SUPERB INSTRUMENTS & FX COLLECTION: EVERY ONE TRIED & TESTED!



COMPUTER MUSIC SPECIAL

COMPUTER MUSIC ESSENTIAL SELECTION 2010

FULL GUIDE AND TUTORIALS INSIDE

FREE PL

Build your ultimate music production setup with our pick of the best free software for PC, Mac and mobile

DRUMS

WORKSTATIONS

TRACKERS

UTILITIES

SAMPLERS

AMP SIMS

DAWS

EFFECTS

SYNTHS

musicradar.com
CMUS44 2010 £6
Future MEDIA WITH PASSION
9 771468 781008 44>

New Primacoustic© IsoTools

for the studio & stage



VOX GUARD™

larger & lighter than the competitors, the Voxguard allows you to reduce ambience around your microphone when recording vocals



KICKSTAND™

eliminate resonance



CRASHGUARD™

reduce the spill from cymbols & improve isolation



TELEPAD™

use your iphone live as a teleprompter or metronome



TRI-PAD™

isolates the mic stand from the studio floor, eliminates resonance & improves clarity

For more information visit www.primacoustic.com
or contact exclusive UK distributor
www.shuredistribution.co.uk / 01992 703 058

PRIMACOUSTIC

Primacoustic is a division of Radial Engineering Ltd. All trademarks property of Radial Engineering Ltd.

cm SPECIAL 44 2010

Future Publishing Ltd.
30 Monmouth Street, Bath BA1 2BW
Tel: 01225 442244 Fax: 01225 732275
Email: computermusic.special@futurenet.com
Web: www.musicradar.com/computermusic

EDITORIAL
Editor: Andrea Robinson
Associate Editor: Ronan Macdonald
Art Editor: Stuart Ratcliffe
Disc Editor: David Newman
Contributors: Tim Cant, Craig Hitchings, Andy Jones, David Newman, Scot Solida
Cover illustration: Magictorch
Sub-editor: Kieran Macdonald
Group Senior Editor: Julie Tolley
Senior Art Editor: Rodney Dive
Creative Director: Robin Abbott
Design Director: Matthew Williams
Editorial Director: Jim Douglas

ADVERTISING
Tel: 01225 442244 Fax: 01225 732285
Advertising Sales Director: Clare Dove
Advertising Sales Manager: Lara Jaggon
Account Sales Manager: Alison Watson
Senior Sales Executive: Leon Stephens

CIRCULATION & MARKETING
Trade Marketing Manager: Verity Cooke
Campaign Marketing Manager: Charlotte Pratten
Brand Manager: Jennifer Wagner
Promotions Executive: Madeleine Umpleby

PRINT & PRODUCTION
Production Co-ordinator: Frances Twentyman
Production Manager: Rose Griffiths
Head of Production: Richard Mason

LICENSING
International Licensing Director: Tim Hudson

FUTURE PUBLISHING LIMITED
Publisher: Rob Last
Publishing Director: Mia Walter
UK Chief Executive: Mark Wood

DIRECT SALES
Phone our UK hotline on: 0870 837 4722
Buy online at: www.myfavouritemagazines.co.uk/music/computer-music-special/

Printed in the UK by Stones and BGP on behalf of Future.
Disc duplicator: Software Logistics.
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

Future produces carefully targeted magazines, websites and events for people with a passion. Our portfolio includes more than 180 magazines, websites and events and we export or license our publications to 90 countries around the world.

Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR)

Chief Executive: Stevie Spring
Non-executive Chairman: Roger Parry
Group Finance Director: John Bowman
Tel +44 (0)20 7042 4000 (London)
Tel +44 (0)1225 442244 (Bath)

www.futureplc.com

© Future Publishing Limited 2010. 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.

Join the new music making community musicradar.com
News • Reviews • Tuition • Samples • Forums • Community

FSC Mixed Sources
Product group from well-managed forests and other controlled sources
Cert no. TT-COC-1815
www.fsc.org
© 1996 Forest Stewardship Council

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).

recycle
When you have finished with this magazine please recycle it.

welcome

Free music production software – we love it, of course! That's why our **cm** *Essential Selection* has become something of an annual event.

What's it all about? Well, with hundreds of developers offering their wares for free download, and new ones appearing on an almost-daily basis, sorting out the good stuff from the bad (not to mention the downright ugly) is a nigh-on impossible task. Anyway, who has time for that...

We do, that's who! So here's the scoop: we get together a select team of **cm** testers and lock them away for a few months with a mission to hunt down the very best music production tools in the freeware universe today. After a rigorous selection and testing process, we gather all our favourites together and present them to you in one complete package.

And so we have it: the **cm** *Essential Selection 2010*, a brand-new collection of top-notch instruments, effects and utilities to take care of your every music production need. You won't see anything here that's appeared in our previous collections, and every single item has been personally chosen, tried and tested by us before being deemed worthy of inclusion.

What more is there to say, apart from a big thanks to all the dedicated, generous and forward-thinking developers who keep the freeware scene thriving.



ENJOY THE ISSUE...

Andrea Robinson **Editor**



The **cm** Mission Our goal is to help you make better music with your Mac- or PC-based setup. With that objective in mind, we bring you step-by-step tutorials, unbiased product advice, music production techniques, expert tips and guides and a disc packed with sonic tools.

COMPUTER MUSIC ESSENTIAL SELECTION 2010

cm/contents

Your guide to cm's Essential Selection 2010, offering you a massive collection of superb music-making software on one disc. Get stuck in!



13
EFFECTS
Get creative with reverb, delay, pitch correction, filtering, EQ, compression, glitching and more

25
SYNTHS
A huge collection of virtual analogue, FM, modular, additive and subtractive instruments





46
SAMPLERS & OTHER INSTRUMENTS
Exotic and traditional virtual instruments, samplers and sound collections to expand your sonic palette



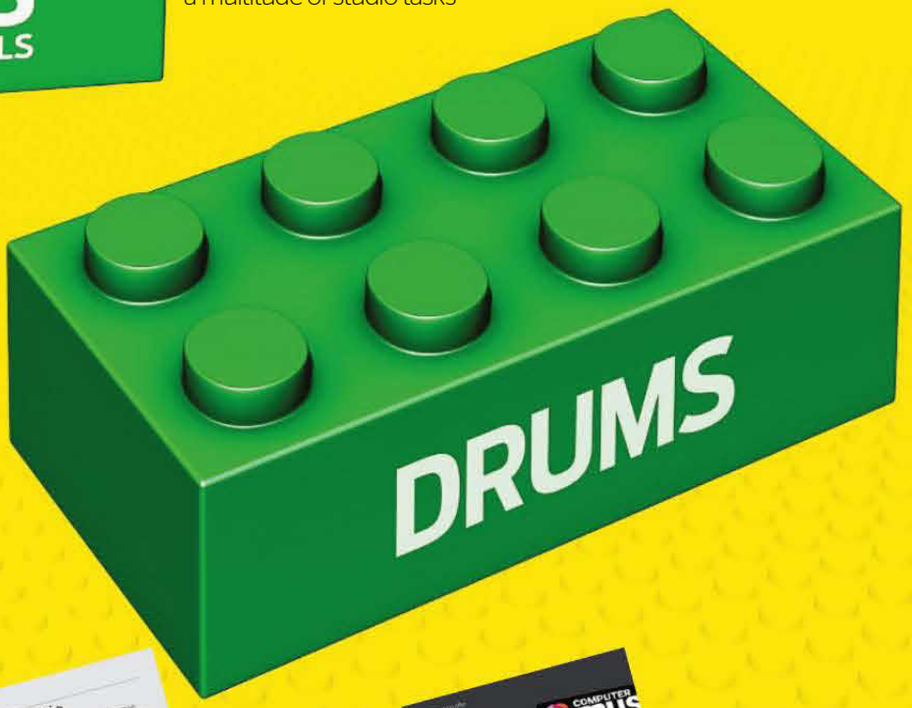
61
AMP SIMS
Infuse your productions with the sound of hardware tubes, valves and transistors



69
DAWS AND TRACKERS
Audio recorders, sequencers and VST hosts, plus modern and old-school trackers



77
UTILITIES AND MISCELLANEOUS
A huge and varied collection of tools to cover a multitude of studio tasks



87
DRUMS
Get your beats nailed with drum samplers, drum synths and classic drum machines







06 PLUG-IN STARTUP GUIDE
New to music production? Our beginner's guide will get you up and running with your free plug-in collection

94 MOBILE MUSIC
Our selection of 20 of the best downloadable free apps for iPad, iPhone, Android and Windows Mobile

44 SUBSCRIBE
Make sure you never miss a **cm** Special again, and save money too! Check out our special subscription offer

PLUG-IN STA GUIDE

Even if you're a computer music novice, you'll have your machine set up for audio and ready to rock in minutes with our fast guide to using plug-ins

Making professional-level music and recordings used to be an expensive business, but thanks to the power of today's home computers and the availability of excellent free and inexpensive software, that barrier to entry has practically disappeared. Anyone can start making professional-quality music using little more than a desktop or laptop machine, some carefully selected software, and of course, their ears!

Unfortunately not everyone is a computer whizz, and installing and using music software can be intimidating for the newbie computer musician. This needn't be the case, as with a little instruction it's easy to set up and use quite sophisticated music software on your home computer, whether you have a Mac or PC.

As you've no doubt noticed, this **cm** Special comes with enough of the aforementioned software, carefully selected, to keep you busy for a long time to come. To use the plug-ins on the coverdisc, you'll need a host DAW. You may have a DAW of your own choosing (such as Cubase, FL Studio, Live, Sonar or Logic), but so that we're all on the same page, in this guide we'll be using Cockos Reaper, which is an excellent and highly recommended shareware DAW. You can find an unlimited trial version of Reaper in its own folder on the cover disc.

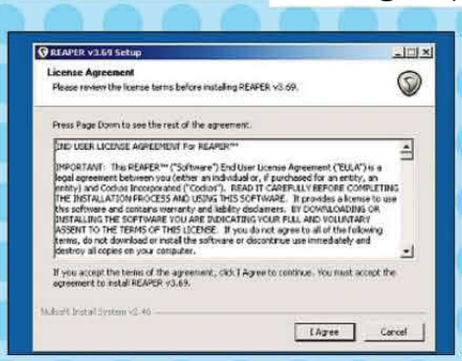
> "With a little instruction, it's easy to set up sophisticated music software on your home computer"

Over the next few pages we'll show you step by step how to install Reaper, audio drivers, and various plug-in effects and instruments from our *Essential Selection*. Then we'll show you how they can be used together to make sweet music. Don't worry if you find the terms confusing, because we'll be explaining what they all mean, and we'll also take a look at the various types and formats of music software to give you a better idea of exactly what applications you should be looking for to get the most out of your computer music-making experience.

