

- 1 Very portable and well built
- 2 A doddle to use
- 3 Every emulation sounds very authentic and it's a joy to play

The C1 Organ was Nord's first dedicated two manual Hammond B3/Vox/Farfisa emulator and it's fair to say

that Clavia got it pretty much spot on first time round.

However, with a continuing quest to bring new and improved products to their customer base, the C2 promises to improve on an already winning formula that has many fans. The C1 was already considered pretty authentic and established itself quickly with the very hard to please Hammond emulator community. So what's new and improved this time around?

On first glance you would think not much has changed but there are numerous improvements both under the hood and cosmetically. First up the percussion controls have been moved much nearer the manuals, which is very

welcome, and now have additional coupler modes in the new pipe organ mode. The vibrato/chorus (and now tremulant) controls have also been moved to a more easy to reach position and the vibrato/chorus manual selectors



have been moved from the drawbar area to a much better place with the rest of the vibrato/chorus controls. One thing missing is the old C1 Unison Mode (that was a kind of three mode stereo chorus) not a big deal for me, but still worth mentioning.

Pedal pusher

Also, the rotary speaker controls now double as couplers in the pipe organ mode, allowing one manual's stops to be played by the other, coupling of the lowest bass note to the super low bass stop for massive rumbling bass, plus further coupling of both manual's stops to the pedals and more (there are seven coupler modes for maximum flexibility). While on this topic, there's been a slight renaming of the break control from 'break' to 'stop' (used to stop the rotary speaker spinning). Pipe organ stop names have now been added under the drawbars too and preset space has been

Additional Features

The onboard amp models (Roland Jazz Chorus and Fender Twin) work well and are great for that un-Leslie'd straighter Rock sound, while the drive control sounds rich, and full allowing some real power-organ playing or subtle grit.

The delay, three-band EQ and five reverb modes

are musical, high quality and flexible, bringing realistic and natural sounding acoustical support to all the sounds. In particular, the delay is great for Reggae or Dub especially along with the tap tempo function.

One of my favourite features is the ability to add a set of MIDI bass

pedals to control the pedal manual. Further to this, the Synth Bass mode adds a synth bass sound to further beef up the low end. Perhaps in the future, Clavia could augment this feature with some different synth tones, plus the ability to turn the full lower manual into a synth bass.





increased from 100 to 126 slots to accommodate the extra pipe organ programs, so there's plenty of scope for creating plenty of your own sounds.

New features

The review model arrived with the front mounted rotary speaker flick switch (an extra cost option), which works great and goes in the same position as on a real B3 to preserve the authentic feel. This connects to the rear panel via a jack and screws into the front underside of the C2. All in all, the C2 is much more logically laid out and quicker to

what is overall a beautifully put together and great looking instrument.

One of the most endearing features of the C1 organ was its lightweight form factor and the C2 thankfully retains this lightness too, being only one pound heavier than its predecessor. It's very easy for one person to pick up which is great for such a large instrument and certainly it beats dragging a real Hammond around!

The action of the manuals is pretty much the same as the Nord Electro 3 and is great for organ playing. It's slightly stiffer than a real Hammond but

volume, decay, rotary speaker horn and bass rotor speed and acceleration, plus there are three tonewheel modes that allow you to turn your C2 into a beaten up sounding or brand new sounding organ as you wish. There's also the possibility to cancel the ninth drawbar when percussion is engaged as on real Hammond's – very authentic.

Music sounds better

So what of the sounds? Well the new pipe organs are superb and couple with the onboard reverbs, really transport you into the grand surroundings of

cathedrals, churches and concert halls.

The samples are excellent, the tremulants are authentic and it's incredibly easy to use. I can see many a church

organist and new players alike having fun with this instrument but in a recording context it also works brilliantly. Same goes for the B3s, Voxs and Farfisas – they are all superb.

I really can't find fault with any of the emulations – they are authentic throughout and very inspiring to play. In comparison with my 1958 Hammond B3 and 122 Leslie the C2 really does capture the mojo and overall tone/feel.

To conclude, as far as B3/Vox/Farfisa/Pipe Organ emulators go this board cannot be beaten in terms of sounds, playability and portability. Put it at the top of your list immediately! **FM**

I can't find fault with the emulations – they are authentic throughout and very inspiring to play

use on the fly than the C1 which is a real bonus. All the easy to access sub menu features are listed in full on the front panel too which is handy, though as I mentioned in my Nord Electro 3 review sometime ago, I wish this was a peel off sticker as it does detract from

still a joy to play and it's possible to set the organ to play with a very quick trigger point for super fast playing. Keyboard click can be altered to taste too and most other sections have further tweakable parameters in the sub menu system. It's easy to change percussion



SPECS

General: 126 Program Locations, 2 Live Buffers

Organ Section: Hammond B3, Vox Continental- and Farfisa-models, Pipe Organ-Baroque style with 21 stops, Bass models (tonewheel, synthbass and pipe organ bass), 20 Digitally Controlled Drawbars, 6 Drawbar Presets per Program Location

Percussion Controls: Vibrato/Chorus/Tremulant Control

Effect Section: Three-band Equalizer, Overdrive, Three Speaker Simulations – (JC/Twin/Rotary), Delay with feedback and tap-tempo function, Reverb with five algorithms

Keyboard: Two x 61 Medium Weighted Waterfall Keys

Connections: Jack Stereo Headphone Output, Two Main Jack Outputs, High Level Outputs: 11-pin Leslie standard connector or jack, Mini jack monitor input, Jack Sustain Pedal Input, Jack Rotor Control Input, Jack Swell Pedal Input

MIDI: MIDI In, Out plus dedicated Bass Pedal MIDI In.

USB

Dimensions

966 x 163 x 445mm

Weight

15.5kg

ALTERNATIVES



Hammond XK3c

£2,166

Hammond's single-manual B3 emulator. Can be coupled with the XK3 for a dual manual beast.

hammondorganco.com



Roland VK8

£1,596

Portable board with real drawbars, chorus/vibrato/reverb plus additional orchestral sounds including strings, choirs and pianos.

rolandus.com



Korg BX3

£780

Two sets of real drawbars, extensive MIDI control options plus Vibrato/Chorus/Overdrive/Reverb.

korg.co.uk

FutureMusic VERDICT

BUILD



VALUE



EASE OF USE



VERSATILITY



RESULTS



The C2 is hard to beat. It looks and feels great and delivers authentic emulations across the board.

98 FutureMusic

Loopmasters

Royalty-free sounds for producers worldwide

Loopmasters

Flexible sample libraries for producers and musicians who required top quality playing from seasoned professionals to integrate into and inspire their music.

[MORE PRODUCTS AT LOOPMASTERS.COM](http://LOOPMASTERS.COM)



Essential Minimal Techno



Tech House Producer 2



House Generation Vol 2



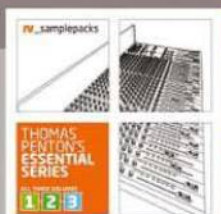
Slammin Hip Hop...

rv_samplepacks

RESONANTVIBES.COM

rv_samplepacks is Resonant Vibes' line of quality-driven sample packs. Ranging from 100 MB to 600 MB+, each pack was created by a handpicked producer.

[MORE PRODUCTS AT LOOPMASTERS.COM](http://LOOPMASTERS.COM)



Essential Series



Absence of Essence



Komposit



Kazell

wave alchemy

Samples and loops ideal for dance music production, film, TV and broadcasting, multi-media, games developers, DJs...

[MORE PRODUCTS AT LOOPMASTERS.COM](http://LOOPMASTERS.COM)



SFX Collection 01



Electro House Progr'ns



Drum Machines 01



Deep Drums

MUTEKKI MEDIA

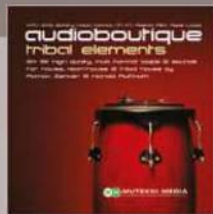
professional audio sample libraries

If it's state-of-the-art Loops, Drums, FX, Bass or Synth Sounds you're looking for, we specialise in offering the sample material you need.

[MORE PRODUCTS AT LOOPMASTERS.COM](http://LOOPMASTERS.COM)



Electro House Vol 1



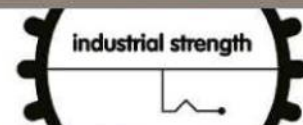
Audio Boutique 2



Secret House



Bass Intact



Brooklyn's ISR bring you new electronic and drum 'n' bass samples from around the world.

[MORE PRODUCTS AT LOOPMASTERS.COM](http://LOOPMASTERS.COM)



Dubstep Special Edition



D'n'B Rough Conn Vol 3



Hardcore Tekno



Tekno Toolbox

push button bang

At the cutting edge of electronic music production, bringing loops and sounds that will inspire you.



Tribal Tech



Rise

GU

Global Underground encapsulates dance music's international explosion and restless creativity.



Sultan



Mic Fanciulli

WAV : REX2 : ACID : REASON REFILLS : LIVE PRESETS : APPLE LOOPS : AKAI MULTITRACKS : HALION : MPC : EMU : EXS : RMX : SFZ : MAC / PC

WWW.LOOPMASTERS.COM

The source for sounds

Call +44 (0) 1273 692 313 or visit the website

Livid Instruments Block | £349

Another pad-style controller? Yeah, but the Livid guys have a great track record of great innovations. **Martin Delaney** explores the new kid on the block

WHAT IS IT?

Button-based MIDI controller, with environmentally conscious design ethic and cool 'instrument' vibe

CONTACT

Who: Red Dog Music
Tel: +44 (0)131 229 8211
Web: lividinstruments.com

HIGHLIGHTS

- 1 Wood and aluminium construction – makes a change from all that plastic
- 2 Has a functional setup ready to use immediately, so you can do the tricky stuff later
- 3 Incredibly flexible, and compatible with almost anything

The pad-button-grid controller field has got crowded: monome, Akai APC40, Novation Launchpad...these

controllers target Ableton Live users, directly or indirectly, as well as users of more flexible applications such as Max/MSP, and Reaktor, and various VJ programs. Add Max for Live to that list, and ideas are rapidly changing about what connections we can build between hardware and software. The most recent arrival is the Livid Instruments Block.

Block is the latest in a line of controllers from Livid Instruments in Texas, going back to the Tactic, the VX Rack, and the Ohm (still in production

as the Ohm64), and sidetracking into the transparent plastic weird-cool of the Viditar – a video jamming 'guitar'. More streamlined than the Ohm, block is a square device which is all about the 64 buttons, with just a handful of other controls: eight knobs, two faders, and seven function buttons (one is a big fat one intended for more dynamic uses like tap tempo) – all of the buttons are lit by blue LEDs. The top panel is aluminium, and the case is made of jelutong, a lightweight hardwood that used to be a major source of chewing gum, apparently. The block scored with its wood and metal loveliness, and chunky controls, but I'd prefer the 13

screws in the top panel to be countersunk, especially the ones between the buttons – they are intrusive. The knobs didn't line up with the grid – as a performer I'd find this extremely annoying in a live situation. Block's compact enough, but it is quite deep, and it won't fit in everybody's laptop case.

Block party

Block is USB-powered, doesn't need drivers, and ships with MIDI notes and CCs assigned to the controls and buttons. Use it immediately and figure it out later – I like that.

When you're ready to create your own presets, download the free Block Editor app, assign your chosen functions (the 'function' buttons can also send program changes, by the way), and toy with the LEDs – draw a pattern in the editor and Block's LEDs follow right along – type a text message, and watch it scroll across the display. Even better, load a QuickTime movie into the Editor, and watch as the pads attempt to display it – this works best with simple graphics. Probably pointless, but a lot of fun.

The Editor source code is available under a GPL licence, and can be edited in Max/MSP. When I tried block with Ableton Live, I realised how spoiled I've been by the APC40 and Launchpad –





suddenly it's old-school to manually map controls and clip launching! Once I made the effort to set it up, though, Block worked great and was fun to use. The interface is visually clear (apart from those knobs), and there's a quality feel to the thing, which is a big part of

relates very well to the Block layout. Livid's products feel like they're targeting VJs just as much as musicians, and block will probably suit VJing very well, especially because it's a situation where you can be more flexible in the use of knobs and faders.

regular Max/MSP patches – Livid have a free Max for Live step sequencer example which you can download.

Grid iron

In a world of APCs, Launchpads and monomes, and even Livid's own Ohm

64, it's tough for a new machine to fit in, but block will reach those people who want a portable, customisable, controller with a more 'organic'

There's definitely a quality feel to the unit, which is a big part of what you'd be paying for

what you're paying for. In the default MIDI mode, Block's grid buttons will light to indicate a playing Session View clip. Then I downloaded the demo of Arkaos Grand VJ, an app which Livid themselves use in their tutorial movies – Grand VJ has a matrix view which

I've done a lot of VJ gigs, and I could easily imagine using block for this and being very happy about it. Block, like the Ohm 64 it's based on, is designed to be as open and customisable as possible, and it can be fully controlled via Max for Live or

vibe, and more controls than the monome (but less than the APC40). You know, these days, at this level, it's not about 'better' or 'worse' with these controllers – they all have different ways of doing similar things. You'll be choosing based on price, compatibility with your existing gear, maybe a specific hardware feature that you need, and an emotional response generated by which one turns you on when you look at it.

Livid seem to focus on three things: live performance, user customisation, and ethical production – only you can tell if that means something to you. Sometimes Block comes across more like something from an art installation than a down'n'dirty controller, but it's a good looking, functional, and individual piece that will last you a long time. **FM**

The Software Side

If you know Ableton Live, you'll see uses for the Block immediately. However, the Block isn't designed to be Live-specific, like the APC40 and Launchpad – it'll work just as easily with any other music app, from GarageBand to

Supercollider. The Livid guys are into the VJ scene too, so it's not surprising that the Block makes a great VJ controller. Livid also have their own standalone apps, so you can use an entirely Livid environment, with apps designed to suit the

hardware. The Block Editor makes it easy to assign any note or CC to any control (including program changes), create and upload presets, and load new ones on the fly – and check out the fun things it does with text and movie input!



SPECS

- > Anodized aluminium face
- > Jelutong wood case
- > Grid of 64 buttons with blue LEDs
- > 6 function buttons with blue LEDs
- > 1 large 'tap tempo' button with blue LED
- > 2 faders
- > 8 knobs
- > USB port at back of the case
- > Requires free Block Editor application for programmable MIDI mapping
- > Compatible with any MIDI-learn DAW or VJ software
- > Works with Mac OS X/Windows/Linux

Dimensions
260 x 260 x 38mm
Weight
1.36kg

ALTERNATIVES



Akai APC40

£399

Currently the big boss of Live-specific controllers – a tactile controller that requires zero set-up time, and challenges the boutique guys to keep up. See also Novation Launchpad.

akaipro.com



Monome

£ depends on model and availability

The 'original' pad-grid-wooden baby, with a similar vibe to the Livid gear, and a big online community.

monome.org



Ohm64

£499

Another Livid product – the Ohm is curvier than the Block, though functionally pretty similar – you might have a preference for one control layout over the other.

lividinstruments.com

FutureMusic VERDICT

BUILD [Progress bar]

VALUE [Progress bar]

EASE OF USE [Progress bar]

VERSATILITY [Progress bar]

RESULTS [Progress bar]

The Block is a well-built, mini alternative to the more mainstream pad-style controllers.

Native Instruments Kontrol X1 | €199

NI finally release their own branded Traktor controller.
Declan McGlynn finds out if it's worth the wait

WHAT IS IT?