This guide is intended purely for beginners, and includes troubleshooting advice in case you encounter any problems. Experienced computer musicians can quite happily skip this and dive right in to the rest of the issue, but if you're a bit rusty and you need a quick refresher, the following tutorials will get you back on track.

You'll find all the software referenced in this guide on the coverdisc, so you already have everything you need to get started making music on your computer in minutes. So, without further ado, grab your DVD and let's get cracking!

> Step by step Installing Reaper



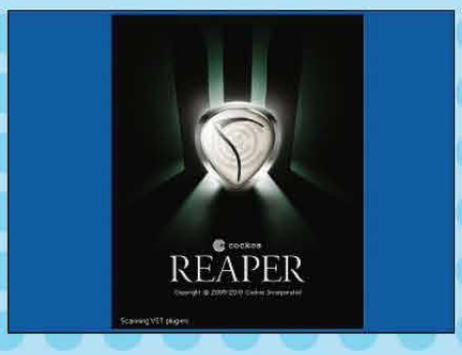
1 > To start things off, open the **Cockos Reaper trial version** folder on the coverdisc and double-click the installer file. If you're using a PC this will be an EXE file, and running it will begin the installation procedure. Follow the on-screen instructions to install the software. Once the installation is complete, click the **Close** button.



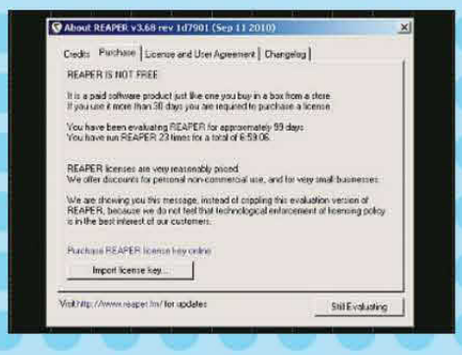
2 > If you're a PC user without a discrete audio interface and you intend to use your computer's onboard soundcard, we suggest installing ASIO4ALL, which you'll find in the **Utilities** folder on the disc. Again, simply double-click the installer and follow the on-screen prompts.



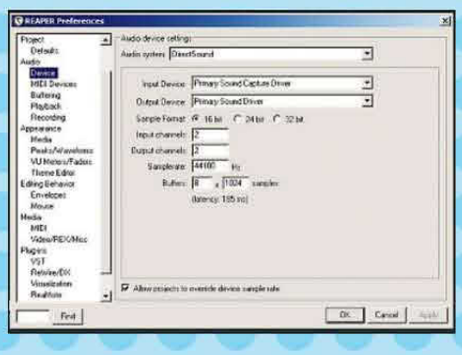
3 > Mac users should double-click the **Reaper366_i386.dmg** disc image file. This will cause the disc image to be mounted. Click on this file in Finder, then drag the Reaper and ReaMote icons into your **Applications** folder. Reaper has now been installed and is ready to run. Let's check everything is working properly before we install anything else.



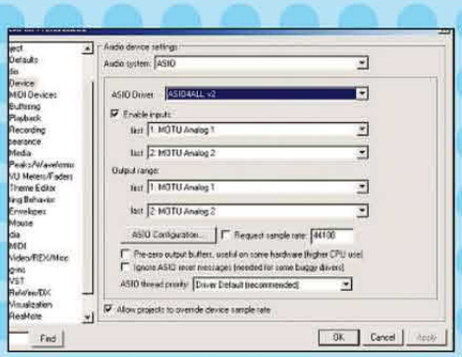
4 > To run Reaper on the PC, open the **Programs** menu from the **Start** button, and click the Reaper icon in the **Reaper** folder. On Mac, double-click the Reaper icon in the **Applications** folder. When Reaper runs for the first time it will search your system for plug-ins and attempt to set up your audio device.



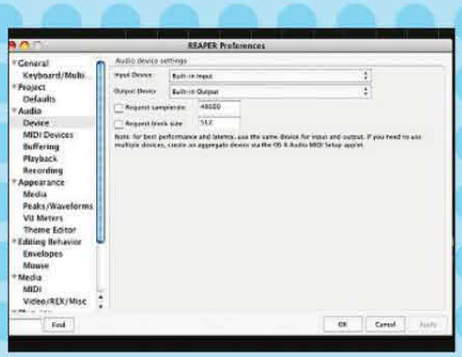
5 > Once Reaper has loaded, the About Reaper window will be displayed. You'll have to wait for the short countdown to finish before you can click the **Still Evaluating** button – this is just a reminder that Reaper isn't free software and should be registered if you intend to use it after the trial period.



6 > First things first – let's check our audio driver settings. Without your audio driver set up correctly, you're not going to be able to hear anything, so it's pretty important! To check these settings, open **Options»Preferences** and select the **Audio»Devices** page from the menu on the left of the Preferences window.



7 > PC users: in the Audio Device Settings on the right, the top setting is **Audio system**. Click this to bring up a dropdown menu, and select **ASIO**. In the **ASIO Driver** setting below, select **ASIO4ALL**, or the driver for your audio interface.



8 > Mac users don't have a choice of device driver types, and instead have separate options for **Input Device** and **Output Device**. To use your Mac's onboard sound, select **Built-in Input** for the Input and **Built-in Output** for the Output. Otherwise, select your audio interface.



9 > Once your audio interface is set up correctly you can test it by dragging the **TestBeat.wav** audio file from the **Tutorial Files\DAWs\Cockos Reaper** folder on the DVD onto the main window in Reaper. You should hear it play back. If it doesn't, check to make sure you've selected the correct audio driver settings and that your computer's audio interface and speakers are set up properly.

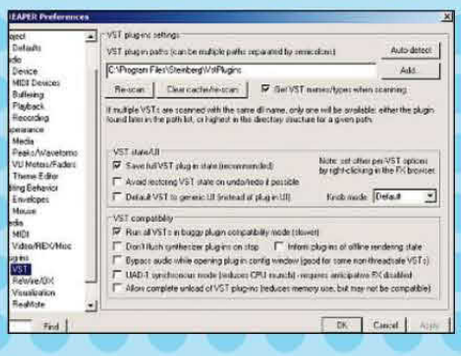
DAWs and plug-ins

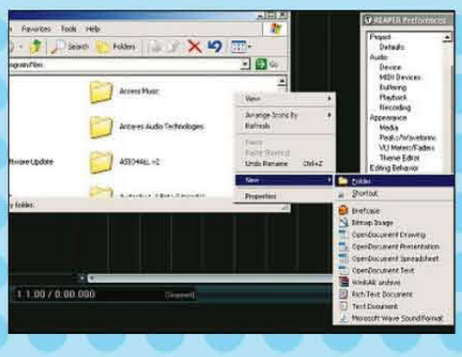
For the uninitiated, dealing with computers can be befuddling enough, but throw the jargon- and acronym-packed world of digital audio into the equation and you've got the potential for a massive amount of confusion. Here, then, we present our straightforward guide to the various formats and types of music software available.

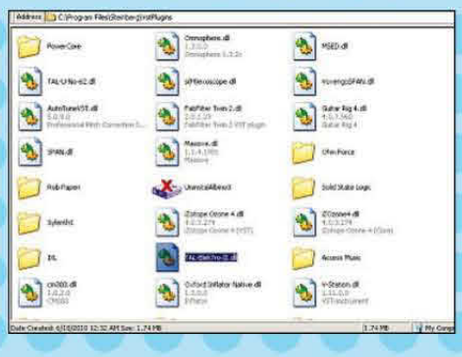
In this guide we're going to be using Reaper, which isn't free software but comes in versions for both PC and Mac, which makes it convenient for explaining computer music basics on both platforms. Reaper is provided as an unexpiring trial, which means you can use it fully-featured for as long as you like, but if you do continue to use it after the 30-day trial period you should purchase a license for it from **www.reaper.fm**. These licenses are cheap, starting at just $60, and will help fund the development of this excellent software.

But what is Reaper? In music tech parlance, Reaper is a DAW (digital audio workstation) application. You can use it to record audio on multiple tracks, which can be layered up to create a complete song. It's also possible to process these sounds with effects, and synthesise new sounds with virtual instruments. These instruments and effects are known as plug-ins because they 'plug in' to host DAW software such as Reaper.

> Step by step Installing plug-ins on a PC



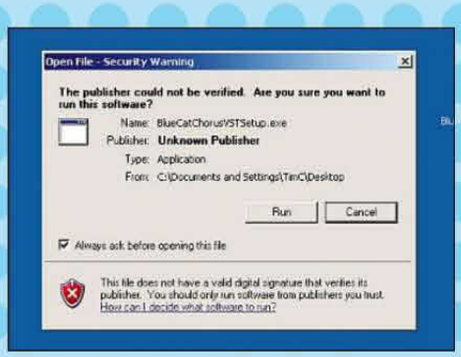


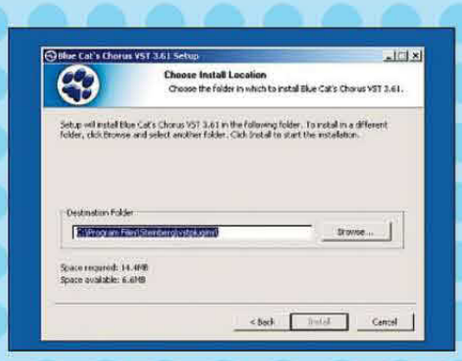


1 > To install VST plug-ins on PC, you need a shared VST plug-ins folder. To check where this is on your machine, open Reaper's preferences menu and select the **Plug-ins»VST** section on the left-hand side of the window. The plug-in folder location will be displayed in the **VST plug-in paths** field.

2 > Make a note of this folder. If there isn't a folder there already, you can make one. To do this, open the **Program Files** folder on your boot drive and create a folder within it called **VSTplugins**. Click the **Add** button in the Preferences window to add this to Reaper's list of plug-in folders, select this folder in the dialog that appears, and click **OK**. Now we're ready to install our first plug-in, TAL-Elek7ro!

3 > Open the **Software/Synths** folder on the cover disc and drag the **TAL-Elek7ro-II.zip** file onto your desktop. Double-click it to see its contents, and drag **TAL-Elek7ro-II.dll** into the plug-in folder. Simple ! TAL-Elek7ro will be added to Reaper's list of plug-ins the next time you launch it, or you can click the **Re-scan** button in the Preferences window to re-scan the folder for plug-ins now.





4 > Many plug-ins have automatic installers, so let's try one of these now. Open the **Effects** folder and drag the **BlueCatStereoChorusVSTSetup.exe** file onto your desktop. Double-click the icon to run the installer (Windows might ask you if you really want to run the installer – click **Yes**), then follow the instructions.

5 > When you get to the **Choose Install Location** section of the installer, check that the plug-in path in the Destination Folder panel is correct. If it isn't, you can enter it into the field yourself or use the **Browse** button to locate it. Once the correct location has been entered, click **Install**, then click **Finish** once all the files have been installed. Click the **Re-scan** button, then click **OK** to exit.

POWER TIP

>Shortcuts

If you intend to use a lot of plug-ins, we highly recommend creating a shortcut to your plug-ins folder. This makes it a lot quicker to check what's what in there, and to install new instruments and effects. To do this on a Mac, right-click the plug-ins folder, and select **Make Alias**. Drop the newly created alias onto your desktop and you're done! For PC users, the procedure is virtually the same: right-click your plug-ins folder and select **Create Shortcut**.

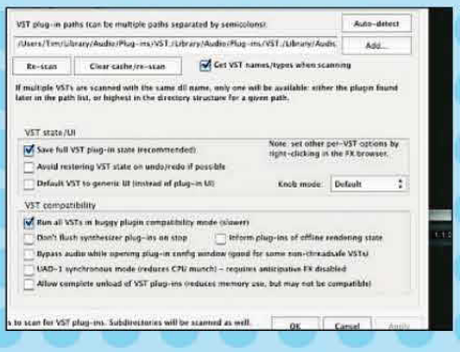
"AU plug-ins are only used on Macs, but VSTs are available for both Mac and PC"

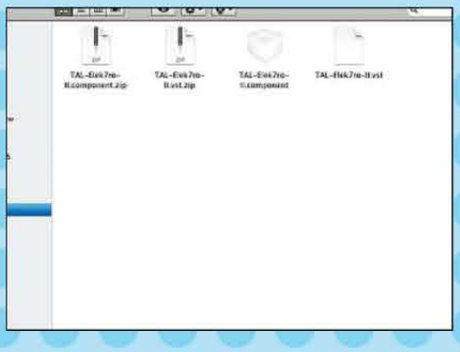
Plug-ins, instruments and effects come in a variety of formats, the most common being AU and VST. AU plug-ins are only used on Macs, but VSTs are available for both Mac and PC. However, it's important to remember that PC VSTs won't work on a Mac and vice versa: you need the right version for your operating system.

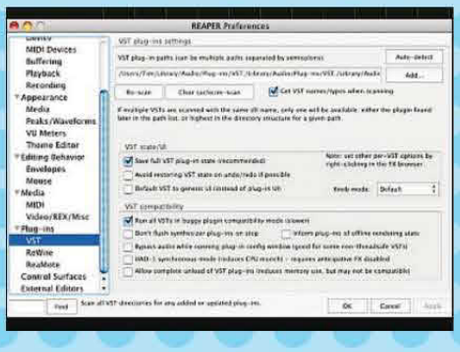
Not all DAWs will work with every type of plug-in. For example, Steinberg Cubase can only use VSTs, and Apple's Logic and GarageBand will only use AUs. Reaper and Ableton Live can use both AU and VST plug-ins. We're focused on those two widely-available plug-in formats in this **cm** *Special*, although there are other popular formats in existence, including DX, RTAS and TDM.

In this tutorial we'll show you how to install Mac AU and VST plug-ins, and PC VST plug-ins, and how to use them in Reaper. If you have another DAW you'd prefer to use them with, please consult its documentation.

> Step by step Installing plug-ins on a Mac



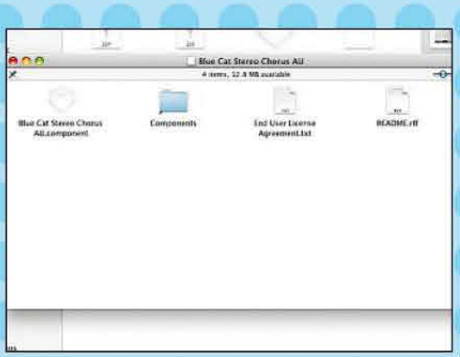




1 > Macs have predefined plug-ins folders for AU and VST formats, but to complicate things slightly there are separate VST and AU folders for the system and the user. Most software uses the system folders. We can see from the **VST plug-in paths** field in the Preferences window that Reaper scans both the system and user folders for plug-ins.

2 > Let's start by installing both the AU and VST versions of TAL-Elek7ro into the system's plug-ins folder. Drag the **TAL-Elek7ro-II.component.zip** and **TAL-Elek7ro-II.vst.zip** files from the **Synths** folder on the coverdisc onto your desktop, then double-click each one to extract its contents.

3 > Drag **TAL-Elek7ro-II.component** into **Macintosh HD/Library/Audio/Plug-ins/Components**, then drag **TAL-Elek7ro-II.vst** into **Macintosh HD/Library/Audio/Plug-ins/VST**. TAL-Elek7ro will be added to Reaper's list of plug-ins the next time you launch Reaper, or you can click **Re-scan** in the Preferences window to manually re-scan the folder for plug-ins.





4 > Sometimes plug-ins are supplied as disc images, usually with a shortcut to the relevant plug-in folder included in the disc image. Open the **Effects** folder, and double-click **Blue Cat Stereo Chorus AU.dmg** or **Blue Cat Stereo Chorus VST.dmg** to mount the disc image. A new Finder window will open – drag the **.component** or **.vst** file onto the folder shortcut to install the plug-in.

5 > Many plug-ins feature their own installers, UVI Workstation being one example. Open the **Other instruments/UVI Workstation** folder, and double-click **Workstation-1-1-7.dmg** to mount the disc image. A window containing the **Install UVI Workstation.mpkg** file will appear. Double-click it and follow the on-screen instructions to install the plug-in.

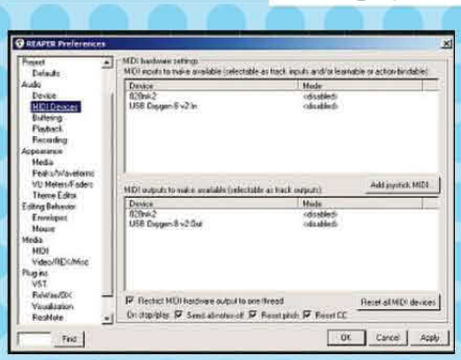
POWER TIP

>Organising your plug-ins

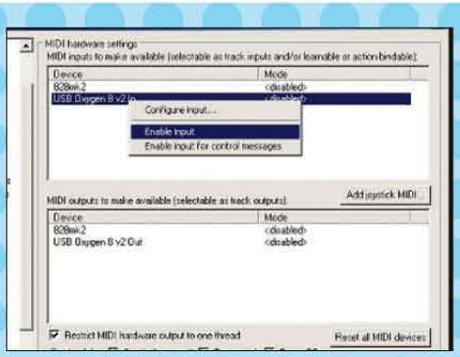
With so many free plug-ins available, it's tempting to simply install everything you come across. Unless you've got a great deal of free time, however, this isn't a great way to work: your plug-in folders will become cluttered and the plug-ins you find most useful can get forgotten. We suggest creating a folder for new plug-ins you genuinely think may prove useful, and we also highly recommend you keep back-ups of your most used plug-ins, along with authorisation details in the case of paid-for instruments and effects.

> Step by step

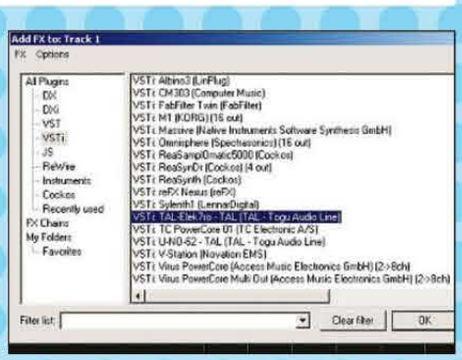
Setting up MIDI and adding virtual instruments to tracks



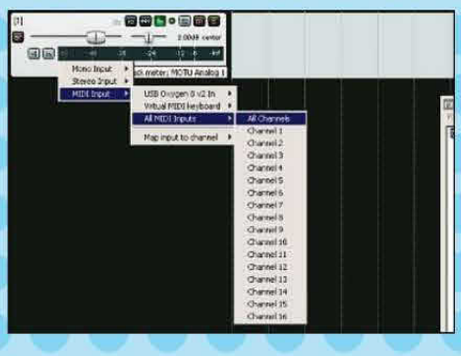
1 > If you've got a MIDI controller such as a keyboard or drum pad, you're probably going to want to use it with your DAW. The first step is to install any software and drivers that came with the device. Once that's done, load up Reaper, go to **Options»Preferences** and select the **Audio»MIDI Devices** option from the menu to the left.



2 > You'll see a list of available MIDI devices – by default, they'll all be disabled. Locate your MIDI controller in the list, and right-click it. Select **Enable Input** and the device will become enabled. Before you can actually play anything with it, though, you'll need to add a track with a MIDI instrument on it. Click **OK** to exit the Preferences window.



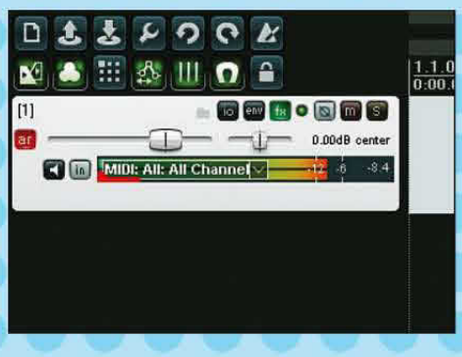
3 > To create a new track, go to **Insert» Track**. Click the **FX** button on the track info panel, and add TAL-Elek7ro or any other instrument by double-clicking its name in the list of plug-ins. If you're not sure which of your plug-ins are instruments (as opposed to effects), you can filter down to VSTi or AUi using the options on the left.