An official Traktor controller from NI

CONTACT

Who: 2Twenty2
Tel: +44 (0)845 2994222
Web: native-instruments.com

HIGHLIGHTS

- 1 Lots of visual feedback
- 2 No mapping required
- 3 Small footprint



You'd be forgiving for thinking that NI's first attempt at a controller for their über-popular DJing software

would be along the lines of Akai's APC40 – replicating the software's GUI and strongest features in hardware, making the visual feedback recognisable and the layout logical. But you'd be far off the mark – NI have, for better or for worse, squarely aimed their product at one sector of their market – timecode vinyl and CD users. While this makes sense as a business choice – NI need to associate themselves with currently installed professional club

systems and equipment if they are to truly become a standard – it is odd to completely remove the ability, or at least make it very difficult, to use the X1 away from these scenarios. That being said, NI have admitted it's not the first controller we'll see from them, so let's assess the X1 in the context it was designed for.

Dimension X1

Anyone who is familiar with NI's excellent groovebox Maschine will instantly recognise the look and feel of the X1 – its black metal sheen and rubberised buttons has a satisfying and reassuring feel and it definitely feels like it will take a beating on the road and in the club. Once the unit is plugged in, like Maschine, it glows an array of colours from its backlit buttons and instantly works with the new version of Traktor – not a MIDI map in sight.

The X1's size and shape are designed to sit alongside a standard hardware mixer – not unlike Allen & Heath's Xone:1D. Unlike the 1D though, the X1 squeezes in complete control of two decks into a tiny footprint, and does so quite remarkably.

The X1 is laid out fairly logically, with the effects and transport sections being of main interest. The effects section is comprehensive to say the least with a total of twenty-eight controls for what is essentially a fairly simple element of Traktor. Along with the standard effects on/off buttons and amount knobs, NI have included a Dry/Wet knob, a global on/off button each effects channel as well as Shift functions to cycle through effects.

NI have also taken the questionable decision to label each of the on/off buttons and knobs with three of the



most popular DJ effects: Delay, Reverb and Filter. It's up to you how much of an annoyance this could be – personally I found it initially confusing but after some reshuffling, I got used to it and it does make sense.

Conveniently, hitting Shift and FX On will make these labelled effects active on that channel so if you have gone crazy with effects selection you can reset it to the defaults with one click and start again.

On rotation

There are four endless stepped rotaries on the X1, with the first two controlling

controls loop length and clicking it down controls loop on/off. This is nothing revolutionary but is a genius move by NI to give intuitive and fairly comprehensive control over looping, with a single knob. The X1's transport controls finish off the unit, with a total of 16 buttons that double-up as cue triggers when the Hotcue button is active as well as having multiple Shift-functions.

At this point I must admit that Shift functions have always been the bane of controllers – not only does it require multiple mappings and, sometimes, a photographic memory, the jumping in

Hotcue mode attempting to launch an unassigned cue. The only visual reference for this mode is a slight change in shades of blue depending on your cues and an illuminated Hotcue button. It would have been nice to see a change of colour to avoid confusion – double-mapping buttons such as Play, Stop and Cue needs to be treated with clarity to avoid errors and I don't feel like the X1 makes it obvious enough.

Focus right

If you're an in-the-box DJ, it's more than likely you will find the X1 to be lacking, with no velocity or pitch controls and no

crossfader, making its 199 Euros price tag a lot less appealing for what is essentially a small part of your potential setup. That being said, touring DJs who

are looking for a hardware addition to their current timecode-based Traktor setup will fall in love with the X1. What it really excels in is intuitive control: everything does what it feels like it should and it only takes a few minutes before you become very comfortable – something I found myself saying when reviewing Traktor Pro last year. In its context, the X1 delivers maximum performance and is one of the most instinctive controllers I've ever used. In-the-box DJs will need to hold out (X2?) but anyone craving a slim solution to sit alongside club installs need to check it out. It just makes sense. **FM**

SPECS

Windows: XP (SP2, 32-bit), Vista (SP1, 32-bit, 64-bit), Windows 7 (32-bit, 64-bit), Pentium IV or Athlon 1.4GHz (SSE1). 1GB RAM

Mac: OS X 10.5, Mac OS X 10.6, G4 1.4 GHz or Intel Core Duo 1.66 GHz, 1GB RAM

Controls: Four endless, clickable rotaries, eight 270° knobs, 30 back-lit assignable buttons.

Dimensions:
120 x 52 x 294mm

Weight:
691g

This is a genius move by NI to give intuitive and comprehensive control over looping, with a single knob

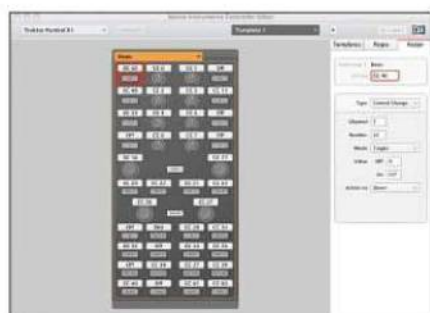
browser selection and loading with a click while it's Shift-functions provide track-seeking and view-changing i.e. making the browser temporarily fullscreen. Scrolling through the browser works perfectly and loading is swift but the track-seeking resolution could be a little less extreme. The other two rotary controls looping in a very intuitive manner – turning the knob

and out of different 'pages' does nothing for your flow and focus when performing. This is obviously something NI are very aware of and they've worked hard to label the X1 where appropriate while still maintaining a clear layout.

This is the case for everything but the Hotcue function – I repeatedly found myself panicking when a track won't play only to discover that I was in

Controller Editor

The launch of NI's Maschine saw the introduction of Control Editor – a comprehensive editing software for all of NI hardware controllers. For the X1, the options are straightforward but thorough – each button's CC number can be changed, it's type selected (i.e. CC, Note, Pitchbend etc etc), channel number, mode (i.e. toggle, trigger, gate or inc), it's value between 0 and 127 changed and when the action of the button



occurs decided (i.e. on pressing or on releasing). Similar options are available for the rotaries, which makes Controller

Editor incredibly useful and stretches the cost of the X1 quite a bit, if you take the time to map it for other jobs.

ALTERNATIVES



Allen & Heath
Xone:1D

£199

Similarly-priced with a single jog wheel and faders but nowhere near the visual feedback offered from the X1. Worth a look if you're dedicated to in-the-box Dling.

[xone.co.uk](http://www.xone.co.uk)



Vestax VFX-1

£199

Two channels of effects control, designed for Serato and for use alongside the VCI-300, the VFX-1 is lacking for the price when compared to the X1. Suitable if you're a Serato user, though.

vestax.com

FutureMusic **VERDICT**

BUILD

VALUE

EASE OF USE

VERSATILITY

RESULTS

A highly impressive controller that makes up for its shortcomings with genius intuition.



Elysia Mpressor Plug-in | €349

Two innovative German manufacturers join forces to create an emulation of a highly flexible hardware compressor. **Stuart Bruce** prepares to be Mpressed

So, what does it do? Well, to start with, you have a great straightforward compressor with controls for threshold, attack, release, ratio and gain make up. Attack and release times are very comprehensive, attack ranging from the ultra fast 0.01ms to 150ms which gives you plenty of options in shaping the front of a sound and release times varying from 5 to 1200ms giving lots of scope from pumping to smooth.

It will grab hold of and shape pretty much anything that you throw at it from buzzy synths to funky guitars and any kind of drums or percussion. But the real surprises are when you bring some of its more exclusive features in to play.

The first of these is the 'auto fast' switch on the attack time. When a sound is a mix of attacking and sustaining components its often hard to find an attack time that compliments both. Too short and the sustains suffer, too long and some of the peaks you want to tame slip through.

What auto fast does is to use the setting on the knob as the basis for all softer or more sustained program but when it gets loud or attacking it drops to

ON THE DVD

WHAT IS IT?

A plug-in compressor with some very novel features

CONTACT

Who: Elysia GmbH
Tel: +44 (0)20 8962 5080
Web: elysia.com

HIGHLIGHTS

- 1 One of the best auto attack functions I have ever used. Ever
- 2 Negative compression ratios take you beyond the realm of standard compression effects
- 3 A Gain Reduction Limit control that allows very precise manipulation of extreme compression settings

There are an enormous amount of hardware compressors available out there so it's pretty hard for a manufacturer to come up with something new. One of the few companies to have blazed this particular trail with any success over the past few years has been German manufacturer Elysia.

Their Alpha compressor has found its way into many a big mastering studio and that's where I first came across it. With its stunning audio quality and incredible range of control it has quickly established itself as a tool of choice for many a top mastering engineer.

Mpressive

The Mpressor has had the same kind of reaction from top recording engineers. Besides being a great straightforward compressor it has a few tricks up its sleeve that really help it to stand out from the crowd. However, the price for the hardware units does put them firmly

out of reach for a lot of potential customers so it seems like a wise move to get a software version out on the streets. Choosing to do this in partnership with the guys at Brainworx, currently the holders of their share of *Future Music Platinum Awards* meant that we were very keen to get our greedy mitts on it.



The Mpressor allows you to control parameters in the usual click and drag way but also gives you mousewheel support. Simply place the cursor over the parameter and adjust it using the mousewheel. Holding down shift puts it in to fine mode. Very useful and something more manufacturers should be doing

a much shorter attack time. The result is a very even feeling compression that never lets go, allowing you to sit an instrument in the mix without any unwanted peaks and troughs. Particularly useful for clean or crunchy guitars, basses and loops where you often have a mix of short transients and sustained elements.

Next you have the 'Anti-log' button next to the release knob. This applies an antilogarithmic curve to the release time which is normally linear. A linear curve allows for a smooth release of compressed signals which sounds more natural to our ears and less evident. Anti-log turns this characteristic on its head and makes it very audible indeed.

Pumping drums and quieter percussive elements in loops can be brought to the fore. Dry drums can start to sound ambient, and in combination with the attack time you can really stick some energy into a groove.



The Mpressor also has a sidechain function so you can trigger it from any other track, input or buss in your DAW. Very useful especially considering all the weird and wonderful shaping possibilities it already gives you

would so that the characteristic of the Mpressor is based around heavy compression but you can tailor how much dynamic range you lose. In practice, this means that although you have the excitement of hitting the circuitry hard, the sound doesn't choke,

Filtered through

The bottom left of the Mpressor has the two knobs and switches of the Niveau Filter. This is an EQ that balances its cut and boost around a centre frequency which can be set anywhere from 26Hz to 22kHz. As you turn the

knob clockwise you boost above the centre frequency and simultaneously cut below it. Turning anti-clockwise boosts below and cuts above. This

very simply alters the character of the sound from dark to bright and is surprisingly effective. At its most extreme settings it becomes a high- or low-pass filter. I can imagine using the plug just for this EQ.

So, putting it all together with those negative compression ratios, you have a pretty useful bag of tricks here. From subtle but controlled compression to radical pumping, tonal shaping to complete changes in the feel of a groove, the Mpressor will certainly make a mark on your music. Add to that great sonic quality and this is a very powerful and musical tool that you'll find yourself reaching for every day. **FM**

Although you have the excitement of hitting the circuitry hard, you can allow the sound to breathe more

GRL Control

Below the release knob sits the Gain Reduction Limit control. This allows you to set a maximum amount of gain reduction independent of the threshold control. 'What is the point of that?' you ask. Well, it means that you can set your threshold higher than you normally

you can allow it to breathe more. The overall effect is a bit like mixing a compressor on another pair of groups, but still holding the peaks back. It's very useful, especially when it comes to balancing a complete kit or a loop into a track once you have found the sound that you like.

To Infinity and Beyond!

How compression affects the dynamic range of a signal is defined by the compression ratio. Once the threshold is passed, the ratio determines how much the output signal will be reduced.

A ratio of 2:1 means that for every 2dB above threshold at the input you get 1dB at the output, so the higher the compression ratio the more you contain the

dynamic range. At $\infty:1$ any increase in level above the threshold results in no gain change at the output.

That is what a limiter does, but once you go beyond infinity into negative ratios the higher the input level the more the output gain reduces below your threshold point. This may seem like a daft idea but when you try it you start to get the

point. On percussive sources you can change the groove around, pianos and guitars can lose their attack and start to sound almost reversed.

With judicious use of the Gain Reduction Limiter and some of the other specialised parameters on the Mpressor, it's possible to radically alter envelopes as effectively as their excellent hardware.



SPECS

Available in VST, AU, RTAS and TDM

System Requirements

Mac: Intel or PPC (recommended 1GHz or more), 256MB Ram, Mac OS X 10.4 or higher. Pro Tools 7.0 or higher or a VST or AU compatible host
PC: Intel compatible CPU (recommended 1GHz or more), 256MB Ram, Windows 2000 or higher, Pro Tools 7.0 or higher or a VST compatible host
iLok USB dongle

ALTERNATIVES



Eventide Omnipressor

\$1,195

Originally a hardware unit that first appeared in the '70s, the Omnipressor is a wonderful device. With negative ratios and an attenuation limit control, it must have partly inspired the Mpressor. Sadly the software version is only available for Pro Tools. Begging e-mails for native code versions should be sent to the website.

eventidestore.com



Waves C1 Parametric Compressor

From \$130

A comprehensive strip which also gives negative ratios, sidechain and equaliser. Split into three separate processors, which can be used independently or together, the C1 is a really useful addition to any setup at a great price.

waves.com



iZotope Alloy

\$249

With six stages of processing including EQ, compression and transient shaping Alloy is a big complex beast. Definitely worth a look.

izotope.com

FutureMusic VERDICT

STABILITY	■■■■■■■■■■
VALUE	■■■■■■■■■■
EASE OF USE	■■■■■■■■■■
VERSATILITY	■■■■■■■■■■
RESULTS	■■■■■■■■■■

With the reputations involved you'd expect something special and the Mpressor doesn't disappoint.

sE X1 and Project Reflexion Filter Bundle | £169

A large diaphragm condenser and reflection filter for £169? There must be a catch. **Robbie Stamp** checks out the latest sE bundle

WHAT IS IT?

Cardioid condenser microphone and reflection filter

CONTACT

Who: Sonic Distribution
Tel: +44 (0)845 500 2500
Web: seelectronics.com

HIGHLIGHTS

- 1 Full and pleasing LF mic response
- 2 Highly effective and easy to use reflection filter
- 3 Excellent value for money

SPECS

Polar Pattern: Cardioid
Additional Controls: Bass cut and 10dB pad
Frequency range: 20Hz to 20kHz
Sensitivity: -32dBV/Pa (25.1mV/Pa)
Equivalent Noise Level: 16dB (A weighted)
Max SPL: 125dB (0.5% THD @ 1000Hz)
Output Impedance: 200
Additional Controls: High-pass filter switch
Package contents: X1 mic, mic clip, reflexion filter, mounting clamp assembly and spanner

The Reflexion Filter has been a great success for sE as well as an inspiration for a dearth of clones. To answer challenges

to their reputation for innovation, performance and sheer value for money, sE have released this bundle of their new X1 condenser microphone and Project Reflexion Filter, a cut-down version of their original design. At £169 this is no doubt a hard bargain to match, but the value for money can only work if the products can deliver, and so with no further ado...

The X1

The X1 may be a low cost microphone but it doesn't feel that way. The brass shell and black rubberised finish not only give it a rugged solidity but they also create a well damped low resonance casing for the condenser diaphragm. sE are keen to stress the hand-made production process used for

this mic, an approach that manifests not only in the build quality, which is excellent, but in the performance of the microphone. The X1 sounds like it looks and feels – solid, sturdy and unfussy.

The frequency response has an even-ness and mid-range clarity that is often lacking in designs at this price point. The essential tone tends towards the 'warm' without incurring those dreaded adjectives of 'muddy' and 'fuzzy'. There is no overt rise in the upper mids and instead there is a gentle lift in the HF range that helps balance the strong lower frequency response.