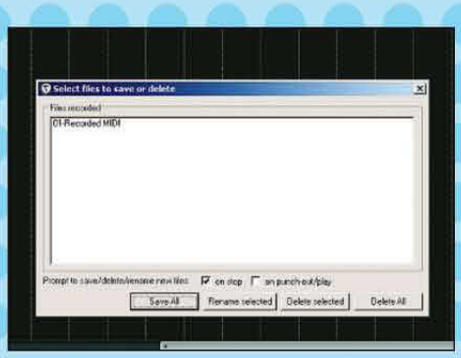
4 > Once you've double-clicked the instrument, the Add plug-in window will disappear, and you'll be presented with the plug-in's interface. We're almost ready to play, but first we need to set the track up to receive MIDI. To set the track's input to your MIDI controller, click the **In** button and select **MIDI Input»All MIDI Inputs»All Channels**.



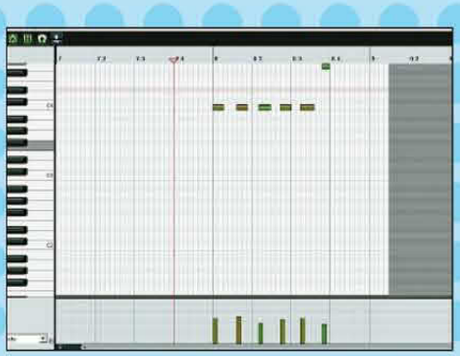
5 > Next, click the Record Arm/Disarm (**ar**) button on the left-hand side of the track's info panel. Now when you play notes, press buttons or adjust knobs or faders on your MIDI controller, you should see a red bar bounce up and down on the track's level meter. This shows that the track is receiving MIDI information.



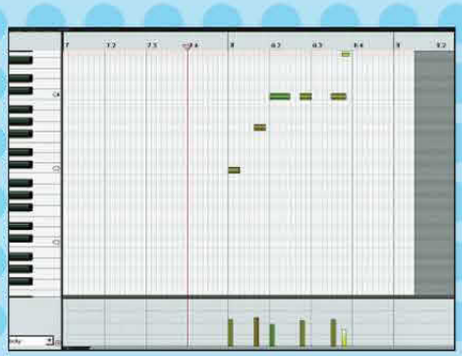
6 > You can now record your MIDI data, but you won't actually hear what you're playing unless you click the **Record Monitoring** button that looks like a speaker below and to the right of the **ar** button.



7 > Let's make a MIDI recording. The track is armed and ready to go, so click the **Record** button on Reaper's transport bar and Reaper will begin recording. Play a few notes, and when you're done, click the **Stop** button and Reaper will display a dialog asking if you wish to save or delete the data you just recorded.



8 > Click **Save All** to save the MIDI. You'll see the MIDI notes appear in the recorded MIDI item block. To take a closer look, double-click the block and the MIDI grid edit window will appear. This will show you all the notes you recorded, which can be moved around by dragging.

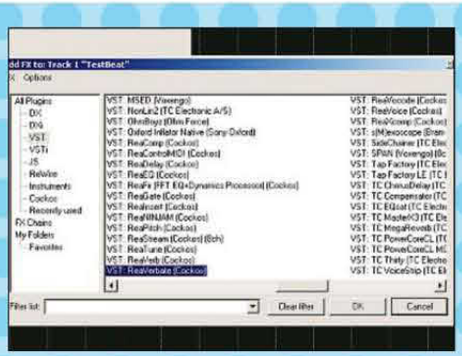


9 > You can edit the start and end point of notes by dragging their left- or right-hand edges. To change their velocity – which by default usually controls the volume of the sound – drag the white line in the centre of the notes up or down, or click the velocity bar in the velocity lane below the grid. You can also create or delete notes simply by double-clicking anywhere on the grid.

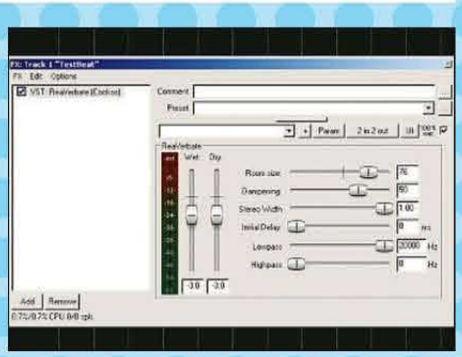
> Step by step Using plug-in effects



1 > Adding plug-in effects to tracks works just like adding plug-in instruments. First, create a new project in Reaper by clicking **File»New Project**. Create a new track by selecting **Insert»Track**. Drag an audio file – **TestBeat.wav** from p7 will do – onto the track. Have a listen to the audio without any effects by using the transport controls on the central bar. Click the **FX** button to add a plug-in effect.



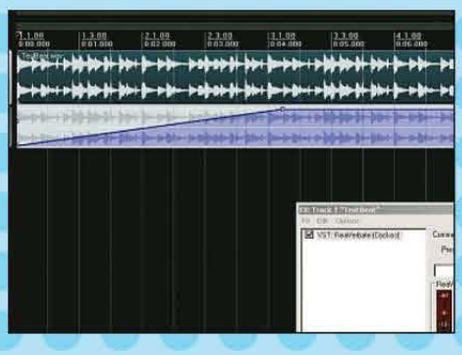
2 > A list of plug-ins will appear. Click **VST** in the menu on the left to only show VST effects. Locate ReaVerbate. This is one of the plug-in effects included with Reaper, and it adds a reverb effect to the sound. Add the effect to the track by double-clicking it. You'll see the plug-in's interface displayed in the **FX** window.



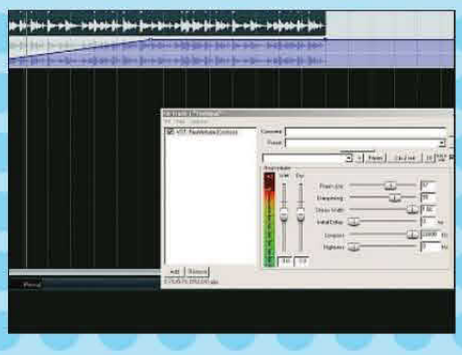
3 > Play the track back. You'll hear that the sound now has a reverb effect on it. You can adjust the parameters on the ReaVerbate effect to change how it sounds. For example, turning up the **Room Size** slider creates a much bigger-sounding effect. It's possible for Reaper to automatically change these parameters as your project plays back. This is known as automation.



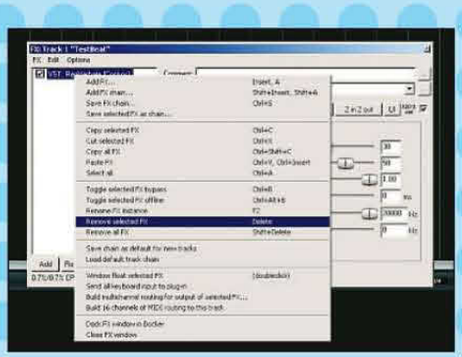
4 > To use automation, click the **env** (envelope) button on the track's info panel. This will bring up a list of all the track's parameters that you can automate, including the parameters of effects and instrument plug-ins. Locate **RoomSz** in the **ReaVerbate** section, and click the check box to the left of it. An automation track will appear.



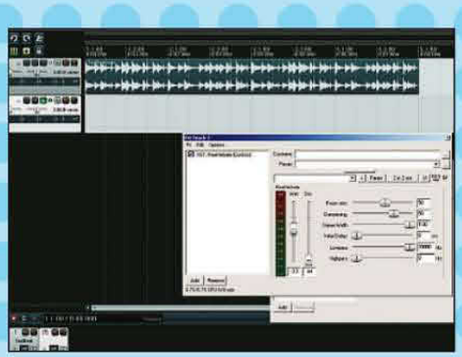
5 > Close the envelope window, then hold down **Shift** and click a few times at different points on the **Room Size** envelope. These points can then be dragged around to create an automation curve. Create an upward ramp, as we've done in the screenshot above.



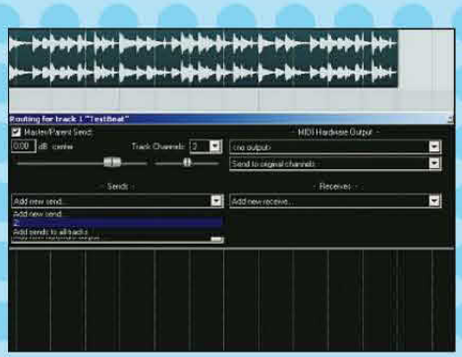
6 > On playback you'll see that the **Room Size** slider gradually rises as the envelope on the **Room Size** channel moves upwards. Automation can be used to create cool dynamic effects, and is a very useful tool when mixing a track.



7 > We've just used ReaVerbate as an 'insert' effect, so called because we inserted it straight onto one particular track. It's also possible to use effects in another way, as 'send' effects. Let's try this now. Delete the ReaVerbate effect from the FX window by right-clicking on it and selecting **Remove Selected FX**.



8 > Create a new track using **Insert» Track**. Bring up this track's FX window by clicking the **FX** button on its track info panel. Add the ReaVerbate effect as before. We're going to use this track as a reverb effect only, and don't need to hear the dry, unprocessed signal through it, so turn the ReaVerbate's **Dry** parameter all the way down to **-inf**.

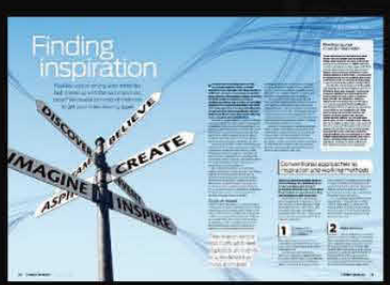


9 > On the track with the audio on it, click the in-out (**io**) button. In the Sends section of the window that appears, click the menu and select **2:** to create a send and route it to the track with the reverb effect on it. The difference between this method and the previous one is that you can route any number of tracks to this effect, processing them all with the same reverb. **cm**

ESSENTIAL READING FOR THE CUTTING-EDGE PRODUCER



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



From studio staples to out-there oddities – get creative or give your tracks that professional sheen with this collection of quality production tools

MeldaProduction PC MAC

MeldaProduction effects

What is it	Collection of 12 plug-in effects
Web	www.meldaproduction.com
Format	VST/AU
System requirements	**PC** Windows XP/Vista/7, 32-/64-bit VST host **Mac** OS X 10.5, 32-bit AU/VST host

What better way to kick off our effects collection, we thought, than with a whopping bundle containing no less than 12 plug-ins! Included in this MeldaProduction pack are tools for adjusting a track's dynamics, such as MCompressor and MLimiter; stereoising processors including MStereoExpander and MAutopan; and classic effects such as MEqualizer, MPhaser and MFlanger. In short, this is a complete collection of freeware effects that will get you well on the way to producing polished tracks.