The X1 works very well with vocals and acoustic instruments, delivering a full bodied sound with a smooth mid range and un-hyped top. The flipside of this is that some harmonically aggressive sources, such as a distorted guitar amp can come across a little hollow or distant sounding. The output is very much in the 'healthy' category

which allows for a substantively low self-noise performance and therefore less need to crank preamps. This makes the X1 good for use on quieter sources.

Project RF

The Project Reflexion Filter uses the same basic design and patent-pending materials as the original, and even though the layering is less comprehensive, this has not left it lacking in effectiveness and the construction quality is still excellent.

The strong yet lightweight clamping mechanism is easy to assemble and adjust. The horizontal bar mount can pitch up/down over a 180° range, the filter can move up/down by 195mm while the mic clamp can move back and forth within the filter by around 150mm. In combination this allows for a great deal of freedom with regard to mic/filter positioning and mic choice.

There is an appreciable 'drying up', characterised by a reduction in HF and increase in perceived LF, but no overt narrow band resonances occur as one might expect from placing a mic so close to a (relatively) solid surface. Of course the filter cannot remove all room sound, and doing so is rarely a pleasant effect, but it is a useful and gentle adjustment to the room reflections. Though particularly suited to vocal recording it is equally effective for instrument/amplifier recording and focussing the mic on more distant sources, e.g. set back from a drum kit.

The Bundle

The bundle is best suited to vocal work and in this role, I was particularly pleased with the results. Both products are set to retail at £99 each, which is hard to better, but as a bundle for £169 it seems impossible to beat. Though it is clearly aimed at the more budget conscious end of the market it would also make a real bargain addition to any mic collection. **FM**



FutureMusic	VERDICT
BUILD	☐
VALUE	☐
EASE OF USE	☐
VERSATILITY	☐
RESULTS	☐

A true bargain bundle deal with a very attractive value vs performance ratio.

MAKE 2010 YOUR YEAR

crystal-clear award-winning sound suites



www.PRIME  LOOPS.com
...pure inspiration...

Future Music readers exclusive: get 10% off with coupon code FMPL10

"As we were looking for new nearfield monitors, we tried quite a few. Then along came the Sonodyne SM 100Ak and Wow! Such detail and smoothness, and in our opinion, out-performing some of the far more expensive competitors. So it was a no brainer ... yes please!"

Francesco Cameli, Sphere Studios, London



SONODYNE
REFERENCE SERIES

www.sonodyne.eu | www.audiopros.eu

FRANCESCO CAMELI & SIMON BOHANNON
Sphere Studios, London



Your search for precise yet affordable reference monitors has just ended.

Our new aluminium die-cast active monitors feature high-grade components throughout, and produce a rich and detailed sound.

Contact us or your local dealer for a demo.



SM 200Ak



SM 100Ak



SM 50Ak

Aluminium die-cast enclosures | Kevlar woofers | Ferrofluid cooled silk dome tweeters with integral waveguide | Workstation boundary compensation | Low THD bi-amplification: 200W, 120W, 90W

EUROPE: The Audio Professionals
INDIA: Sonodyne International Pvt. Ltd
ASIA: Steinberg Media Technologies Asia

T: +44 1923 693770
T: +91 9810661147
T: +65 6274 3577

E: info@audiopros.eu
E: response@sonodyne.com
E: admin@steinbergasia.com.sg

Products of the Mukherjee Innovation Centre

Mini Reviews

The latest musical bits and pieces racked and rated

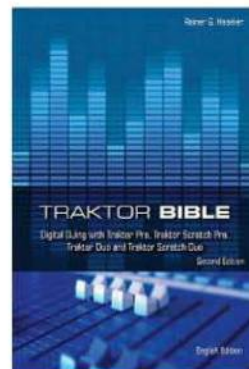


Traktor Bible | €29

traktorbible.com

Traktor is fast becoming the choice for digital DJs – Rainer G. Haselier agrees and has taken quite a hefty chunk of his time to pen a 384-page reference guide to all things Traktor. And when I say ‘all things’, I mean all things. From the very basic first steps all the way to comprehensive LED feedback ideas, harmonic mixing charts and creative effects and mapping suggestions. This, the second edition of the already popular book, sees tips added for Maschine control and for the updated 1.2 version of Traktor and much more. While this isn’t a book you’ll find yourself reading from cover-to-cover, it’s a vital reference point for Traktor professionals and beginners alike, going well beyond the manual, with inspirational ideas as well as easy-to-understand step-by-step instructions, screenshots and charts. Definitely a solid purchase for serious Traktor users. *Declan McGlynn*

9/10



IK Multimedia GrooveMaker | £4.99

ikmultimedia.com

Proving to be among the most consistent and on the money iPhone music apps are IK Multimedia's

GrooveMaker series.

What started out as a simple drag and drop House groove workpad has expanded to include versions for House, Techno, Trance, Drum 'n' Bass and – new release – Reggaeton, all priced at £4.99 each.

The GrooveMaker engine isn't a DAW as such but a massive library of highly usable hits and loops in your

chosen style. You simply audition and drag and drop the sample to one of eight tracks available. Averaging out at around 150MB per genre, the samples on board are musically and thematically grouped so dragging and dropping practically anything together produces convincing results.

Noodling around on the fly, muting and soloing is great fun and enough to convince most onlookers that you are – in fact – a genius. Taking it to the next level you can arrange loops into sequences and

make entire tracks. And if you're particularly pleased with your WIP then a simple button push uploads the track as audio to IK's server, ready for downloading into your full-size DAW. Genius.

For quickly putting together new ideas, or simply having fun making music with a batch of matched samples (on your phone!) then the GrooveMakers are unputdownable bargains. *Greg Scarth*

8/10

USB Retro Wooden Speaker | \$29

usbgeek.com

Because of its cool retro black ash wooden cabinet and USB and SD card reader, we really wanted to

like this little mobile hi-fi speaker. Problem is – it sounds pretty bloody horrible, even with such a bargain price tag it's easily worse than most computer's built-in speakers. Other problems include its lack of support for any USB keys and SD cards over 2GB in size and its very clumsy

controls. There are positives which include a rechargeable battery that works on mini USB, remote control, 3.5 aux input on the rear and stereo speakers. It might be passable as a speaker for your bathroom or kitchen, but as much as we liked its quirky design we would find it very difficult to recommend its sound despite its very reasonable price. *Chris Barker*

2/10





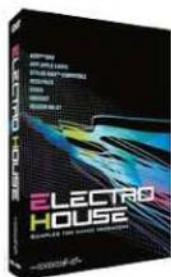
Tech House Journeys | £20

timespace.com

Regular readers will be well aware of the fact that we're big fans of *Digital Redux's* A-Class Series sample packs here at *FM*. The pick of the five latest titles is number 18 in the series, *Tech House Journeys*, a set of twenty construction kits which contain enough drum loops, synth patterns, pads, basslines and FX to satisfy any producer's desire for fresh sounds with a very high-quality to boot.

Samples are included in all major formats and, as always, the price is incredibly cheap for such a high quality product. At just under twenty quid, this is an absolute bargain. Every producer will find a place for it. *Greg Scarth*

8/10



Electro House | £60

timespace.com

Zero G have been in the sample game since Moses was in short trousers, so they're a name we've come to rely on for high quality samples. This new package lives up to our expectations, with a particularly good set of loops, drums and FX recorded from software and hardware synths including the Roland Juno-106, SH-101 and Moog Little Phatty.

All the major sample formats are represented and the sounds are all recorded in tasty 24-bit resolution. With only 1.6GB of sample content, this isn't the biggest sample pack we've ever seen from Zero G, but it's still worth a look if you're in the market for a good all-round Electro library with plenty of usable content. *Greg Scarth*

7/10



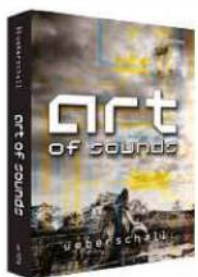
Queen's English | \$30

darksideofthetune.com

This new release from Dark Side of the Tune is based around vocal samples of London dominatrix Miss T. Consisting of 176 samples of words and phrases, Queen's English certainly provides interesting content but there's not enough here to make it appeal to everyone.

Given that this pack's unique selling point is the prim and proper English accent of its vocal star, these samples will probably go down better outside Britain, where it'll offer a shortcut into the dark 'underbelly of old Blighty'. Most British producers will find it easier to recreate the content with the help of their friendly local dominatrix/wife. *Daniel Griffiths*

2/10



Art of Sounds | £99

timespace.com

Rather than focusing on a single genre, this new package from Ueberschall delivers a selection of weird and wonderful FX-based loops and hits. The content is highly original for a sample library and incredibly versatile, offering sounds which would happily fit into all kinds of production styles from IDM and Ambient to Dubstep and Drum 'n' Bass.

As usual, Ueberschall have used their own Elastik Loop Player format, meaning you'll have to install the software before you can use the samples. In this case, though, it's probably worth it. There isn't a huge amount of content here (just 1GB) and it's not the cheapest, but this is a seriously high quality package.

Chris Barker

8/10



SONTRONICS

BRITISH DESIGN • WORLD CLASS

5th ANNIVERSARY OFFER!

FREE

SONTRONICS STC-80



To celebrate our
5th ANNIVERSARY
we're giving away an **STC-80**
dynamic mic worth **£79** when
you buy any other Sontronics mic

Only available to UK & Eire customers purchasing any Sontronics microphone (not STC-80) before 28th February 2010. Full terms & conditions at www.timespace.com/sontronics



Just a few reasons to choose SONTRONICS...

- ✔ Lifetime Warranty on all our microphones ✔
- ✔ All products designed & developed in the UK ✔
- ✔ World-class quality at sensible prices ✔
- ✔ We offer unmatched support & technical advice ✔
- ✔ Our range includes preamps, stands & accessories ✔
- ✔ Wide range of mics to suit all applications ✔



Distributors for UK & Eire
tel: 01837 55200

www.timespace.com/Sontronics

Q&A

Our panel of experts answer your music-making questions, from hardware issues to software ideas, with tips and tricks along the way

MacBook or tablet?

Carl Brookes asks:

Q I've got £800 burning a hole in my pocket and I want to use it to buy a new Mac laptop, so the obvious choice for me is the new white MacBook (which I can get for £799). Before I go for it, though, I was wondering a few things: a) if there are any reasons why it's not suitable for making music on and b) if you had any more news on this supposed Mac tablet that's apparently being made? If the answer to b) is yes, I might be tempted to hold off and wait for that.

Mark Gyver replies:

A The new white MacBook is certainly a looker – unlike its predecessor, it benefits from a unibody enclosure. It's also worth noting that its built-in battery promises to run your laptop for up to seven hours on a single charge, which could be a plus point if you regularly work away from mains power.

On the downside, the audio input and output have been combined into

one socket for this version (the previous white MacBook had them on separate sockets) which is bad news if you want to record using the built-in audio system. You could easily negate this problem by using an audio interface, though.

Speaking of interfaces, the other downside to the white MacBook is its lack of a FireWire port – again, its predecessor did have one. This being the case, any audio (or other) peripherals will have to be able to connect over USB 2.0.

As for the tablet, the rumour is that it's going to happen, but when – and in precisely what form – remains to be seen. It has been speculated that it'll be more of a souped-up iPhone rather than a touchscreen Mac, and if it doesn't run OS X, it won't be able to run Mac music software.

This being the case – and given that you seem to be in a hurry to spend the money – I'd go ahead and get the MacBook (unless the combined audio input/output and missing FireWire port are dealbreakers for you, that is).

THE EXPERTS

Mark Gyver computer music expert



With 15 years of music production experience, Mark knows everything (and more) about the current and classic software market.

Doug Kraul technology author



Doug Kraul is an electronics and computer industry innovator, who has designed analogue modular synthesizers and MIDI devices.

Dan Goldman artist/producer



Aka JD73, Dan is a session keyboardist, producer and remixer, specialising in vintage gear, mixing and production techniques.

To send in your queries you can email us at futuremusic@futurenet.co.uk and we'll pass them on to the relevant expert. Or write to **Future Music Q&A, 30 Monmouth Street, Bath BA1 2BW**

Tracking compressor?

Brian Milburn asks:

Q I often record into my DAW with EQ and compression on my vocals. Is this the best way to record or should I be recording my vocals dry?

Dan Goldman replies:

A That's a good question and one that depends on a number of important factors. First off, you have to take into account how dynamic the vocalist is, i.e. do they generally sing quietly or loudly or are they the type that moves on and off the mic quite a bit. If the latter is the case then it can be sometimes useful to compress a little on the way in just to even out the inconsistencies in volume. However this is not a hard-set rule.

I prefer to leave all processing off until the mix stage as it allows me to have a completely dry unaffected vocal to work with. This allows the vocal to be treated according to how the track evolves/develops. More often than not, the setting in which your vocal sits when its being recorded will completely change by the time the track gets to its final version, so it makes a lot of sense not to do anything too drastic in terms of EQing or compression at tracking stage. Of course, if you are 100% certain that you want a heavily compressed vocal sound and you have a particular box you like to sing through to give your vocals a bit of extra mojo while recording, then of course its worth adding a compressor.

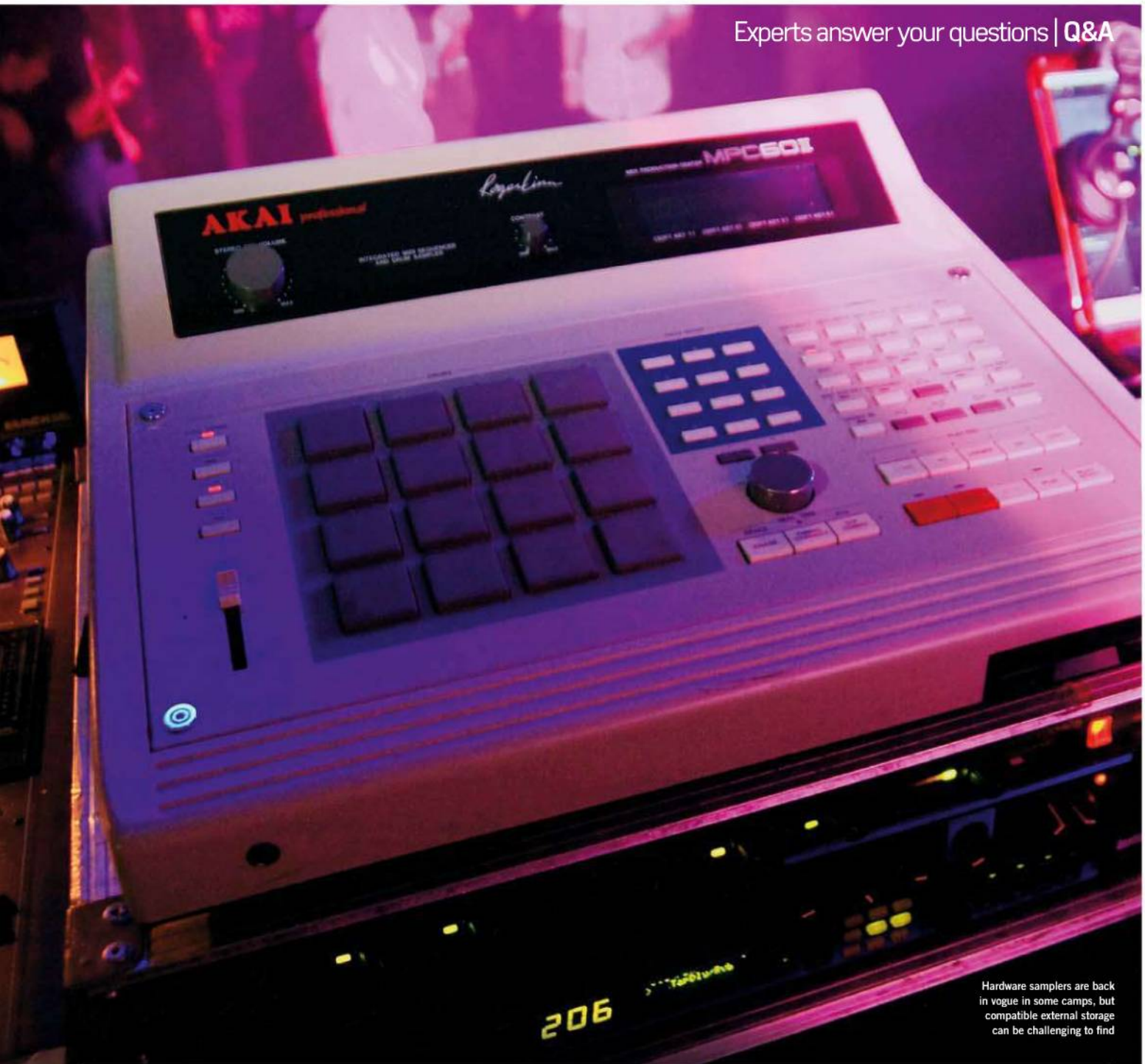
One advantage of tracking through a compressor is that it keeps peaks in check and stops you clipping the inputs of your soundcard allowing distortion free recording. Note that if you aren't using a compressor on the way in and your vocals are quite dynamic then the only way to avoid clipping is either kicking in the overkiller limiters on your soundcard (if it has them) to avoid overs or recording in at a much lower level so the full range of the vocal can be captured without clipping or distortion.

There is no right or wrong way to go about it but hopefully this will give you a few pointers. EQ-wise if the music for your track is already done and you have a nice outboard tracking EQ unit, then you could of course EQ your vocal to the track when recording but remember this

MacBook Choice

The new white MacBook looks lovely but, in some respects, has worse specs than its predecessor





Hardware samplers are back in vogue in some camps, but compatible external storage can be challenging to find

Vintage Sampler Storage

George Burdell asks:

Q I have acquired a Yamaha SU-700 'loop sampler'. My unit includes the optional SCSI connector. What kind of storage device can I use with this sampler and connection?

Doug Kraul replies:

A SCSI drives once ruled the sampler kingdom. However, outside of the Mac world and some specialised PC use, SCSI was never really mainstream. Furthermore SCSI's popularity peaked nearly

fifteen years ago. This makes outfitting a vintage sampler also a quest for vintage storage!

Samplers often had modest data size limits of a few gigabytes. A large capacity drive must be split into numerous small partitions. This makes SCSI ZIP removable cartridge drives a good alternative. Each project can reside on its own cartridge, making it less likely you will run out of storage. Just be sure to source a number of cartridges – you never know when they will become difficult to find!

My personal favourite is a Flash memory adaptor. There are SCSI work-a-likes that use inexpensive Compact Flash memory cards instead of a hard drive. One such product is the CF-CARD flash card adaptor from SCSI For Samplers.

The company also offers a wide array of SCSI storage options specifically qualified for use with a hardware sampler. There are helpful charts and other information on their website to help guide your decision. One thing to keep in mind is that it is unlikely that any of

these approaches will provide back and forth sample compatibility with your computer. Nearly every hardware sampler uses some type of proprietary data format – most use a proprietary disk format that requires special software before your computer can even access the data. Even when the sampler uses a common disk format like DOS FAT there can still be issues with reading or writing those disks with your computer.

A software solution like Chicken Systems' (chickensys.com) Translator can read and write some, but not all sampler disk formats. If computer compatibility is your goal then research thoroughly before committing funds.

gives fewer options at the mix stage. As with tracking compression, if you like the sound of the as you are recording then go for it!

Smooth bass

Simon Coley asks:

Q I'm making mainly Soul, R'n'B and Funk and I'm using a lot of synth bass but often the sound seems a bit too pokey and sticks out of the track. I'm after a really smooth yet live sounding feel but I can never

encompass a very wide dynamic range and as well as having a lot of low-end info, basses can often contain a lot of high frequency content. Surprisingly though, there is often a whole load of this hf/lf content that can be removed.

Try sweeping a low-pass EQ through its range on your bass sound while listening to your track and its quite surprising how much highs can be cut out of the bass that take up a lot of headroom in the mix but that cant really be heard. The same goes

bass to be the dominant bassy element. If you want the kick to carry most of the sub info then cut the subs out of the synth bass sound to let it slot in with the kick and avoid lots of excessive sub frequency mud/buildup. Also, try a compressor to smooth things out.

I often set my compressor's attack so that it locks down the initial spiky attack transients using a fairly fast attack time and a slowish release to hold the tail of the sound in check and smooth it out. Finally, try using the sidechain input on your compressor to glue the bass sound to your kick drum by assigning the synth bass compressors

sidechain input to the kick drum channel on your DAWs mixer.

Lost in the matrix

Kelvin Thomas asks:

Q I've been using Ableton Live for a while and I've now decided that the time is right to get myself a controller for it. I want to buy one



The newer grayscale sixty four is another monome stunner

of the 'matrix-based' controllers that are on the market, but I just don't know which one to get.

At first, I was set on the Akai APC40, but then I saw the Novation Launchpad and thought maybe I should go for that. However, I've been doing a bit of research on the internet and a lot of people are recommending either a monome or Livid Instruments' new Block controller. Could you advise please?

Mark Gyver replies:

A The answer to your question largely depends on how you're planning to use your controller, how much money you have to spend and

As well as having a lot of low-end info, basses can often contain a lot of high frequency content

quite get what I'm after. Also I'm not sure what the best way is to EQ the bass for the type of music I'm making. Could you give me any advice? Many thanks.

Dan Goldman replies:

A Synth bass can be a problematic thing to sit in a track primarily because synth bass sounds often

for lows too. Try a high pass filter on the bass and sweep it around, you'll be amazed at how you can cut a lot of sub frequencies out but still get the bass to sit nicely in the mix, while allowing it to still sound bassy!

Also try cutting a little around 150-200Hz as there's often mud around this area. A good rule is to decide whether you want the kick or

Magnetise Your Mixes

Todd Heap asks:

Q I have read some glowing comments about how much analogue tape helps glue elements together and makes

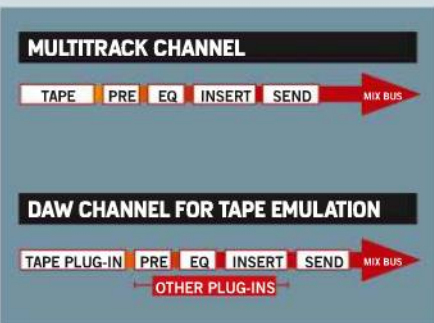
a final mix sound better. Are there any techniques that I can use to get a similar result from my sequencer and some specialised plug-ins? Thanks a lot in advance!

Doug Kraul replies:

A A number of companies offer plug-ins that model magnetic tape. Examples include

Ferox, DUY DaD Tape, Voxengo TapeBus, Massey TapeHead and AirWindows IronOxide. Certain 'warming' distortion or compressor plug-ins like the PSP Mix Saturator 2 can also be pressed into tape simulation duties. Signal chain placement and drive levels are important to achieve a convincing 'tape vibe'. In

general, you need to mimic the way tracks are recorded and mixed from actual tape. This means average levels around -18dBFS (RMS) into the tape plug-in. Also be cautious about adjusting a single track by ear – what sounds good on a single track may not work across an entire mix. These are subtle effects that need a careful approach.



1 The top diagram is a typical analogue multitrack. Tape output comes into the mixer where it is amplified by a preamp, followed by equalisation, insert effects, and so on. The lower diagram illustrates proper placement of the tape plug-in as the first effect processor in the signal chain.



2 Place a gain trim like Sonalksis's Free G, with its RMS meter, before the plug-in. Adjust the input level to between -15 and -20dBFS RMS, depending on how hard you want to drive the 'tape'. Use a second gain trim after the tape plug-in to correct level change.



3 One common production technique is to bounce a sub mix of parts, like drums, to tape to help gel the mix. You can approximate this, without actually bouncing, by routing the group through an auxiliary channel fitted with the same tape plug-in arrangement used on your 'tape' tracks.

**CUSTOM BUILT BY ROCK FANS,
FOR ROCK FANS**

MAMA
FESTIVALS

CLASSIC & ROCK
PRESENT

HIGH VOLTAGE



(24TH JULY 2010)



(25TH JULY 2010)

**VINYL EXCHANGE, CLASSIC ROCK CINEMA
BEER TENT, CLASSIC MOTORBIKE & CAR EXHIBITION**

**SATURDAY + SUNDAY JULY 24/25, 2010
LONDON VICTORIA PARK**

TICKETING INFO:

LIMITED EARLY BIRD JUMP THE QUEUE (EXPIRES DEC 31ST 2009)

DAY TICKET £65.00 (NO BOOKING FEE)

WEEKEND TICKET £120.00 (NO BOOKING FEE)

**FESTIVAL'S 24 HOUR HOTLINE: 0871 230 5582
ONLINE BOOKINGS WWW.HIGHVOLTAGEFESTIVAL.COM
JAZZ CAFÉ BOX OFFICE, CAMDEN.**

OPENING HOURS MONDAY TO SATURDAY 10.30AM TO 5.30PM

how much of an object of desire you want your new piece of hardware to be. The APC40 vs Launchpad dilemma is probably the easiest to resolve. With its additional controls (knobs, faders and buttons) Akai's controller is a more complete proposition if you work primarily in

the studio, whereas the Launchpad is a smaller, lighter device that's geared more towards performance. There's also the price difference to consider, though – the APC40 costs more than twice what you'll pay for the Launchpad (£399 as opposed to £149). So if it's the matrix of buttons

that's most important to you (as opposed to any other controls) and you're on a tight budget, buy Novation's offering.

The monome and block are slightly different kettles of fish. Rather than being designed specifically to be used with Live,

they're open-ended tools that can work with other software and in pretty much any way you like. They're also beautifully built – the Block (\$399) is milled out of a single piece of wood, while the new monome grayscale sixty four (available for \$500 in January) is made of black silicone over a steel enclosure.

To summarise, if you want a plug-n-play controller to be used exclusively with Live, go for the APC40 or Launchpad. If you want a more flexible controller that's lovingly-crafted, take a look at the Block and the monome.

Support for SoundFonts

Kevin Mulholland asks:

Q I've been away from computer music making for a while but I'm now in the process of putting together a new PC-based setup. As part of this, I'm getting a new audio interface – I used to have an old SoundBlaster soundcard. One of the things I liked about this was that it let me use SoundFonts, but none of the new models I've looked at seem to support them. Could you let me know if

there are any interfaces that will let me use SoundFonts, and if not, whether there's any software that will let me use them?

Mark Gyver replies:

A The SoundFont sampling format was developed by E-mu and Creative Labs in the '90s – hence it being supported by the latter company's SoundBlaster cards. These days, though, music-specific audio interfaces

are just that – interfaces that deal with audio – and aren't designed to generate sounds of their own.

The reason for this is that we can now get all of our sounds in software, and you'll be pleased to learn that the SoundFont hasn't been forgotten. You'll find support for it in a variety of samplers, but if you're just looking for a simple plug-in that will let you use them, may I recommend Cakewalk's SFZ+. Originally developed by rgc:audio,

this is billed as a 'professional SoundFont player' – it's multitimbral and has multiple outputs. Effects are included, too.

Most importantly though, SFZ+ has a nice interface and is easy to use. As I recall, Creative Labs' SoundFont editor wasn't all that pretty, so I think you'll be impressed by SFZ+'s slickness. You'll be delighted to learn that SFZ+ can be downloaded for free from the Cakewalk website (cakewalk.com).

Outfitting a laptop for music

GJ Shlach asks:

Q I want to use my two-year-old HP Pavilion dv9000 laptop to record music. Do I need a newer, more powerful model?

Should I upgrade to Windows 7 or stay with Vista? Also, I read your article about hard drives and I am concerned that the laptop's 5400RPM hard drive is insufficient. Is it possible to install a hard drive with faster speed?

Doug Kraul replies:

A It is helpful to remember that in all likelihood your laptop was a capable music computer when it was new. Just because there are now faster, more powerful computers does not diminish your older model's capabilities. So before you endeavour in any upgrades, I recommend you set up your existing laptop for sequencing and see how it goes.

There are numerous Internet guides that cover setting up Vista for music production. However, instead of sorting all that, I recommend you visit your sequencer's support website and see what the company recommends. As far as upgrading to Windows 7, it is still too early to know the intricacies of using it for music production. I would save that for another day.

Since you are interested in an external audio drive there is probably no need to upgrade the internal drive to a 7200RPM model too. 1TB USB and FireWire 7200RPM drives are quite affordable and they provide ample room for your audio work and file transfer. Revisit my recent *FM* hard drive article (issue 219) for set up guidance.



Grouping in Logic

Q **Harriet Herbert asks:** I'm looking for a way to bundle and effect backing vocal stacks as a group in Logic Pro. It can get crazy complicated in there and I need to process and mix them together to keep the sound consistent. What's the best way to do this? Thanks a lot for your help!

A **Dan Goldman replies:** There's a pretty easy way to do this in Logic though it's not immediately obvious. Using Logic's Aux/Buss channels, it's very straightforward. This method can be used for grouping and effecting/processing any types of sound groups including drums, keys, percussion and anything else you want to batch process. Processing them together gives a more cohesive sound.



1 First off you need to get your vocals nicely levelled out using the mixer volume strips. Make sure everything is nicely balanced first.



2 At this stage, it's worth assigning the elements you want to group together as this allows you to easily draw in any automation or make any group volume changes/edits together. Here I've assigned the drums and percussion to Group 1. This also prevents any accidental changes to individual track volumes within the group. Make any necessary panning changes at this stage too.



3 A handy tip: if you hold shift and drag across the mixer channels you can easily select all channel strips at once allowing you to enter the group assignment on just one strip and it will change all the other selected channels to the same group. By default Logic assigns all tracks to the stereo outs. To enable the effecting of all the drums as one we can now assign the outputs to a buss.



4 Now that the tracks are assigned to a buss we can see that the relevant buss channel pops up in the inspector window. Using an Aux channel for bussing here is slightly more flexible than a straight Buss channel as this allows you to set the buss output to any channel you like. Here, I've set it to a surround output and named the Aux/Buss channel 'drums and perc'.



5 If you need to process individual channels within the group you can of course still do this. Here I've added some compression to the kick drum and nothing else.



6 Apply processing as you need to the Aux/Buss and all your grouped drums/vocals etc will be effected together – very neat and very easy! You can then easily balance all the drums in the mix as a group too with just one mixer volume slider. **FM**

BETTER MIXES TODAY!

Give your tracks the treatment they deserve. With our brand-new **cm** Special, you'll discover how to produce polished, professional mixes that stand out from the crowd

- > Pro techniques demonstrated step-by-step
- > How to produce a mix from start to finish
- > Sort your sound with our guide to monitoring



DON'T MISS OUT! GET IT FROM

Computer Music Special 39 is available from selected WH Smith, Barnes & Noble, Chapters and independent newsagents, or myfavouritemagazines.co.uk

On sale UK 9/12 Europe 16/12 North America 6/1 ROW 20/1

Demos



Are you unsigned, under-appreciated and looking for your first break? Get your tracks right on track!