All of the plug-ins share the same GUI design, so once you've picked up the basics of one from the collection, you'll be able to find your way around the rest. And you won't have any trouble picking up the basics – all the MeldaProduction freeware VSTs and AUs are incredibly well thought-out and easy to use.

That's not to say that the plug-ins aren't extremely deep and versatile – far from it! These little beauties are crammed with parameters, and each one has plenty of options for getting the most out of your sounds. For example, many of them feature sync-to-host controls for creating modulations that are perfectly in time with the rest of your track, as well as a variety of preset and custom LFO shapes, which we think is a very nice touch indeed.

We showcase a few of the plug-ins in the walkthrough opposite, putting them to work processing a simple drum loop and bassline. Follow along and you'll get the gist of how the effects work – then you can get on with using them in your own productions.

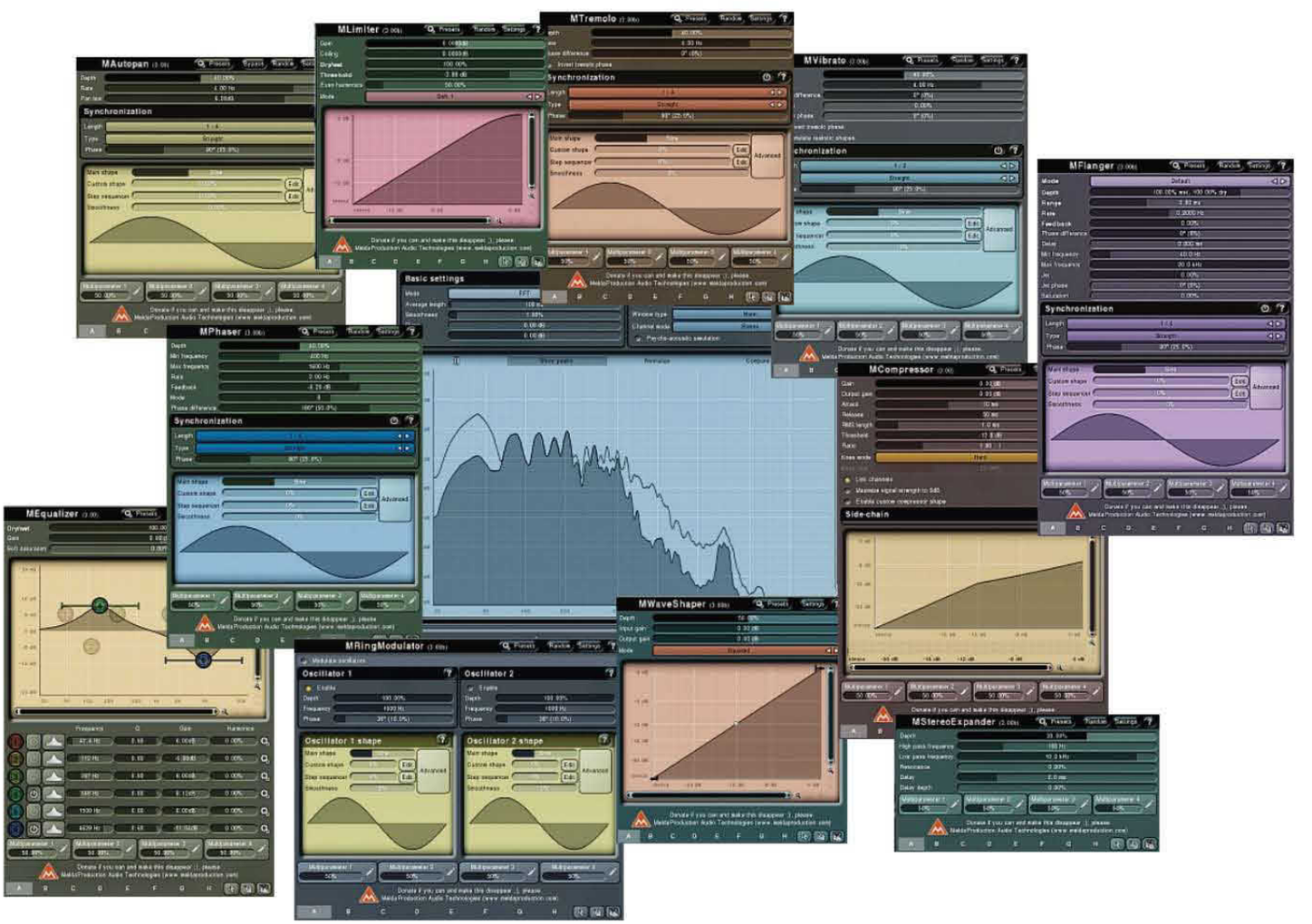
If, after trying out this free selection, you find that you crave even more control, you might like to check out some of the commercial effects that are available from MeldaProduction. The majority of these are provided in multiband format, so you can really get deeply into processing certain areas of the frequency spectrum independently.

Behind the scenes

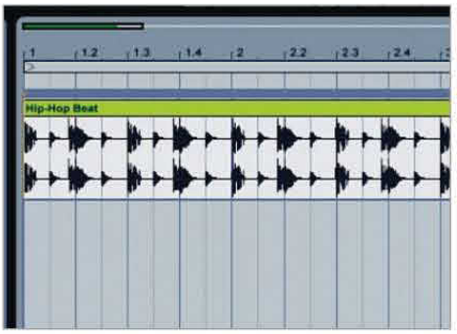
We asked MeldaProduction's founder and main man, Vojtěch Meluzín, how this collection was developed and eventually released as freeware.

"Once upon a time", he tells cm, "there was MDrummer. Several effects had to be done for it, so an integrated effect system had already been developed. After the release of MDrummer, somebody noted that the effects by themselves were worth using, so they were all converted into VST and other standard formats.

"They soon became pretty popular, mainly because they are generally more versatile than most effects of the kind that were available at the time, especially for freeware. They are also well known for their completely resizable GUIs, which is just something that none of the competition out there has."



> Step by step
Fattening up beats and bass with MeldaProduction effects



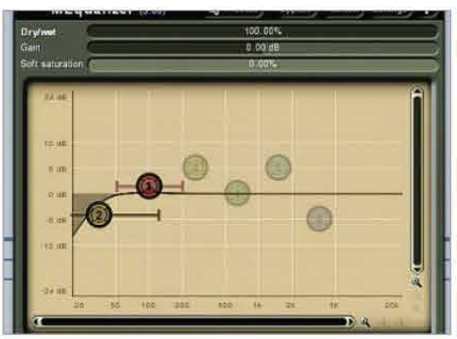
1 > MeldaProduction's plug-in bundle gives you a fine selection of effects that will help turn your tunes into powerhouse productions. Here we'll begin with a raw drum loop (**Tutorial files/Effects/Hip-Hop Beat.wav**) and phatten it up a bit.



2 > We call up MCompressor first, to give us a more uniform level and boost the sustain portions of our hits. We check **Maximize signal strength to 0dB** to apply automatic makeup gain, increase the **Ratio** to **5:1** (giving us quite hard compression) and adjust the **Attack**, **Release** and **Threshold** settings to suit our material.



3 > Our beat is already sounding much bigger, but it's not hitting hard enough in the lower mid frequencies the way a hip-hop beat should. The snare could do with a little more oomph and the top end could do with brightening up a bit, too. Let's take a closer look at what we're working with by calling up MAnalyzer, which will highlight the precise areas that are in need of attention.



4 > Although there's a decent amount of sub, there's not much impact in the 90-100Hz region, so let's bring in MEqualizer to rectify this. We apply a slight boost at 100Hz with a narrow **Q**, and use a high-pass filter to take out the content below 35Hz, which may cloud our mix unnecessarily when there are more elements present.



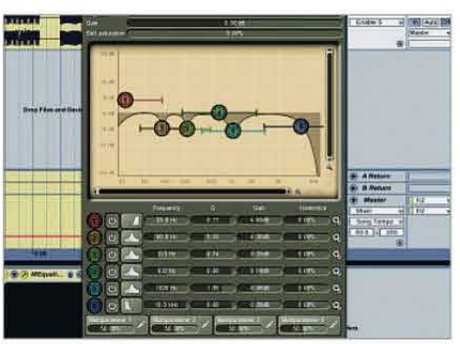
5 > We add another MAnalyzer to see the results of our EQ adjustments. Using this gives us a visual idea of whether our changes are having a positive effect, but you should always rely mainly on your ears. Now, as you can see from the screengrab above, we've also gone ahead and sorted our midrange and top end.



6 > Let's add in our bassline (**Squelchy Bass.wav**) and apply some effects to get it gelling nicely with the drums. First up is the MCompressor, which will level out any large variations in the signal. We've gone for a slightly lower **Ratio** setting and kept the **Attack** and **Release** times longer than those used on our drums, as maintaining the transients is less important for bass sounds.



7 > Let's add a bit of grit to our bassline, as it's sounding far too clean at the moment, and we want it to bite. We call up MWaveShaper, increase the **Depth** (or how much of the signal is affected) to around 80% and drag the white dot in the central window towards the top left, which saturates our signal.



8 > Playing the drum loop and bassline back simultaneously, we now make some EQ adjustments to the latter using MEqualizer. We attenuate the bassline around the most prominent areas of the beat, such as the 90Hz region, where our kick drum punches through. Note that there's a handy **Harmonics** slider on each band, for bringing out the upper harmonics of your signal.



9 > Last but not least, we use MStereoExpander to give our bassline some subtle width, before adding MPhaser to provide a little movement and modulation (**Hip-Hop Beats and Bass.wav**). The remainder of the plug-ins in this collection work along similar lines to the ones we've showcased here.

Destroy FX
Buffer Override

PC MAC

What is it	Glitch/stutter effect
Web	destroyfx.smartelectronix.com
Format	VST/AU
System requirements	**PC** Windows 95, VST host
	Mac OS X 10.3.9, AU/VST host

If you're producing electronica in any of its many forms, you'll probably want to get hold of a decent glitch/stutter effect for turning selected portions of your beats into unpredictable granular chaos. Allow us, then, to introduce one of the best-kept secrets in the freeware world: Buffer Override by Destroy FX. Creators Sophia Poirier and Tom Murphy have released a variety of bizarre effects over the years, as well as writing code for the likes of Cycling '74's Pluggo collection and Abbey Road Plug-ins.

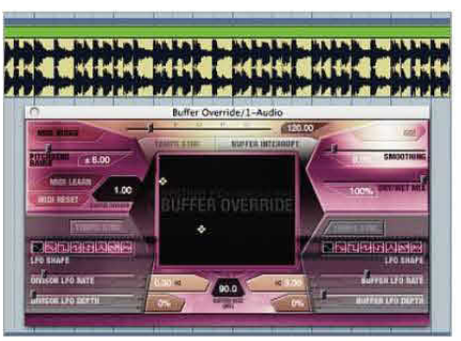
Buffer Override isn't for the faint-hearted, and it can be absolutely baffling trying to determine what each parameter is doing when you first use the plug-in, but the results can often be quite stunning. Essentially, the effect enables you to literally override your host's buffer window settings, split audio up into tiny granular chunks and spit them out the other end in various glitches, stutters and spurts. It works particularly well on drum loops, providing you with an array of new rhythms and beat combinations.

In fact, the results are often chaotic, so we recommend that you simply mess around with the XY window, moving the two crosses about in real time, while recording all the results to a separate audio track. You can then revisit the recordings and slice out the very best bits of chopped-up audio for use in your tracks. Be aware, however, that you can lose hours playing with this plug-in. Don't say we didn't warn you.

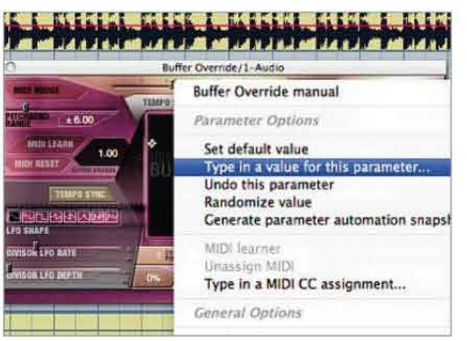


Buffer Override can be intimidating at first, but stick with it and you'll soon find yourself unable to stop tinkering

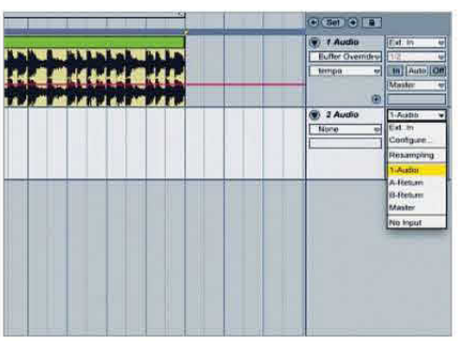
> Step by step
Using Buffer Override to create drum loop variations



1 > Let's take a standard drum loop and mangle it. The best way to use this plug-in is to record its output to a separate channel, so that you can pick the bits that work and discard the ones that don't. Load up **Drum Loop.wav** (from **Tutorial files/ Effects** on the DVD) in the drum loop channel, and prepare to get granular.



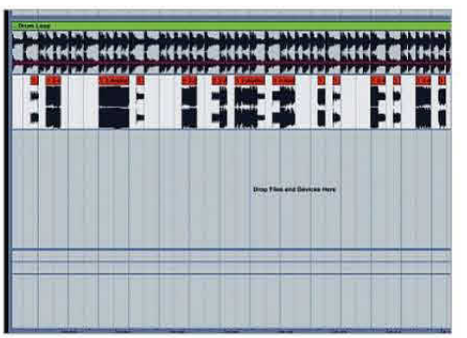
2 > Buffer Override won't affect the loop upon playback until we change some of the settings, so let's first prepare the effect and get it tempo-synced to our host. Our loop is running at 215bpm, so activate the three **Tempo Sync** buttons and Shift-click the **Tempo** slider at the top to manually enter the BPM, as we have here.



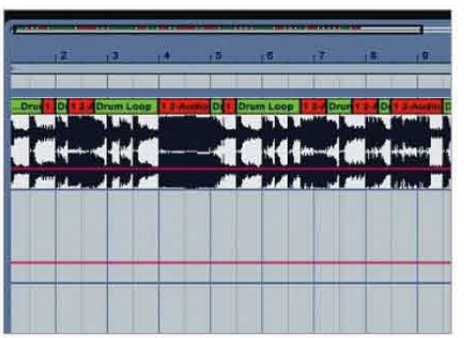
3 > Create a new audio track in your host, set it to record mode and choose the drum loop/Buffer Override channel as its input. Now we can really start to have fun by randomly playing around with Buffer Override's XY window and recording all of the glitchy goodness that it chucks out.



4 > Start recording and simply move the top white cross around, experimenting to see what works. If you find yourself running out of time just as things are starting to sound good, duplicate the original loop a few times to give yourself a bigger window of opportunity.



5 > With your results recorded to the second audio track, have a listen, chop out the bits you want to keep and delete the rest. Now simply slot the best sections into your original loop. Be sure to listen again without Buffer Override active, just to make sure things are still flowing nicely.



6 > With the variations slotted in (**Glitchy Drum Loop.wav**), it's simply a matter of repeating the process until you have the right number of variations for your drum track. It's wise to keep an original copy of your loop stored somewhere, though, just in case you go too far and create a mess!

Audio Damage
Rough Rider

PC MAC

What is it Extremely hard compressor
Web www.audiodamage.com
Format VST/AU
System requirements **PC** VST host **Mac** OS X 10.4, AU/VST host

The folks at Audio Damage don't really like developing 'normal' plug-ins, so even when they make what you might think is going to be a standard dynamics processor, they have to add something unique. As a result, their freeware compressor Rough Rider (not to be confused with the multiband Rough Rider Pro) is gloriously over the top.

In fact, Rough Rider is such a beast that it can easily be misused in the wrong hands and crush the life out of anything put through it. This is particularly due to its massive ratio range, which can go from 1:1 (or no compression at all) right up to a whopping 1:1,000.

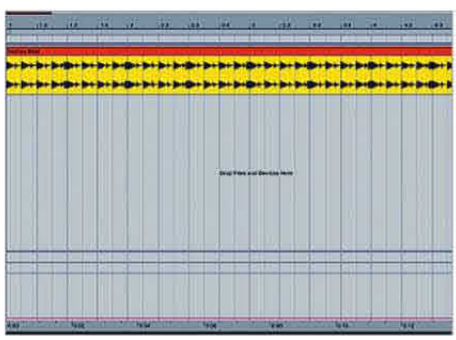
Using Rough Rider on the latter setting essentially makes it a limiter, reducing any signal fluctuations above the threshold to more or less the same level. Such extreme compression can have its uses, however, and we'll show you how to use Rough Rider as a parallel compressor for producing a fat drum track – a technique known in some circles as New York compression.

Added to this, there are Sensitivity and Makeup controls. There are Attack and Release controls, too, but note that Audio Damage have deliberately left off parameter readouts for these, so you'll have to rely on your ears, just as engineers had to do in the hardware days.



Approach with caution! As its name implies, Audio Damage's Rough Rider is a powerful beast

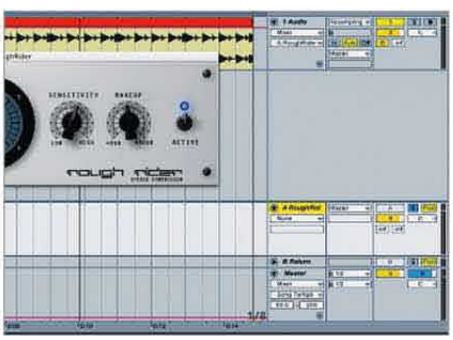
> Step by step Parallel compression with Rough Rider



1 > We begin with a simple four-to-the-floor drum loop (**Tutorial fils/Effects/ Techno Beat.wav**). We load this up in our DAW (we're using Ableton Live, but you can use any DAW that enables you to set up send and return channels).



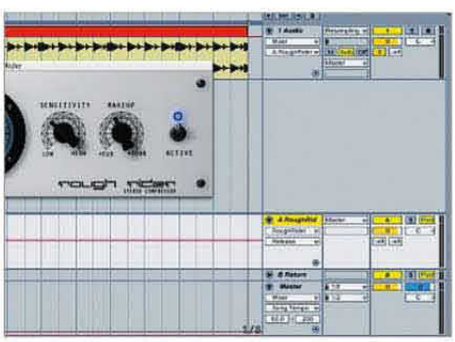
2 > Our beat sounds good, groove-wise, but it's in need of some serious fattening up. This is where the over-the-top compression of Rough Rider comes into force, as it will bring up the sustain portions of individual hits. We load it up on our A Return channel.



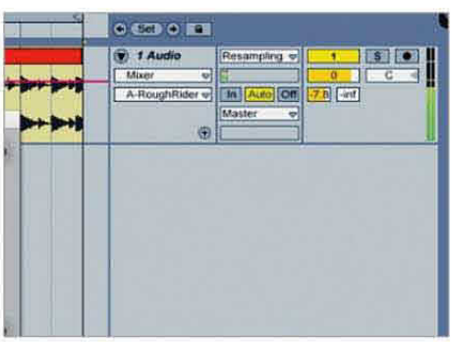
3 > For the plug-in to take effect, we need to send our drum loop signal to the A Return channel. We do this in Live by dragging up on the first box underneath the drum loop track's volume control, where we set it to **0**. Next, we solo (**S**) the A Return channel, so that we can only hear the processed signal.



4 > We dial in an over-compressed setting, which will crush the peaks in our signal and raise the sustained portions of each hit. We set the **Ratio** to maximum, apply a fast **Attack** and a slow **Release**, and adjust the **Sensitivity** (or threshold) and **Makeup** dials to taste.



5 > Our signal is far too compressed and would sound awful on its own, because the beat's transients (or initial attacks) are overly crushed. We're going to blend in the dry signal, which will bring the initial hits back into the overall mix. To do this, we first need to un-**S**olo the A Return track.



6 > The processed signal is too loud, so we need to reduce the amount sent to the A Return channel – you'll have to adjust the **Sensitivity** to compensate for the reduced signal. Drag down on the first box under our drum loop channel's volume control until you have the perfect balance (**Processed Techno Beat.wav**)

dblue
Glitch PC

What is it: Sequence-based/randomising multieffect
Web: www.illformed.org
Format: VST
System requirements: **PC** VST host

Without doubt, this multieffect from dblue, the alias of developer Kieran Foster, is one of the most comprehensive freeware plug-ins we've ever seen – and as such, it can take a little time to get used to. Glitch actually contains nine effects modules in total, comprising TapeStop, Modulator, Retrigger, Shuffler, Reverser, Crusher, Gater, Delay and Stretcher units, each with its own set of parameters.

Of course, you can simply use each effect on its own, and they all have independent filters as well as Pan, Mix and Gain controls, but the genius of this plug-in lies in its sequencing and randomisation functions. The idea is to manually sequence the effects to turn on and off in short bursts, which can then be saved as patterns, played back as loops and triggered via MIDI. Alternatively, you can opt for the plug-in to switch effects in and out randomly, or even randomise the patterns you've manually created, resulting in complex chains of effects that would take hours to sequence in a DAW. It's just a shame that no real freeware equivalent exists for Mac users.