Demo Of The Month



SELECTED KIT

Hardware

- > Apple MacBook
- > Mbox 2 Pro
- > Tascam VL-A
- > Trident 4 T strip
- > Audio Technica 4033 mic
- > Shure SM58 mics
- > The Double Decker (distortion pedal built by my friend Matt Simpson)
- > Pod X3 Live
- > Aria Pro 11 semi-acoustic
- > Akai LPK25

Software

- > Digidesign Pro Tools 8
- > Line 6 Podfarm

FAVOURITE GEAR

- > "I would have to settle for my friend the Mac. It's always there, works well most of the time and connects me to the rest of the world."



Mono Martian Drawing Pictures Of You

Contact: myspace.com/monomartian



Unanimously our favourite demo this month. We love the restrained energy of this one. The bass is so large and the

vocal so strong that you can almost hear it straining at the leash to be free. It's a great effect that can only be obtained through capturing a great soulful performance.

The neatly EQ effected and compressed vocal sound sounds great and the slap-dash, corner-of-the-room drumkit suits the passionate 'human' nature of the track perfectly.

It's had to fault in audio terms. If

we had one criticism we'd have liked another chorus at the end rather than the clever outro, but that's just testament to the power of your tuneage! It's not often a demo leaves us asking for more.

"Right now I'm working on a new Mono Martian track," writes Jørgen Landhaug. "At the moment it sounds – believe it or not – like a cross between Enya, The Proclaimers and myself. I'm hoping to have songs recorded and ready to put out in an EP or album format in the first half of 2010." Sounds like you've got a busy year ahead of you. This is great work and we look forward to hearing lots more.

The Artist



Name:

Jørgen Landhaug

Where:

Melbourne, Australia

My track: "I see it

as a darker Pop song with a building soundscape around it. It's Lo-fi Electro-spices cooking over a memorable melody with a twist."

Which bit of the track are you most proud of?

"Personally I would go for the feel of the track. Nothing's overpowering. It floats along and even ends floating. Hopefully it leaves the listener with an urge to give it a second and third play. I think I achieved that by committing to sounds early in the process and mixing as I went along."

If we were to give you £5,000 for gear, what would you spend it on?

"I'd go for a processor/RAM-loaded iMac so no more having to bounce until the very end! Then possibly a Thermionic Culture Rooster or similar stereo-unit for warmth and care of my digital audio. Then I'd maybe shop around for a great plug-in platform: Universal Audio, SSL or Waves. A reverb too, Altiverb probably. And then some of the money would go towards an extra day in Kinder for my two year old daughter to free up some music time me!"

The Best of the Rest...

Dezza and Dutch

Take You Home (featuring Michelle)

myspace.com/dezzadj



We're off to a cracking start here. A nice tight drum kit, some swirling atmospherics

and a good old uplifting Soul House tune. We love the pulsating synth chords on this one – the gentle way they 'wobble' a bit with a bit of careful filter tweaking really keeps the track interesting.

Even at full tilt this track has great depth and space about it. Even

the pad fill sound is carefully notched out to leave frequency space for the rest of the track. The piano gently plucks its way through the track and the understated bass just fills the bottom end without invading on the melody. Yup, every sound is lovingly presented and if you've got a great

vocal too then you pretty much can't go wrong. Full marks to the mix and engineering involved and special mention to vocalist Michelle who puts in an understated and very classy performance here.

Love the long reverb tails and delay tricks on the vocal – proof that you don't have to swamp out a vocal to say 'produced'. Keep your vocal high and dry and save your effects for special occasions.

Very slick, very polished and very gorgeous. Love it.

Edwieg Captured

vibb.com/edwieg



Something altogether angrier now but despite it's abrasive heart it remains expertly produced. While much Glitch and Dirty House pushes listeners

buttons by pushing its faders too far, Edwiq manages to get that dangerous 'into the red' sense of excitement without resorting to breaking his levels or aimlessly abusing his gear.

The Acid spiral downwards from 1:24 is a brilliant trip and the droning sleepy sub-bass keeps the track full and imposing while the twittering takes command. Very effective and more than a little scary.

In fact, it's the continual development and 'movements' that give the track an even more unhinged feeling. The breakdown at 2:27 could easily be a totally different track so there is a feeling that too many ideas have been heaped on here.

But all come through cohesively and despite the swirling, enormity of the mix every element has its place.

Daniel Clayton Farnsworth Circle

dcfaudio@gmail.com



It's a great bass sound – and we love the loose, buzzing, energetic way it's been thwacked – but the sound remains

rather resolutely mono and, despite being pushed up in the mix, it never quite dominates the track as much as we'd like.

A simple short stereo delay, doubling the track and hard panning versions left and right a few milliseconds apart would widen it. Or layer with another sound, or feed through a final stereo distortion.

It's a well recorded and arranged track but the combination of live-sounding guitar and loose, 'off the mic' vocal seems to clash with the rather straight up and down programmed beats. Using a more 'live' sounding kit of kick, hats and snare would get rid of the 'jamming with a beatbox' feel this currently has and take it to the Electro Rock territory we think you're after.

Breakbeatartists Chemical Warfare

myspace.com/breakbeatartists



Hard-hitting D'n'B as authentic and raw as it comes. The beats come thick and fast and some textbook cut-ups and edits



SELECTED KIT

Hardware

- > PC running Windows XP
- > Novation Nocturn 25 keyboard
- > Behringer BCF2000 MIDI controller

Software

- > FL Studio 9
- > D.Cam Synth Squad
- > Lennar Digital Sylenth 1
- > u-he Zebra 2
- > iZotope Ozone 4

FAVOURITE GEAR

- > "FL Studio. I've used it for years now and couldn't live without it."

JFM Airborn

Contact: jmoransligo@hotmail.com

We really like this one. But mainly that's because we

really like Deadmau5. This is easily the best impersonation we've ever heard! And – judging by your kit – we're reckon that's exactly what you had in mind. FL Studio 9, D.Cam Synth Squad... Hmm, looks familiar.

That said the chords are suitably melodic, the effects and gating spot on and the choice of sounds throughout exquisitely presented and minimal. The only nagging doubt we have while listening to this gentle

journey unfold is whether you're actually using some of DM's loops from FL9.

There's a gentle homage, then there's taking an artists loops, racking them up, tweaking them and making something... 'new'.

If you wanted to break the DM spell (and we're not sure that you do) a new bassline – expanding the gentle octave rocking that presents itself during your outro – would at least stem any claims of cloning.

That said it sounds great.

But now it's time to go forwards and put your own stamp on your own music.

Hot Pick



SELECTED KIT

Hardware

- > Apple MacBook and MacBook Pro
- > Danelectro Guitar
- > Digitech RP50 Delay
- > Nord Lead 2
- > Korg microKorg
- > Shure SM58
- > FM Buddha Machine

Software

- > Logic Pro
- > BFD Drums
- > iZotope Ozone 3

FAVOURITE GEAR

- > "That'd be the MacBooks. No MacBook means no songs for us! Other than that, Nord Lead 2 and then the microKorg."



The Explorers Other Than You

Contact: myspace.com/explorersmusic

Love this. We're not sure if we'd like the track that's obviously buried under this glittering and thudding remix but there's

plenty of fun to be had in this reworking. We love that it takes elements from the obviously guitar driven original and chops them up against a nice '90s-style pacey Dance track.

The heavily effected vocal that peeps through the mix from time to time gives a great hook and the sense that faders are being ridden and effects send being turned as the track is played give it an

exciting old school feel. Like an unhinged dub-version of a old familiar tune. More and more bands are taking the studio route to making a distinctive sound and it seems like you're well on the way to carving a niche with this tune. If you can keep the variety up we predict great things going forwards.

We'd be tempted to give all your tunes a similar treatment even in their 'basic' forms. That MGMT / Hot Chip / Animal Collective barely-controlled mash of sounds and styles could just be the hook you're looking for.

The Artist



Names:

Jez Dennis and Rob Bannister

Where:

Chesterfield, UK

This track:

"It's nostalgic summer freedom, making the most of your nights out after dull working days!"

Which part of the track are you most proud of?

"I would say the warm organ sound that runs through the track. I think that Rob would say the nostalgic guitar plucks and high end stabs."

If we were to give you £5,000 for gear, what would you spend it on?

"A Mackie TT24 Digital Live Mixer / Mixing Console. This would unfortunately be over £5,000 but we would add the rest because it would help us massively to jam live!"

What are you working on now?

"We still have many tracks half complete but all being well we will hopefully have an EP ready soon and possible album ready by mid-2010. Keep checking our MySpace!"

mean that we're left in no doubt as to this track's intention and direction.

However this track breaks few rules, clearly reveling in its role as 'the real thing'. Beats are skittering and sliced, the distorted bass is pleasingly controlled (neatly avoiding the trap of too much bottom end that too much D'n'B strays into) but it never quite jumps off into the broader, more ambitious landscape.

In its place – central to a slamming D'n'B DJ set – this would do the business but as a piece of Electronic music, it's searching for a hook, with the only 'key' being a neat twittering lead line, rather than the bone-cracking synth leads that signature the likes of Pendulum.

Perhaps some greater uses of the stereo space for fills and diversions (the track is currently unrelentingly right between the eyes right now) would make it more exciting and episodic? Likewise some experiments in tempo or breakdowns, builds and climaxes. Right now it remains a breakneck, prime example of the art.

Tic-Tac Go South

adamdavey62@hotmail.com



It's quite a month for shuffling, easy-going House this month and this one moves us just like it contemporaries. The feel is unusual and relentlessly perky and just when you think you're staring down the long desolate road to Minimalism, in drops a tune and shuffling bassline that takes it off into an altogether more easily enjoyed and Pop driven direction.

Highlights included the bursts of delay and filters on the chords and the knowledge that a track should never rest on its laurels. As a result this constantly morphs by virtue of melody – effectively introducing a verse/chorus arrangement – or by clever effects tricks such as the slowly ramping reverb.

We reckon it's the old school square wave bassline that we like the most however. That and the carefully tweaked timing to the delays and occasional shuffle to the notes and hits – just to keep you on your toes.

Love it. It's on repeat.

Yadgyu Control Factor

yadgyu@hotmail.com



We love a nice big, obvious drum machine snare and the dry snap of the kick drum work great with the grumbling bassline.

Tramel Willis, it's creator, has clearly gone for a warm, rounded suite of sounds here and by and large the track works, but there are elements of too much going on at times, as lines run around each other and fill up the space rather than have room to entertain in their own right.

A larger bed of reverb, perhaps sending half of your lines as a buss would give a more intangible 'vibe' feel to the synths. Saving delay and modulation effects to make cleaner lines jump out. Right now everything is given a very even handed treatment with very little actual effects discernible. All the elements are in place. A simple, more aggressive

remix, would let your work shine. **FM**

Hot Pick



SELECTED KIT

Hardware

- > M-Audio 1010 Soundcard
- > Yamaha SY22
- > M-Audio UC33e controller
- > Genelec 8030 monitors

Software

- > Ableton Live
- > Sony Soundforge

FAVOURITE GEAR

- > "My Genelec 8030s. This is the first track I used them for mastering. It made me realise just how important a quality set of monitors is."



Helm of Awe Happy Here

Contact: soundcloud.com/richie303

Yes! Something 'different' from the mind of Richie Turnbull, AKA

Helm of Awe. "It's a slice of tripped-out Tech-Funk that rocks the floor with discordant chimes and minimal samples," he says and what at first sounds like a loopy loop of Wobbly House proves to be a stern bit of dancefloor damage.

It's that big, slap-in-the-face snare drum that does it. Layered with a few loops it gives the track a great, funky feeling of pace.

Elsewhere we've some very bizarre shimmering

chords and a sliced and diced vocal treatment that's almost impossible to pin down. Suffice to say it appears that the entire track has been designed from the ground up to confuse and – dare we say it – irritate. We're not too sure about opening your DJ set with this one but in the wee small hours this ambitious track might just set the place alight.

The more you listen the more the Rock 'n' Roll chord progression becomes obvious but it's that self same sense of Rock anarchy that makes this track something...like we say 'different'. Top work.

Unsigned and unloved? Get your tracks on these pages!

If you're an amateur music maker wanting to take the next step up then we want to help. Broadcast your music via the *FM* DVD and bravely subject your work to our expert advice!



1 Non pros please!

Are you unsigned, non MCPS or PRS registered and making music that you think could be something special? Then our *Demos* pages are for you. We're here to help and want to broadcast your work to *FM* readers around the world! If you're already making money and living the dream then thanks, but no thanks. Everyone else should head to futuremusic.co.uk our virtual home and blog site where you'll find regular input from the *FM* team.



2 Look for the SoundCloud Dropbox

We're big fans of SoundCloud, the online audio sharing service that let's you effortlessly pass around your audio to your friends or collaborators. SoundCloud lets you audition the audio in your drop box without the need to download it first – it plays in your browser with a click – making it the fastest and easiest way to get at audio files ever. Check out soundcloud.com to get your own SoundCloud box. Ours is on the right, just below the advert.



3 Click on the box and upload

Click on *FutureMusic's* SoundCloud DropBox then click on the big 'Choose files' button and upload your very BEST work. We haven't the time to wade through 12 tracks to get to the good ones! They need to be MP3s please. AND YOU MUST take the time to add a description – your name, address, band name, track name please – and give us your email address too! Include your track name and band name in any correspondence please!



4 Start work on that bio...

If your track is selected to be featured in the magazine we'll email you and ask you a whole bunch of questions such as your favourite gear, how you got your sound, you know – all the things you see us ask people! We're always up against one deadline or another here at *FM* so a rapid concise and easily understood reply to our questions is appreciated. Make sure you put your real name, artist name and track name on all correspondence!

All offers are subject to availability! We do not take any responsibility for any misprints or misinterpreted information!

All prices include 17.5% UK Vat and Tax paid is clearly shown on all invoices. For VAT registered companies this can be deducted at source. Please note that all our invoices will be in euros.

All transactions are carried out in euros and as such the GBP price can vary dependent on the current day's rate of exchange. Thomann are not liable for any surcharges added by your bank or card issuer.