Glitch enables you to save sequenced effects patterns for randomisation or hands-on playback via MIDI

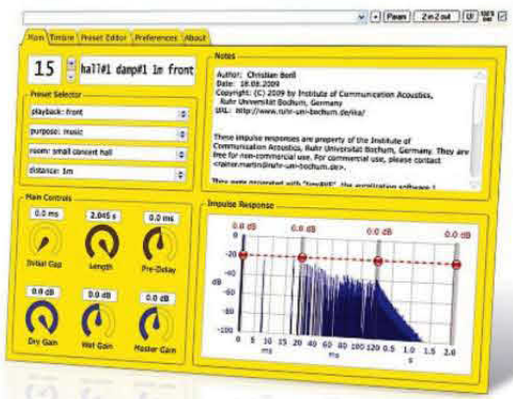
Institute of Communication Acoustics
HybridReverb2 PC MAC

What is it: Convolution reverb
Web: www2.ika.rub.de/HybridReverb2
Format: VST
System requirements: **PC** VST host **Mac** VST host

It's truly astonishing to realise how much work some developers put into their freeware, and this one from Christian Bor of the Institute of Communication Acoustics at Germany's Ruhr-Universität Bochum is probably the geekiest offering we have in our effects selection. What's more, if you're a dab-hand at programming, you'll be pleased to know that all of the source code is available online.

HybridReverb2 was originally entered into the KVR Audio Developer Challenge 2009, where it was the top-ranking Mac entry and placed second overall (just behind Bootsy's PC-only FerricTDS). It's a convolution-based ambience effect that uses 48kHz/24-bit-quality room impulse responses (short audio recordings of sounds in a real-world acoustic space) to generate its reverb. On the cover DVD you'll find the basic package of impulse responses that comes with the plug-in to get you started, but if you like what you hear and want extra options, you can always visit the developer's website to download a whole load more.

The plug-in has a very natural sound, as you'd expect from a convolution reverb, yet has incredibly low latency and CPU requirements, so don't be put off by the rather intimidating GUI. Everything is, in fact, laid out very nicely indeed, and you'll soon find yourself whizzing around the various pages. Plus, there are some quality presets included to get you on your way.



HybridReverb2 uses short audio recordings of real-world room sounds to create its reverb effects

Togu Audio Line
TAL-Vocoder PC MAC

What is it: Vintage vocoder emulation
Web: kunz.corrupt.ch
Format: VST/AU
System requirements: **PC** 32-/64-bit VST host
Mac AU/VST host

That classic robotic vocoder sound has been in and out of fashion time and time again in the pop world. In the 80s, a variety of acts used its distinctive, synthesised tones in their music, including Dynamix II on their 1986 hit, *Just Give the DJ a Break*. It was rather clever, then, of Togu Audio Line to solicit the advice of Dynamix II's David Noller when designing their latest plug-in, TAL-Vocoder – this counseling has clearly paid off.

Based on a vintage hardware model from the early 80s, TAL-Vocoder is an envelope-following 11-band vocoder plug-in that uses a combination of analogue-modelled components with digital STFFT (short-time fast Fourier transform) processing. Not that you really need to know what any of this technical mumbo-jumbo actually means, of course. You just need to know that the effect sounds amazing and has been optimised for the human voice, with algorithms included for consonant sounds to increase the intelligibility of spoken words.

As you may already know, vocoders need a source signal or modulator (such as the human voice) and a carrier signal. The latter is supplied by a voltage-controlled oscillator and, indeed,



Togu Audio Line's TAL-Vocoder has been developed in collaboration with David Noller of Dynamix II

TAL-Vocoder offers Pulse, Saw, Noise and SubOsc waveforms, each with independent level controls. The plug-in has one more trick up its sleeve, though – it can actually use the left stereo input, meaning that *any* sound source can be used as the modulator signal. Try using drum beats and other material to create different effects.

Christian-W. Budde PC

Lightweight Multiband Compressor

What is it: Processor-friendly multiband compressor
Web: www.savioursofsoul.de/Christian/vst-plugins
Format: VST
System requirements: **PC** VST host

Multiband compressors are predominately used at the mastering stage, but they can also be incredibly useful for processing stereo tracks such as drum loops, as they enable you to vary the amount of compression (and other settings) on different parts of the frequency spectrum.

Christian Budde's Lightweight Multiband Compressor is an open-source plug-in that provides a fine example of this type of effect. For example, with drums, you could use it to apply heavier compression to the area below 100Hz to keep the kick solid throughout, and lighter compression on the upper frequencies to maintain the dynamic variation and accenting on the more percussive elements.

True to its name, Lightweight Multiband Compressor (presented in a custom skin on the DVD) is particularly CPU-friendly, so you can use multiple instances across any group tracks that you might have going on in a particular tune. Equally importantly, the parameters are set out very simply, so you should have no trouble getting to grips with it.



Lightweight Multiband Compressor offers flexible compression control and is easy on your CPU

Blue Cat Audio

Stereo Chorus PC MAC

What is it: Stereo widening/ensemble effect
Web: www.bluecataudio.com
Format: VST/AU/DX/RTAS
System requirements: **PC** P4 CPU, Windows XP/Vista/7, 32-/64-bit VST/DX/RTAS host **Mac** Intel/PPC CPU, OS X 10.5, AU/VST/RTAS host

Sometimes you want a certain instrument to sound wider, to fill the stereo spectrum, or thicker, to sound as if many instrumentalists are all playing the same part in unison (for example, the string section in an orchestra). In short, you need a chorus effect.

Blue Cat Audio's Stereo Chorus is an efficient and incredibly easy-to-use chorus that can process both mono and stereo audio tracks. The parameters are very simple, so you'll have no trouble nailing the right sound in mere minutes.

Stereo Chorus gives you control over the Delay (that is, the slight delay between the left and right channels that tricks your ears into thinking that there are two signals present), Depth and Rate (how much pitch modulation is applied and the speed at which it changes, respectively), and overall Stereo spread of the track. There's also a choice of Sine and Saw modulation shapes.

Finally, Dry and Wet faders enable you to balance the centralised original signal and the wider, thicker processed sound. Give it a whirl on your synth sounds (we find it works a treat on basslines and pads) and you'll quickly realise how important chorus is in modern production.

As an added bonus, if you'd prefer an alternative 'look', you can download more skins from Blue Cat Audio's website.



Stereo Chorus from Blue Cat Audio is an easy-to-use way to start experimenting with chorusing effects

Bluenoise

Mountain Echo PC

What is it: Tape-style delay
Web: www.bluenoise.no
Format: VST
System requirements: **PC** VST host

Mountain Echo replicates the sound of vintage tape delays, which took short recordings of an incoming signal and played them back slightly after the original sound had passed through. That might not sound very exciting in itself, but the fact that analogue tape was used to make the recordings gave the resulting echoes a very warm tone, with fluctuations in playback speed causing the pitch to waver slightly.

As musicians started experimenting with adjusting the playback speed and other parameters in real time, they were able to produce constantly shifting modulations in the repeats. You can hear this on classic dub records by the likes of King Tubby and Lee 'Scratch' Perry, with the delayed signals being pitchshifted as they gradually fade out.

This is the kind of sound that Mountain Echo replicates best, offering users control over the tempo (or playback speed) and feedback (number of repeats). To further add to the vintage quality, there are parameters for low-pass and high-pass filters, which can also be adjusted in real time for more interesting effects.

Note that, as it doesn't have a mix knob, we highly recommend that you use Mountain Echo as a send effect, balancing the dry signal with the wet by determining how much of the signal is sent to the plug-in.



Mountain Echo enables you to recreate the distinctive tape delay sounds found in classic dub tracks

SPL
Free Ranger PC MAC

What is it Simple EQ unit
Web www.spl.info
Format VST/AU
System requirements **PC** VST host **Mac** AU host

This offering from the mighty Sound Performance Lab of Germany gives a taste of the company's expertise in excellent effects. Free Ranger is taken from SPL's Full Ranger EQ and is a simple-to-use passive EQ plug-in with four fixed bands: 40Hz, 150Hz, 1.8kHz and 16kHz.

The upper band, 16kHz, can be used to add air or sparkle to any source, or to remove the extreme top end from bass signals, for example. The next band, 1.8kHz, is where the human ear is particularly sensitive (as we are naturally attuned to pick out the human voice, which sits in this range). Boosting this frequency (known as adding presence) will therefore help any instrument to cut through a mix. The 150Hz frequency, meanwhile, affects the warmth of a track, so it's particularly useful to boost on bass sounds, kick drums and snares if things need to be fattened up slightly. Finally, the sub end is controlled with the 40Hz slider, good for increasing the low-end punch of kick drums or reducing overly boomy sounds. Each instance of the plug-in can store up to four different settings, in the A, B, C and D slots, which can then be automated to change the EQ used on a particular instrument as the track reaches the chorus or enters the bridge section, for example.



Free Ranger's four frequency bands can be used for a surprisingly wide variety of applications

ValhallaDSP
ValhallaFreqEcho PC MAC

What is it Frequency shifter/analogue delay emulation
Web www.valhalladsp.com
Format VST/AU/RTAS
System requirements **PC** VST/RTAS host **Mac** AU/VST/RTAS host

ValhallaDSP was set up by Sean Costello, a programmer with an academic bent who tries to make each of his plug-ins work on psychoacoustic principles – in short, to make them sound great to the human ear. The slick reverb algorithms used by Audio Damage's Eos are just one testament to his amazing work.

We've chosen ValhallaFreqEcho, a Bode-style frequency shifter and analogue echo emulation, for our selection here. Even though there are only six parameters, including Delay, Shift (+/- 1kHz) and Feedback, there's a massive range of sounds that can extracted from the plug-in, from subtle phasing through dub-style echoes to chaotic frequency shifting and endless delays. There are high- and low-pass filters in there, too, for further shaping the processed signals and mimicking the analogue characteristics of tape delays. In fact, the best results are often to be had from simply experimenting with different settings and adapting the parameters in real time.

Delay times can be set in milliseconds or synced to your host's tempo, including triplet divisions, and the plug-in can take either mono or stereo sources and output them in mono and stereo, too. And if you need any more guidance about each of the plug-in's controls, there are super-handy mouse-over tips that pop up in the lower section of the GUI every time you hover over a parameter. Nice.