The prices below are based on the published day's rate of exchange:
1 EUR = 0.890 GBP, 1 GBP = 1.124 EUR

thomann
MUSIC IS OUR PASSION

Musikhaus Thomann
Treppendorf 30
D-96138 Burgebrach
Germany
T +49 9546. 9223-0
F +49 9546. 6774
E international@thomann.de
I www.thomann.de

HOT DEALS

www.thomann.de | International Hotline: +49 9546 9223-55 | Fax: +49 9546 9223-24

Swissonic MDR-2

Mobile digital audio recorder

44.1kHz, WAV/MP3, stereo, built-in flash memory (up to 2h of MP3 recording), Slot for separate SD (16MB - 2GB) or SDHC (4GB) cards, built-in stereo condenser mic, 2 jack ins for external mics or guitar/line, headphone out, line out, mini speaker, USB 2.0 interface, frequency range: 20Hz to 20kHz, incl. external stereo mic and USB cable, dim. LWH: 15,5 x 8,5 x 3cm, weight: 200g.



order code 203423 € 78.- € 65.-

Swissonic MDR-4

Mobile digital audio recorder

24bit, sample rate: 44.1/48kHz, record format: WAV (16/24bit) and MP3 (64/96/224/320kbps), 5 effects (delay, chorus, room, reverb, pitch shift), built-in speaker, 128 x 64 pixel LED display, 1/8" stereo line in, 1/8" external mic in, built-in stereo mic, 1/8" headphone out, Mini-B type USB connector, powered by PSU or 2 AA size batteries, incl. power supply unit, 1GB SD card and USB cable, dimensions WDH: 6,7 x 2,9 x 10,7cm.



o. code 226599 € 88.- € 78.-

Yamaha Pocketrak 2G

Compact digital recorder

Recording format: Linear PCM or MP3, playback format: MP3, WMA, WAV or DRM10-WMA, 2GB memory, tilt-up microphone, level meters and ALC for optimum record levels, USB 2.0, incl. USB cable (for PC connection), AAA eneloop rechargeable battery (can also be powered with standard AAA alkaline batteries), stereo earphone (inner ear type), carrying leather case, DVD-ROM. Weight: only 49g. € 122.- € 109.-



order code 204895 € 122.- € 109.-

Zoom H2 UK

Mobile MP3/WAV recorder

1-point stereo mic design, MS stereo technique, built-in USB interface with audio interface function, WAV 96/48/44.1kHz and MP3 up to 320kbps VBR, headphone out, time stamp function, uses SD-cards (up to 4GB), perfect for interviews, podcasts, meetings and live recordings. USB cable, stand, mic-stand adapter, windscreen, UK power supply and 512MB SD card included. € 167.- € 149.-



o. code 213436 € 167.- € 149.-

Zoom Q3

Handy video audio recorder

Stereo condenser mic, true X/Y configuration, 2.4" LC display (320x240px), video resolution 640x480 at 30 frames per second, video format MPEG-4 SP, NTSC/PAL TV out, audio formats with video: 44.1/48kHz 16/24bit Linear PCM or MP3 up to 320kbps, without video u to 96kHz/24bit Linear PCM WAV, up to 1 hour video with 2 GB SD card, auto record level, includes TV cable, soft case, wind screen, 2GB SD card and 2 AA batteries. € 238.- € 212.-



order code 234280 € 238.- € 212.-

Tascam DP-02CF Set

Digital 8-channel multitrack recorder

8-track recording, uses CF card, LC display, 2 mic/line ins (1/4" TRS), 1 switchable to guitar in, 2 XLR mic ins with phantom, effect send and stereo return, stereo line out (RCA), S/PDIF digital out (optical), headphone out, MIDI out for MIDI timecode or clock, USB2.0 port, int. multieffect processor and reverb processor. Bundle including 2GB Thomann Compact Flash Card. € 255.- € 254.-



order code 203379 € 255.- € 254.-

Zoom H4 N UK

Digital recorder

Perfect for interviews, podcasts, meetings and live recordings, 24bit/96kHz, MP3 up to 320 kbps bitrate, two built-in stereo microphones switchable between 90° and 120°, needs 24V or 48V phantom power, USB port, incl. 1GB SD card, windscreen, UK power supply, mic clip adaptor, USB cable, bag and Cubase LE4. € 333.- € 296.-



order code 228789 € 333.- € 296.-

Olympus LS-1 I

Digital recorder

24bit/96kHz, 2 built-in mics, internal 8GB HDD, expandable up to 32GB with SDHC card, up to 23 hours record time, edit functions, PCM/WAV/MP3/record & playback, built-in stereo speaker, display with backlight, SD/SDHC slot, USB, headphone out, silver metal housing, weight: 165g (incl. batteries), connection for external power supply, incl. wireless remote and Steinberg Cubase 4 LE. € 349.- € 311.-



order code 234496 € 349.- € 311.-

Zoom R16

USB audiointerface and DAW controller

16-track playback and 8-track record, 24bit/48kHz PCM recording, internal stereo condenser mic, battery or USB, 8 mic ins (2 with 48V phantom power), 2 outs, 8 balanced XLR / 1/4" TRS connections, internal effects, Mackie Control emulation via USB, for Win XP/Vista and Mac OS, incl. Steinberg Cubase LE4 and 1Gb SD Card (Support for SDHC-Cards up to 32GB). € 379.- € 337.-



order code 232058 € 379.- € 337.-

Korg D888

Digital recorder

8 channels, 16bit/44.1kHz, 80GB hard disc, 8 mic/line inputs, 48V phantom power, 8 outputs (monitor L/R, master L/R, channels 5-8), up to 8 tracks simultaneous recording, 8 virtual tracks per track, built-in FX processor, 3-band EQ, pan pot, internal metronome, USB 2.0 and S/PDIF (optical) connection, dimensions: 37,5 x 33,1 x 11,0cm, weight: 4,4kg. € 509.- € 453.-



order code 193062 € 509.- € 453.-

Stanton S.252

Single CD player

3 pitch modes (± 8%, 12%, 16%), single and continue mode, digital output, fader start, instant start, dimensions WDH: 21,6 x 27,5 x 8,8cm, weight: 2,3kg. € 88.- € 78.-



order code 236219 € 88.- € 78.-

Swissonic CDM P I

Compact CD/MP3-Player

40 seconds anti-shock, pitch ±16%, loop function, slot-in drive, balanced XLR output, direct headphone output with volume control, master level for the line output, IR remote control, 19"/1HE. € 138.- € 123.-



order code 221521 € 138.- € 123.-

Pioneer CDJ-400

MP3 single CD player

With ID3 tag & CD text, MIDI controlled via USB, jog wheel, scratch jog FX, ±6/10/16% pitch control, master tempo control, reverse play function, shock-proof memory, hot loop & beat loop for 10 cue/loop points per disc (maximum). € 658.- € 587.-



order code 139321 € 658.- € 587.-

Numark DDS 80

Digital DJ performance system

Loops, pitch control, scratching over jog wheels, title and track search system, large LED display, 3 USB ports, includes hard drive and CD/DVD disc drive, 19" rackmountable. € 439.- € 391.-



order code 216026 € 439.- € 391.-

Pioneer DJM 400

Professional DJ mixer

2 channels, mic/aux switch (to select 2 mic inputs or 1 stereo line input), fader start, crossfader curve adjustment, talkover (-20dB), peak level meter. € 469.- € 417.-



order code 191081 € 469.- € 417.-

the t.mix Mix 502

5-channel mixer

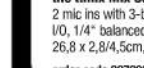
1 mic in with 2-band EQ, 2 stereo ins, 2-track I/O, 1/4" balanced jack out, dimensions: 13,8 x 22 x 2,8/4,5cm, weight: 0,8kg. € 27.- € 24.-



order code 207200 € 27.- € 24.-

the t.mix Mix 802

2 mic ins with 3-band EQ, 2 stereo ins, 2-track I/O, 1/4" balanced jack out, dimensions: 19,3 x 26,8 x 2,8/4,5cm, 1,2kg. € 42.- € 37.-



order code 207202 € 42.- € 37.-

the t.mix Mix 1622FX

16-channel mixer

4 mic ins with 3-band EQ and 48V phantom power, 4 stereo ins, 2 aux, 2-track I/O, balanced XLR and 1/4" jack out, internal 24bit DSP with 256 presets, dimensions: 35 x 38,4 x 4,2/9,6cm, weight: 4,6kg. € 138.- € 123.-



order code 207209 € 138.- € 123.-

Mackie 802-VLZ3

8-channel mixer

XDR2 preamps, 2 mono mic/line ins, 2 stereo line ins, 1 mic/stereo line in, 1 stereo aux return, 1 aux send, 2 inserts, 3-band EQ, low cut filter, PFL, 48V phantom power, internal powersupply, incl. software, dimensions WHD: 27,3 x 22,7 x 4,7cm, weight: 2,5kg. € 185.- € 165.-



order code 209011 € 185.- € 165.-

Soundcraft EFX 8

8-channel mixing desk

8 mono inputs, 2 stereo inputs, inserts on all channels, 1 FX send, 1 aux send (pre/post), solo/mute switch, integrated Lexicon FX with 32 presets, peak LEDs on all channels, integrated power supply, dimensions: 33 x 9,1 x 36,2cm, weight: 4,6kg, rackmount optional. € 266.- € 237.-



order code 118879 € 266.- € 237.-

Mackie 1402 VLZ3 Bundle

14-channel mixer

New XDR 2 preamps, 6 mono mic/line XLR/jack combo inputs, 4 stereo line jack inputs, 2 stereo aux returns, 2 aux sends, 6 inserts, 3-band EQ, low cut filter 18dB, PFL, internal power supply, balanced outputs XLR/jack, weight: 4,5kg, incl. Wizoo Publishing Sound Reinforcement and PA Guidebook. € 359.- € 320.-



o. code 219823 € 359.- € 320.-

Yamaha MG 166cx

16 channel mixer

8 mono mic/line ins (XLR/jack), 2 mic/line ins (XLR/stereo jack), 2 stereo line ins (jack), 3 aux sends, 8 inserts, 3-band EQ with parametric mids, internal compressor on each mic channel, SPX FX processor with 16 programs, 180dB high pass filter, high-end mic preamps, 48V phantom power, dimensions: 47,8 x 10,2 x 48,9cm, weight: 5,5kg. € 379.- € 337.-



order code 115511 € 379.- € 337.-

Alesis MultiMix 16 FireWire

16ch. mixer with FireWire interface

8 mic/line ins, 4 balanced stereo line ins, 3-band EQ per channel, 2 aux send/returns, 100 28bit FX programs, headphone out. FireWire interface: 18 ins, 2 outs, 24bit/48kHz, ASIO/WDM drivers for Win XP SP2, Core Audio drivers for Mac OS X, incl. Cubase LE. € 385.- € 343.-



order code 186079 € 385.- € 343.-

Allen & Heath WZ' 16:2 DX

16-channel mixer

16 mono ins with Insert/direct out, PAD, 100Hz HP and 4-Band-EQ with para. mids, 48V phantom switchable, 6 Aux, Aux 5-6 internal effect, 2 stereo Aux returns, PFL, mute, phones, master insert, master out, mono out with separate fader, A/B out, 2 Digitech FX processors (2x16 programs), MIDI input, internal power supply. € 822.- € 821.-



order code 132316 € 822.- € 821.-

Presonus Studioline 16.4.2

16-channel digital mixer

Built-in 32x18 FireWire audio interface, "Fat-Channel" processing with 4-band EQ, compressors, limiters and gates, 16 inputs, 6 auxiliary mixes, 4 subgroups, 16 Class A XMAX mic preamps, 44.1kHz and 48kHz sample frequency, 2 master DSP effects, talkback, dimensions WHD: 43,7 x 17,5 x 56,8cm. € 2059.- € 1833.-



o. code 225534 € 2059.- € 1833.-

Yamaha 01V96 VCM

Digital mixing console

24bit / 96kHz, 24 analog inputs, 12 Mic inputs, 40 channels expandable, included ADAT interface, 4 effect processors, parametric EQ, incl. Studio Manager Software. € 2380.- € 2127.-



order code 161112 € 2380.- € 2127.-

www.thomann.de

Telephone Hotline: +49 9546 9223-55

Fax: +49 9546 9223-24

The Thomann services

- 30-day money back guarantee
- free shipping to the UK and Ireland on orders above £159

M-Audio Axiom 25 EZ Drummer Bundle

USB MIDI controller keyboard
25 velocity sensitive semi-weighted keys with assignable aftertouch, 8 MIDI assignable trigger pads and rotary encoder knobs, 6 transport buttons reassignable to other MIDI parameters, backlit LCD screen, built-in USB MIDI interface, 20 non-volatile memory locations. Bundle incl. Toontrack EZ Drummer, 5GB drum plugin for VST/AU.

€265.-
£182.-

order code Z39622

Novation Launchpad

Ableton Live and MIDI controller
Bi-directional communication, 64-button Grid with color synced feedback over the status, scene control switchable to control volume, sends, muting and more, up to 6 units at the same time, USB bus-powered, large rubber grips to hold it steady, automap-enabled, incl. Dedicated Launchpad Ableton Live 8 version, weight: 0,76kg.

€169.-
£150.-

order code Z36641

Mackie Control C4 Pro

DAW controller
32 rotary V-pot encoders with integrated push-buttons, 4 LC displays provide immediate visual confirmation of plug-ins and parameter settings, control of up to 32 simultaneous parameters without switching banks, intuitive control of multiple plug-ins, can be used as a stand-alone controller or with Mackie Control Universal, Logic Control and extender modules.

€359.-
£320.-

o. code 112003

Euphonic MC Transport

DAW controller
7 ergonomic transport/navigation keys with multi-color status LEDs, 6 SoftKeys, 16 numeric keys for time code/marker navigation, control multiple applications and workstations via Ethernet, supports HUI and Mackie Control protocols, dimensions WDH: 28 x 30 x 13cm, weight: 2,4kg.

€379.-
£337.-

order code Z28893

Akai APC 40

Ableton Live DAW controller
USB plug-and-play, 40 triggers, 16 rotary control knobs with LED, 8 channel fader, 1 bus fader and 1 cross fader, 2 footswitch connections for tap tempo, tempo nudge, record enable, solo/cue function, for PC/Mac, incl. Ableton Live Lite Akai APC40 Edition.

€439.-
£391.-

order code Z23229

Swissonic Easy

24bit/96kHz audio interface
2 line ins 1/4" TRS balanced, 2 line outs mono 1/4" TRS balanced, 1 stereo out 1/4" TRS (useable as line out or headphone out), volume control for headphone out, frequency response: 20Hz - 20kHz, line I/Os switchable between +4dBu and -10dBu, connection for optional 12V power supply.

USB 2.0
o. code Z18444
FireWire
o. code Z18447
€27.-
£24.-

ESI DualFire

24bit/96kHz FireWire audio interface
2 line ins with level controls (1/4" jack), mic preamps with phantom power (XLR), 2 Hi-Z ins, 4 analogue outs, direct input monitoring with level control, headphone out, bus powered or by separate power supply, supports DirectWire 3.0, MME, ASIO 2.0, GSIF 2.0, DirectSound and Core Audio, incl. power supply and Steinberg Cubase LE 4.0.

€95.-
£85.-

order code Z06255

Presonus AudioBox USB

Compact 2x2 USB audio interface
24bit/48kHz, 2 mic/instrument inputs (48V phantom power), 2 balanced TRS outputs, MIDI I/O, clip LED (on each channel), headphone output, incl. USB cable and Steinberg Cubase LE 4.

€138.-
£123.-

order code Z17037

Lexicon Omega Studio

USB audio interface
8 ins (up to 4 simultaneously), 2 ins with dbx microphone preamps, 24bit A/D converter, 48V phantom power, SPDIF, MIDI in/out, headphone out for zero-latency monitoring, incl. ProTools Plus 32-track recording software and Lexicon Pantheon Reverb Plug-in.

€149.-
£133.-

order code Z16656

M-Audio Fast Track Pro

USB audio interface
4x4 24bit/44,1kHz, in stereo up to 24bit/96kHz, USB powered, 2 mic/instrument preamps with switchable phantom power, 2 inserts, 2 balanced line outs, 4 additional RCA outs, S/PDIF coaxial I/O, S/PDIF out even for AC-3/DTS surround sound, MIDI I/O, compatible with both Mac and PC.

€158.-
£141.-

order code Z184360

EMU 0404 USB

24bit audio interface
2 microphone inputs/Hi-Z or line, digital I/O (optical and coaxial), MIDI I/O, headphone output, line output, compatible with Windows XP (SP 2 or higher or XP x64) and Mac OS X.

€177.-
£158.-

order code Z19706

Apogee One

USB audio interface
24bit/48kHz, 1-canal A/D, convertisseur stéréo D/A, XLR Mic In avec alimentation phantom connectable, Hi-Z Instrument/Line In, sortie casque stéréo, micro condensateur intégré, contrôleur multifonctionnel pur volume et amplification entrée, LEDs de contrôle niveau I/O, pour Mac OSX 10.5.7 ou plus haut, dimensions: 11,7 x 5,7 x 2,7cm.

€205.-
£182.-

order code Z23106

Digidesign Mbox 2 Mini

USB audio interface
1 mic in with phantom, 2 analog line/instrument ins, 2 analog outs, latency-free monitoring, headphone out, Pro Tools LE software, 37 DigIRack and 7 Bomb Factory plug-ins, Pro Tools Ignition Pack.

€225.-
£200.-

order code Z108023

M-Audio Fast Track Ultra 8R

USB 2.0 audio interface
24bit/96kHz, with MX Core DSP, 8 inputs and 8 outputs, 8 Octane based mic preamps with 48V phantom power, 2 headphone outputs with volume control, 2 inserts, 2 instrument inputs, dimensions: 19"/1U.

€349.-
£311.-

order code Z207668

Digidesign Mbox 2 Factory Bundle

USB/MIDI audio interface
2x mic in (XLR), 2x line I/O (jack), SPDIF I/O, MIDI I/O, zero latency monitoring, pro tools LE software (WinXP and Mac OS X), 37 rigiRack- & 7 bomb factory-plug-ins, pro tools Ignition pack, incl. plug-ins (moogefooper analog delay, joemeek SC2 and VCS, digidesign maxim).

€389.-
£346.-

order code Z187325

Apogee Duet

FireWire audio interface
24bit/96kHz, 2 channels, FireWire 400 I/O, breakout cable with 2 XLR mic ins, 2 1/4" jack instrument ins, 2 1/4" jack monitor outs, multi-segment LED display input and output levels, multi-function controller knob, headphone out, Maestro software for advanced control and low latency mixing, compatible with any Core Audio compliant audio application, compatible with Mac OS X Core Audio.

€399.-
£355.-

order code Z12312

Focusrite Saffire PRO 40

24bit/96kHz FireWire audio interface
20 I/Os, 8 mic preamps, 8 analog I/Os (2 mic/line/instr. combo XLR, 6 mic/line combo XLR), ADAT I/O, 2 S/PDIF I/Os, 2 monitor outs, monitor switch, 2 separate headphone buses, MIDI I/O, zero-latency DSP mixer/router, incl. plugin suite, 19", 1RU, internal power supply, weight: 3kg.

€429.-
£382.-

order code Z19725

MOTU Ultralite MKIII Hybrid

FireWire and USB audio interface
24bit/192kHz, 2 mic/instrument ins, 6 bal. ins and 10 outs (1/4" TRS), 48V phantom power, S/PDIF I/O, headphone out, CueMix FX, internal DSP, LCD display, suitable for use as a standalone mixer, compatible with Windows and Mac, supports WDM, ASIO and Core Audio, incl. AudioDesk software for Mac.

€466.-
£415.-

order code Z39141

RME Fireface UC

USB audio interface
36 channels, 24bit/192kHz AD/DA converter, 48V phantom power, 18 I/Os usable at the same time, instrument input, 8x analog I/O, ADAT I/O, SPDIF I/O, 2x MIDI I/O, WordClock, intelligent clock control, SyncCheck, SyncAlign, SteadyClock, DIGICheck and TotalMix, 9,5", 1U.

€799.-
£711.-

order code Z29395

Digidesign Digi 003 Rack+ Factory

24bit/96kHz FireWire interface
2RU, 18 simultaneous channels of audio I/O, 8 analog I/Os, 8 professional mic preamps, 48V phantom power, 8ch. optical ADAT I/O or 2ch. SPDIF optical I/O, 2ch. S/PDIF digital I/O, MIDI I/O, BNC WordClock I/O, 2 headphone outs, incl. Pro Tools LE, Factory Plug-In Bundle and Pro Tools Ignition Pack 2.

€1179.-
£1049.-

order code Z19882

SE Electronics SE 2000

Large diaphragm studio microphone
Cardioid pattern capacitor, gold sputtered 1" mylar diaphragm, frequency response: 20Hz - 20kHz, sensitivity: >16mV/Pa - 36 ± 2dB, impedance: <200Ω, output noise: <17dB typical (A weighted), THD: <0.5% at 125dB SPL, phantom power 48V ± 4V, incl. wooden case and shockmount.

€88.-
£78.-

order code Z223700

the t.bone SCT700 Set

Studio tube microphone
Nice and warm tube sound, 1,07" gold diaphragm, incl. transport case, wind shield, cable, shockmount and external power supply. Bundle incl. the t.bone MS180 pop shield.

€148.-
£132.-

order code Z203197

Rode NT2-A MS-180 Bundle

Large diaphragm microphone
Polar pattern switchable between omni, figure eight and cardioid, 1" diaphragm, frequency range 20Hz to 20kHz, max. SPL 147dB, delivered with shockmount SM2. Bundle incl. the t.bone MS180 popkiller.

€258.-
£231.-

order code Z223002

Shure SM 7 B

Studio microphone
Dynamic studio microphone with a cardioid polar pattern, frequency response: 50Hz-20kHz, bass roll-off switch, mid-boost switch, 150Ω, shielded against broadband interference, fixed stand adapter, XLR plug, includes windscreen.

€369.-
£328.-

order code Z129929

Neumann TLM 103 Studio Set

Studio microphone
Large diaphragm cardioid microphone, pressure gradient transducer with one-diaphragm capsule, transformerless circuitry, extremely low noise: 7dBa, high-quality professional equipment for limited budgets, finish: silver, incl. shockmount, delivered in a box.

€939.-
£836.-

order code Z174067

Peavey Q1311

31-band equalizer
Constant Q factor, 1/3 octave, switchable 6dB or 12dB, 40Hz low cut feature, frequency range: 20Hz to 20kHz, XLR and 1/4" TRS inputs and outputs, output LED display, dimensions: 8,9 x 48,3 x 19,1cm (19"/1U), weight: 4,1kg.

€44.-
£39.-

order code Z38485

SM Pro Audio TB202

Hand microphone preamp
Hand-selected 12AX7 tube, Class A transformerless high voltage signal path, switchable phantom power, switchable phase reversal, optical compressor, E0 circuitry, input gain control, -20dB pad, 110V - 220V external power supply, dimensions: 19"/1RU.

€102.-
£91.-

order code Z174864

SPL GoldMike Studioset 3

2-channel tube preamp
Discrete Class A solid stage, 48V phantom power, phase reverse, pad function, flair presence enhancement, very clear and warm sound, 19" rack format with 2RU. Bundle incl. the t.bone SC450 studio mic, the t.bone MS200 pop shield and Pro Snake TPM6 cable.

€466.-
£415.-

order code Z37993

tc electronic M3000

Dual engine multi FX processor
Two simultaneous reverbs or effects, award winning intuitive user-interface, 600 factory presets and multiple I/O formats, AES/EBU (24bit), S/PDIF (24bit), sampling rates 44,1 kHz, 48 kHz, 19" / 1RU.

€888.-
£799.-

order code Z131732

tc electronic Finalizer 96k

Studio mastering processor
Gain maximizer, 96kHz 24bit AD/DA, multi-band compressor/expander, 3-band spectral stereo image and un-correlated dithering, format conversion AES/EBU, S/PDIF and Tos-link, enter and exit at any sample rate e.g. 32, 44,1, 48, 88,2 and 96kHz and make even asynchronous conversion possible, manual or auto fade tool.

€1158.-
£1031.-

order code Z133460

Event S100

Active 8" studio subwoofer
8" polypropylene cone with damper rubber surround and high-temperature voice coil, frequency response: 35 - 120Hz, -3dB, LFE crossover 20Hz, 2nd-order, noise: >70dB below full output, mono line in with 1/4" connector, line ins with RCA, 2 RCA mains monitor channel pass-throughs, dimensions WDH: 30,5 x 42,3 x 27,3cm, weight: 14,5kg.

€102.-
£91.-

o. code Z114515

KRK RP5 Rokit G2

Active studio monitor
75W, 5" + 1" speaker, frequency response: 53Hz - 20kHz, magnetically shielded, dimensions WDH: 27,6 x 18,5 x 25cm, weight: 8kg. Unit price!

€133.-
£118.-

order code Z13024

KRK RP8 Rokit G2
8" / 1", 140W.

€229.-
£204.-

order code Z13090

ESI nEaR08 Classic

Active 8" studio bi-amp monitors
2-way bookshelf monitors, magnetic shielded, LF amplifier power: 70W, HF amplifier power: 70W, frequency response: 40Hz - 24kHz, 1 balanced input XLR, 1 balanced/unbalanced input TRS, dimensions WDH: 35,8 x 25,5 x 32,2cm, weight: 10kg/unit. Pair price!

€209.-
£186.-

order code Z22139

M-Audio EX66

Active studio reference monitor
Bi-amplified with 200W PWM power per channel, high-impedance analog inputs (XLR and 1/4" TRS balanced), S/PDIF and AES/EBU digital input up to 24bit/192kHz for total digital studio connectivity. Unit price!

€249.-
£222.-

order code Z190176

Adam A7

Active nearfield studio monitor
6,5" Rohacell / kevlar sandwich woofer, A.R.T. tweeter, frequency range 46Hz to 35kHz, 100W (sin), 150W (rms), XLR and RCA input, dimensions: 18 x 33 x 28cm, weight: 8kg. Unit price.

€377.-
£336.-

order code Z193268

Gear Chart

Are you giving your music a fresh kick? In the market for new kit? Finally putting together that dream set up? Then you'll need *FM's* exclusive guide to all our favourite gear

1

2

3

4

5

Hardware Synths



Dave Smith Instruments Tetra | £552

Review FM219 Super Mopho meets cut-down Prophet '08 in this fantastic analogue polyphonic synth.



Dave Smith Instruments Prophet 08 | £1,499

Review FM194 A beast of analogue power. Warm, fat and wooden-ended – what more do you want?



Clavia Nord Wave | £1,395

Review FM196 If you liked the Nord Lead you'll love the Wave. It's more versatile and sounds fantastic.



Dave Smith Instruments Mopho | £280

Review FM208 So much fatness, for such little cash – you'd be silly to miss this analogue bargain.



Use Audio Plugiator | £329

Review FM202 A software and hardware hybrid that is brilliant value for money. We all want one at FM!

Soft Synths



FXpansion D.CAM Synth Squad | £179

Review FM217 A powerful synth collection from FXpansion, favoured by Electro House heroes.



Rob Papen SubBoomBass | €299

Review FM215 Another superb synth from Rob Papen that caters for all your bass-in-your-face needs.



Arturia Minimoog V2 | €229

Review FM215 A fantastic anew update to a classic soft-synth that enables bags more creativity.



Arturia Jupiter 8V | £150

Review FM189 One of the definitive, all-time great polysynths is now a plug that delivers thunderous bass as powerful as its searing leads.



u-he Zebra 2.1 | \$199

Review FM183 Subtractive and analogue synthesis with an ultra-phat sound. Ideal for shaking ground and wrecking speakers. In a good way.

MIDI Controllers



Novation LaunchPad | £149

Review FM220 Greta features at an amazing price make this Ableton controller a performance dream.



Akai APC40 | £400

Review FM215 Although there's still a few things that could be addressed, this is still the best option for performing with Ableton Live.



Livid Instruments Block | £349

Review FM223 Built out of wood and metal, the Block is a great alternative to the more mainstream controllers.



Native Instruments Kontrol X1 | €199

Review FM223 An intuitive, well-built controller at a great price. If you're a Traktor user, try this.



Vestax VCM-600 | £649

Review FM216 A fantastic way to control Ableton Live. Vestax deliver a well built, fun and feature packed DJ style performance controller.

How Our Chart Works

We've fought, bitched, whinged and racked-up all our favourite gear that's available today into our Gear Chart. If it makes an appearance on these pages, then it's well worth a look. We've appraised the hardware in terms of its price point, performance and usability, along with the fond memories and sheer joy factor of cranking it up for the first time. We're not saying that keyboard number six is 'better' than keyboard number seven, for example. We're saying that you should have a think about the music you want to make, read our recommendations below, and check out the gear that sounds cool. Each month we'll be updating our charts with new finds and introducing new lists to keep things fresh. Special mention to the Digital Audio Workstation bit at the back, which should help you nail your ideal recording solution.

The FM Awards

Editor's choice. If you see this little flag tagged on to one of our reviews it's impressed us above and beyond the usual excellence.

Platinum. Buy these. Unless you've got a perfectly good alternative or produce your music on comb and paper.

Value. A special chapeau to bits of gear that deliver the goods without breaking the bank. Value awards mean great gear at even better prices.

The Charts This Month...

120	Hardware Synths	From two-octave upstarts to two-grand monsters
120	Soft Synths	Our pick of sound-producing software
120	MIDI Controllers	The best performance and studio controllers in town
122	Monitors	Record, mix and master with confidence
122	Keyboard Controllers	Everything you need from portables to studio staples
122	Audio Interfaces	Get audio into your computer with quality and style
122	Effects and Manglers	Warp your sound and break new ground
124	Performance Samplers	Take control of your audio live and direct
124	High-end Audio Plug-ins	Treat yourself to the best that money can buy
124	Field Recorders	Record your band or go searching for found sound
124	Microphones	The best mics around for everyone's budget
125	eBay Classic Retro Finds	Keep an eye out for our suggested list of nostalgic love
125	Ways To Stand Out	Dare to be different and reap the rewards
125	Digital Audio Workstations	Which DAW is best for the music you want to make?

6

7

8

9

10



Waldorf Blofeld Keys | £699

Review FM211 A huge amount of exciting presets and solid good looks make for a killer all-round synth.



Korg microKorg XL | £439

Review FM210 This fresh update of everyone's favourite mini-synth gives a new engine and a great vocoder.



MFB Kraftzwerk | €580

Reviewed FM219 German-built modular synthesis on a budget. Prepare to get addicted to analogue with this flexible patch-happy synth.



Doepfer Dark Energy | €398

Review FM223 A good introduction to modular analogue synths, in a lovely wooden-edged box. Nice!



Analogue Solutions Telemark | £689

Review FM217 A semi-modular upright beast, with plenty of unique sonic possibilities.



Spectrasonics Omnisphere | £299

Review FM207 Great sounding, flexible and unique, this is truly a powerhouse of sound design.



GForce Virtual String Machine | £90

Review FM201 Classic string sounds, with hybrid patching, plus a lovely tweakable interface - great stuff!



Waldorf Largo | £175

Review FM217 Waldorf take their Blofeld sound and technology and create a powerful and unique soft synth. Check it out.



Native Instruments Absynth 5 | 179Euro

Review FM220 The super soundscaping synth with a much improved feature list and GUI.



Lennar Digital Sylenth1 | £139

Review FM208 This simple-to-use, Virus-like synth comes packed with a great set of presets.



Novation Nocturn | £69

Review FM199 Once you integrate this Automapping wonder into your studio, you'll wonder how you lived without it.



Moog MP-201 | £400

Review FM211 MIDI and CV control in a unique one-of-a-kind package. LFO generators and USB MIDI are just some of the other great features.



Behringer BCR2000 | £140

Review FM153 There aren't many value-for-money rotary controllers matching this great piece of kit.



Korg nanos | from £36

Review FM209 The keyboard let's the series down, but these portable controllers are still a bargain. They're bundled with great software, too.



Behringer BCF-2000 | £140

Review FM153 Eight 100mm motorised faders for such a low price, this is still a great controller.

Gear Chart

1

2

3

4

5

Performance Samplers



Korg microSampler | £436

Review FM219 Easy to use sampling with some clever extras. Another micro-dominator from Korg.



Akai MPC 5000 | £1,549

Review FM203 The 5000 isn't perfect, but it's without a doubt the best pad-ridden studio-in-a-box on the market. Check it out.



Roland SP-555 | £410

Review FM195 The latest in Roland's line is packed with features. A durable and flexible partner for the loop experimentalist.



Roland SP-404SX | £289

Review FM220 This new update tweaks the original SP-404 but lacks anything really special, so it doesn't climb any places in our chart.



Electrix Repeater | £649

Review FM117 Used by our current fave Imogen Heap for building whole tracks, this discontinued unit still has a healthy second hand market.

High-end Audio Plug-ins



Celemony Melodyne Editor | £319

Review FM222 A plug-in that has the potential to change music production forever. A killer tool for every genre.



Abbey Road Brilliance Pack | \$249

Review FM204 Beautifully recreated from the original vintage hardware – check these out!



UAD Moog Multimode Filter | \$199

Review FM210 The classic Moog filter sound is replicated to a T with this impressive UAD plug-in.



UAD 4K SSL Plug-ins | from \$199

Review FM215 Brilliantly modded pieces of SSL goodness that are begging to be on your UAD card..



Brainworx BX Digital | €398

Review FM200 There's no other plug-in quite like BX's top of the line mastering tool – incredible software.

Field Recorders



Tascam HD-P2 | £729

Review FM186 Built to last and definitely the pro's choice. A multitude of formats and mic settings and superlative sound too.



Roland R-09HR | £259

Review FM204 This flagship recorder will produce crystal clear, 24-bit 96kHz recordings, all from the palm of your hand.



M-Audio MicroTrack II | £229

Review FM202 Not only does this new version look better, but it's also cheaper. A superb update.



Yamaha PocketTrak | £260

Review FM202 This ultra-compact 2GB recorder is a really useful weapon in your recording arsenal.



Edirol R-44 | £499

Review FM205 Record four tracks simultaneously via its quality pre-amps. If you need the flexibility it does the lot and more besides.

Microphones



sE RNR1 | £2,179

Review FM219 Ultra natural sound, low noise floor and a unique design mean that this ribbon mic is definitely worth selling your car for.



sE X1 and Project Reflexion Filter Bundle | £169

Review FM223 Unbelievable value for a robust recording solution.



Blue Bottle Rocket Stage One | £600

Review FM222 Interchangeable capsules make this great sounding mic even more of a must-buy.



Lauten Audio Horizon Mic | £649

Review FM213 This mic is a serious competitor to classic models that sell for many, many times the price.



AKG C214 | £450

Review FM205 As part of the classic AKG family, this mic sets itself up nicely to be a recording bargain that holds its own around the studio.

1

2

3

4

5

eBay Classic Retro Finds

**Roland HS-60** | £250

Released 1984 Same guts as the Juno-106 but the ugly built-in speakers mean it's often overlooked.

**Korg EX800** | £100

Released 1984 This rack-mount version of the Poly800 has a similar sound to the Roland Juno but with the added bonus of a sequencer.

**Yamaha MK-100** | £30

Released 1983 Bargain analogue style workstation that has limited synthesis options but a great programmable drum computer.

**Yamaha TX7** | £80

Released 1983 With DX7's back in vogue, get your hands on the true hardware sound at a fraction of the price with this desktop module.

**Sequential Circuits Multi-Trak** | £250

Released 1984 Easier to program than a Six Trak with a better sequencer – a gem find.

Ways To Stand Out

**Snyderphonics Manta** | £398

Review FM218 Space-age style control with incredible good looks and amazing control possibilities.

**Yamaha Tenori-on** | £599

Review FM193 The amazing lights-in-a-frame synth 'n' sequencer that'll test the way you think about music. Grab one while stocks last.

**Jazz Mutant Lemur** | £1,799

Review FM166 Techni-coloured touchscreen controller. Why not put a camera on it feeding a projector?

**Percussa Audio Cubes** | 399 Euros

Review FM207 Expensive, but one of the ultimate ways to stand out when performing electronic music.

**Moog Etherwave Theremin** | £300

Review FM207 Even 50 years on, people will still gawp as you flail your arms around making Sci-Fi sounds.

Digital Audio Workstations

Best all-in-one solution

**Logic Studio** | £399

Review FM218

The home studio regular and all-in-one studio package gets an update. New additions add all the sexy features we love about the competition, making Logic more self-contained than ever.

Best features include:

- > Incredible time-stretching with Flex Audio technology.
- > New amp designer and pedal board options for guitarists.

Good and bad:

Fantastic Flex Audio raises Logic's appeal even further and despite that stealthy price increase to £399 it remains a bit of a bargain all told.

Best combo of ease and power

**Cubase 5** | £499

Review FM212

Cubase 5 sees Steinberg lower the price and raise the plug-in and feature list. VariAudio, Batch Export and new effects plug-ins all come bundled with 5.

Best features include:

- > The new VariAudio Melodyne-style pitch editor.
- > Plenty of built-in plugs to get you creating professional tracks from the moment you install the software.

Good and bad:

Although Cubase is playing catchup in terms of both bundled content and price, it's can't be argued that it's only getting better. Loyal Cubase users rejoice – Cubase 5 is a winner.

Best for recording audio

**Pro Tools 8** | £319

Review FM210

The industry standard DAW gets a fresh modern update with a brand new GUI, enhanced MIDI editing capabilities, and a heap of new instruments and plug-ins.

Best features include:

- > For mixing, recording, processing and editing audio there isn't anything easier to use or more stable and reliable.
- > Now that it's MIDI is finally up to scratch, it's a great choice.

Good and bad:

Great performance and stability with tempting upgrade offers to a HD system. Well-conceived though limited plug-ins.

Best for jamming and creating

**Ableton Live 8** | £315

Review FM214

Bigger and better than ever. If you like chucking loops together and experimenting then this is for you. Flexible and creative, it'll spark ideas you wouldn't otherwise have.

Best features include:

- > Instantly beat-match any audio and trigger samples in time. DJs can use this instead of decks.
- > Flexible routing and modulation options let you mess and mangle.

Good and bad:

It's a dream for mixing and messing. It's getting a little costly (thanks to that bulging library content) but the cheaper versions remain a bargain and a real studio essential.

Best bangs for your bucks

**Sonar 8** | £349

Review FM207

Updated from the much loved Sonar 7, this new version adds even more features and amazingly puts less pressure on your CPU due to a streamlining of it's core. It's a firm favourite with PC-based producers.

Best features include:

- > Beatscape – a fantastic slicing and warping groove-based beat and drum machine.
- > The TS-64 Transient Shaper is a simple but brilliant plug-in addition.

Good and bad:

A continuous effort to streamline and an incredible amount of features make Sonar 8 a great choice DAW on PC.

Every issue in Guitarist...
Find out more about the gear
that made the music



Guitarist is packed to the brim every month with gear reviews, artist interviews, guitar lessons, tech Q&A, free CD and more



Guitarist
The Guitar Player's Bible
On sale in all good newsagents

www.myfavouritemagazines.co.uk • www.musicradar.com

FutureMusic MARKETPLACE

DEALER



HARD TO FIND

www.HTFR.com

Vinyl House, 10 Upper Gough Street, Birmingham City Centre, B1 1JG



KRK RP 5 G2

(WHITE) MR326934

- 45 Watts RMS Per Speaker
- 5" Glass Aramid Woofer
- 1" Neodymium Soft Dome Tweeter
- Self-powered, Bi-amplified

£249.00



0121-687 7777
sales@htfr.com
FREE catalogue
call or email: catalogue@htfr.com
for a Free copy of our Full Colour
84 Page Catalogue

WANTED/FOR SALE

Cubase

Atari ST & TT

Keychange Music Services

01925 823334

email barrie@keychange.co.uk

www.keychange.co.uk

Notator

FutureMusic

produce | mix | perform | create | innovate

DUPLICATION

1000 CDs with Booklet and Inlay c.£600
Quality CDR / DVD copies from 51p
Mastering and Artwork £70ph
DVD, CD-audio, CD-ROM



RPM

Repeat Performance
Multimedia

6 Grand Union Centre
West Row
London W10 5AS

Tel. 020 8960 7222

Over 23 years experience
Graphic design, colour print
Large and small run specialists
Excellent quality and presentation

Recommended by MCPS

www.repeat-performance.co.uk

MASTERING

Get Your
CD Mastered By
Pink Floyd's Grammy
Nominated Engineer.

www.TubeMastering.com

07734 422 490

NEW RELEASE

SOLAR DREAM LIGHT MACHINE

SOLAR DREAM LIGHT MACHINE

New album

"MACHINE VISIONS"

Out now on iTunes

and www.cdbaby.com

Synths and Vocoders

Inovative Electronica

www.solardreamlightmachine.com

TUITION IN FRANCE

Music Production in France

Improve your music production skills in the
spectacular surroundings of the Ardèche.
Our team of experienced and helpful
tutors offer a supportive and creative
atmosphere in which to develop your
mixing and production techniques.
Accommodation is in beautiful
handcrafted yurts set in a remote forest
right on the edge of the Ardèche gorge.



www.musicinfrance.com

INSURANCE

musicguard

insurance for guitarists

PRICE GUARANTEE

If you find a better deal within
28 days of commencement,
we will refund
double the difference!

0845 408 1810

www.musicguard.co.uk

RECORD LABEL

**Big Step
Records Ltd**
New upfront label
looking for
Breakbeat, Figit,
House demos.
bigsteprecords@gmail.com

EDUCATION

16 years of teaching classes of 5 or less

We have been teaching people how to
produce their own music, become sound
engineers and producers for over 16 years...

**Audio Engineering, Music Technology
and Music Production courses**

A non-academic and practical approach to learning.
No previous knowledge or experience necessary.
Professional 48 track analog and digital recording
studio in West London.

Part-time courses

2 to 15 month courses: beginners to advanced.

Up to only 5 people per course.

Daytime, evenings or weekends.

With over 2000 students since 1989 we are one
of the longest established and experienced
sound engineering schools in the UK.

**Full-time 9 month and 2 year
Diploma courses**

If you want to be a sound engineer

2 month summer Diploma course

Work experience placement provided on

successful attainment of the diploma.

Overseas students welcome.

Cubase SX

Logic Pro 6 & 7

Reason 3

ProTools TDM & LE

Sampling

Synthesiser Programming

Mixing & Production

Analog and Digital Multitrack Recording.



**THE
RECORDING
WORKSHOP**

For prospectus
+ bookings
call free:
0800 980 7455



Future Music reaches over 10,860 readers each month.

Our readers spend an average of £3,055 a year producing music!

To put your company in front of our audience
then please call Leon Stephens on 01225 732236
or email leon.stephens@futurenet.com

ALCHEMEA

creating the next generation of audio engineers since 1992



Erica Basnicki: 3 hours sleep between a 16-hour recording and Pro Tools editing session...we are open 24/7

Our objective at Alchemea is to provide the highest standard of audio and post production training. Whether you are looking to gain the skills & confidence to carve out a successful career in the pro audio industry, or are a producer aiming to improve your sound, Alchemea has the course for you.



**MOBILE
STUDIO**
FOR DIPLOMA
STUDENTS



**iTunes
MUSIC**
FOR LOGIC 9
STUDENTS

www.alchemea.com

info@alchemea.com

+44 (0)20 7359 3986

Weekend
courses from
just
£300

SUBBASS DJ ACADEMY



In 2008 we helped over 60 students get their first gig at some of the UK's top events and nights including; The Gallery, Dusted (The Egg), Push (The Whitehouse), Start*cker (Herbal) and at the Electric Garden Festival. We have the necessary connections to some of the biggest clubs and record labels in the industry.



DJ Courses:

Basic to advanced including 3 month DJ course, digital dj and urban music weekend, turntablism including scratching and beat juggling techniques. And our new Ableton DJ course.

Music Production Courses:

1 month, 3 month or weekend courses (beginner and advanced) available using latest industry standard software. Choose from either Logic pro, Cubase, Reason or Ableton Live.

Professional Course Tutors:

Course tutors include Graeme Lloyd (Stripback), Mike Koglin (DJ Mag Top 100 DJ), John Taylor (Punx Soundcheck), Joe 2 Grand, Peo Haggstrom (Nocturnal Records) and Chris Finke.

Former Subbass students have had their tracks released upon completion of the course. Students are automatically considered for our monthly club nights where they will play alongside established names. This month catch our course students DJ at Ministry of Sound and Pacha. Tracks from the production course will also be considered for our new record label Stripback Records!

SOUND KNOWLEDGE



www.sae.edu

Study degrees* and diplomas in audio, film & music business.

Scholarships available at: mycreativefuture.com

Next Open Day 2010: Sun 21st February

* Validated by Middlesex University



Future Music played a pivotal role
in my learning how to control an
entire studio. Our first album
was strictly Electronic
because of that

**Warren Fischer
Fischerspooner**

Artist and Producer



WHY WE'RE NO1

Since 1991, *FM* has featured every incredible piece of new gear and been in the studio with every hi-tech recording artist who's setting the pace. Our reputation for behind-the-scenes access and in-depth analysis is second to none. No-one is better primed to help you make great new music now and into the future!

FutureMusic®
Technique and technology for making music

Save \$78 on the store price!

Pay only \$8.99 per issue! Subscribe today for **only \$29.23** every three months by quarterly credit card payment*

ORDERING YOUR SUBSCRIPTION IS EASY

Log on to: www.imsnews.com/mus-A004
Or call Toll-Free: 1800 428 3003

To benefit from this offer please quote code A004

In the UK?

Flip to **p30** for
our special
subs offers

Terms and Conditions: *This offer is for new subscribers only. You will receive 13 issues per year. Your subscription will start with the next available issue. Minimum subscription term is 12 months. If at any time during the first 60 days you are dissatisfied in any way please notify us in writing and we will refund you for all un-mailed issues. Payment will be debited in Pounds Sterling.

Your **DVD ROM** section by section...

In The Studio with...

Sharam Jey *FM* head to his studio to uncover the technique behind his album

Max/MSP Part 2

Get to grips with audio in Max with the second part of our introductory tutorials



Reader Demos

Check out the top 10 reader tracks sent to *FM* this month



Hear this month's gear including the Doepfer Dark Energy, Korg Wavedrum and the Nord C2

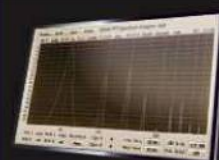
FutureMusic

DVD ROM



Tutorials

Master your DAW with our regular Cubase, Logic and Live audio and video tips



Knowledge Base

Understand Harmonics and Stereo Mixing with our examples

DVD missing?
See the newsagent

In The Studio with...

Joris Voorn. *FM* get an exclusive breakdown of the track *Sweep The Floor* and a selection of Ableton Live tips from this Dutch master

DVD problems?

If the DVD is faulty please return it with your name and address and a description of the fault. A new working version should be returned to you within 28 days. Send it to: **Disc Department (FM223/02/10)**, Reader Support, Future Publishing Ltd, Bath, BA1 2BW. Email: support@futurenet.co.uk

WAVEDRUM

DYNAMIC PERCUSSION SYNTHESIZER

IT'S HERE and making a massive impact on the world of modern music creation. The new generation KORG WAVEDRUM is simply one of the most intuitive real-time, electronic rhythm instruments on the planet today, allowing you to inject jaw-dropping levels of expression into your music with no more than the touch of your hands.

beat it.



stroke it.



hit it.



Equally at home onstage or in the studio, WAVEDRUM's extraordinary dynamic range and sensitivity lends itself to almost any musical genre, responding to the subtlest hand-drum techniques right through to full-on, stick-twirling rock excursions. And with multiple sensors on the head and rim, you can play and control your WAVEDRUM in a whole variety of new ways.

WAVEDRUM is loaded with stacks of sounds including a full range of pop/rock drum sounds, traditional acoustic percussion sounds, plus its own unique range of richly-textured voices. And this is no one-hit-wonder, you don't just get percussion sounds – you get stringed instruments too!

So if you're serious about expressing yourself musically, you need KORG WAVEDRUM – it's serious kit.

play it.

YouTube Check out the videos at www.youtube.com/korgtv

KORG
www.korg.co.uk