ValhallaFreqEcho manages to squeeze a huge array of sounds out of a mere six parameters

Destroy FX
Transverb PC MAC

What is it Tape-style delay
Web destroyfx.smartelectronix.com
Format VST/AU
System requirements **PC** Windows 95, VST host **Mac** OS X 10.3.9, AU/VST host

Transverb is the second plug-in to feature in this section from Destroy FX, who are part of the excellent collective of developers known as Smartelectronix (**www.smartelectronix.com**). In fact, it's well worth checking out the freeware plug-ins developed by other Smartelectronix groups, especially Antii, Bram, Koen Tanghe, Magnus and mdsp.

Transverb is a tape-based delay plug-in with a few very cool features. Essentially, two repeated versions of a signal are played back on virtual tapeheads at various speeds. Choosing the higher speeds pitchshifts the source by up to six octaves, or you can play them back at lower speeds to shift the signal down by as much as three octaves. Each of the two tapeheads has a feedback control to change the number of repeats, and a distance parameter. The latter is the delay buffer (that is, the length of time each repeat lasts), measured from 0 to 2700ms. Each tapehead's output can be balanced with the dry signal to create harmonic layers that sound great on all kinds of pitched and non-pitched material.

There's an overall buffer size slider for both tapeheads together, too, which can be used to create glitchier effects on lower settings. The plug-in is rounded off by a lower-quality setting for a more lo-fi sound, as well as randomisation and tomsound, the latter of which imparts a more reverberating, metallic effect.



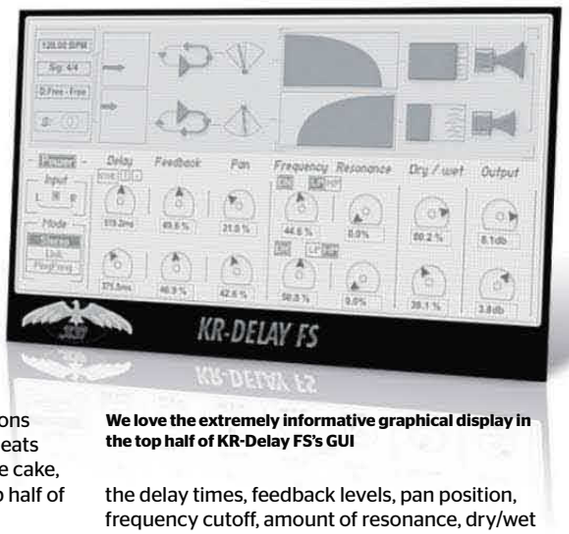
Destroy FX's Transverb works like a tape loop with two independently moving playback heads

KResearch
KR-Delay FS PC MAC

What is it: Multifunctional echo unit
Web: www.kresearch.com
Format: VST/AU
System requirements: **PC** VST host **Mac** AU/VST host

KR-Delay FS is part of Cyprus-based KResearch's Free Series, along with the highly recommended KR-Reverb FS (which is also compatible with Linux operating systems, by the way). What's more, there are flanger, chorus and phaser models in development, so it would probably be very wise to keep an eye on their website, as we anticipate that these will all be equally excellent.

KR-Delay FS can process either mono or stereo signals in the following modes: Stereo, processing the left and right channels independently; Link, where the settings of one channel are mirrored in the other; and our personal favourite, Ping-Pong, where each repeat is panned to the left- and right-hand sides alternatively, creating a very wide sound that's perfect on a variety of lead tones. There's also a large range of tempo-syncing time divisions (from 1/1 to 1/64, with dotted and triplet beats thrown in there, too). The real icing on the cake, though, is the graphical display in the top half of the GUI, which perfectly depicts what is happening to each side of the signal, including the delay times, feedback levels, pan position, frequency cutoff, amount of resonance, dry/wet mix and overall volume.



We love the extremely informative graphical display in the top half of KR-Delay FS's GUI

vacuumsound
ADT PC MAC

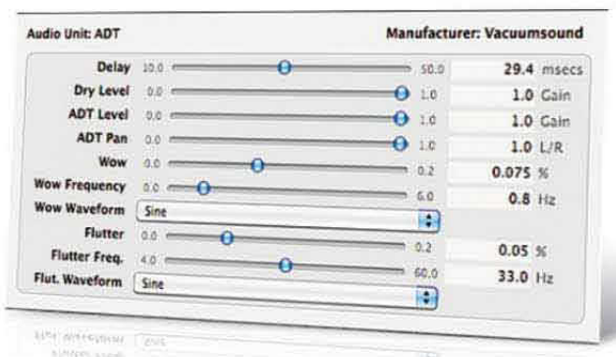
What is it: Double-tracking effect
Web: www.vacuumsound.de
Format: VST/AU
System requirements: **PC** 32-/64-bit VST host **Mac** 32-/64-bit AU/VST host

ADT stands for artificial double tracking, which is a technique first developed using tape recorders by the very clever engineers at Abbey Road studios while recording The Beatles during the 1960s. The story goes that John Lennon didn't much like his own voice, and particularly loathed having to record a part many times over to create a natural chorus effect. The solution devised at Abbey Road was to send John's best take over to a second tape recorder and then re-record it. Because of the physical distance that the electrical signals had to travel and the variance in tape playback speeds, an ensemble effect was created, with each of the signals fluctuating in pitch slightly.

ADT is a plug-in that replicates this very scenario, providing control over levels, pan positions and the delay between the signals, as well as the wow and flutter (including their intensity and running frequency) that is traditionally associated with the tape medium.

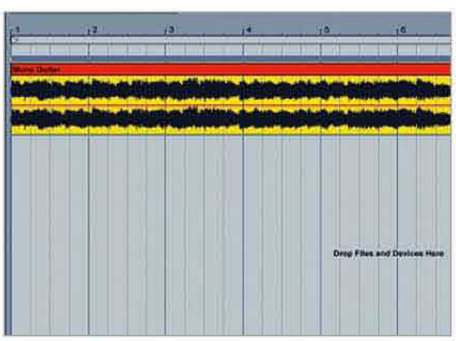
Note that this is strictly a mono-to-stereo plug, so if you're using it in a DAW that differentiates between mono and stereo tracks (such as Logic), make sure you only use it on mono ones.

ADT creators vacuumsound are a somewhat mysterious operation – we've been able to garner very little information about the team behind it all – but we love their simple yet effective approach (Poor Plate is also worth a look, to give just one example), and that's all that really matters at the end of the day.

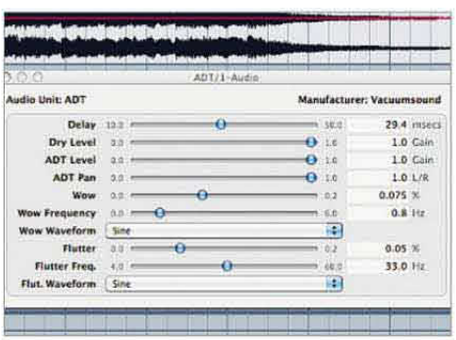


ADT replicates the artificial chorus effect pioneered by Abbey Road engineers working with The Beatles

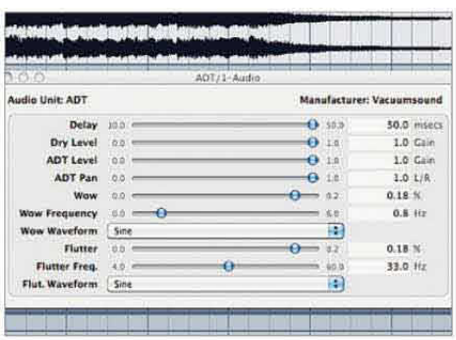
> Step by step: Using ADT to double-track guitar



1 > We record a short guitar chord sequence into our DAW (**Tutorial files/ Effects/ Mono Guitar.wav**). Although it looks like a stereo signal has been recorded, both sides are the same, and we'll only be using the left channel here. This is because ADT can only process mono sources.



2 > Now we load up ADT to get some stereo widening on the go. Just using the plug-in at its default settings, we can already hear that our signal has been spread across the stereo spectrum, creating an ensemble-like effect, as if we were hearing more than one instrument playing the part simultaneously.



3 > Let's see how far we can push the effect. We increase the **Delay** to 50ms, further separating the dry and processed voices. These times are still very short, which tricks our brains into thinking that two signals are present. For more variation, we also increase both the **Wow** and **Flutter** to **0.18%** (**Processed Guitar.wav**).

AcmeBarGig
Aftershock Delay PC



Aftershock Delay is a guitar-based plug-in, but is adaptable to a far wider range of applications

What is it? Three-channel delay
Web www.acmebargig.com
Format VST
System requirements **PC** VST host

Traditionally, VST developers AcmeBarGig are known for creating guitar-based plug-ins (including many amp sims and a cabinet enhancer), and their Aftershock Delay is no exception. This particular effect, however, has much wider potential. It's hugely adaptable to a variety of different sound sources, especially synthesised tones.

Aftershock Delay features three independent delay lines for the left, right and centre channels, each of which has up to six seconds of recording time. Each delay line offers overall Dry and Wet level controls, as well as a Tap Delay button for manually inputting the desired delay time – a neat touch for quickly trying out different settings.

All three channels have exactly the same controls, including a Feedback (or number of repeats) slider, but the great thing is that each one is capable of functioning in a different mode. The three modes are Tap Delay (as mentioned above, where the user manually sets the delay time), Tempo Delay (where delay times are set as beat divisions, synced to your host) and Standard Delay (where delay times are set via the Time knob, which we recommend adjusting in real time for some more 'out there' modulation effects). You can also balance the repeats for each channel with the separate level sliders located on the right-hand side of Aftershock Delay's GUI.

Brainworx
bx_cleansweep V2 PC MAC



Brainworx are hoping you'll use bx_cleansweep as the first plug-in on every channel of your tracks

What is it? High-/low-pass filter
Web www.brainworx-music.de
Format VST/AU
System requirements **PC** VST host **Mac** AU host

This remarkably intuitive filter is taken from the EQ section of Brainworx's excellent bx_digital V2 mastering plug-in. We're almost certain it will replace your standard EQ unit as your first choice when you want to simply remove the low or high end of a particular signal.

The plug-in employs two 6dB/octave first-order filters that act simultaneously upon the input signal. The low-pass filter operates from 20Hz to 2.2kHz, and the high-pass filter has a range of 20Hz to 1.1kHz. These can be adjusted via the Hi-Pass and Lo-Pass knobs, but the best thing about the plug-in is its joystick control, which simultaneously controls the high- and low-pass frequency cutoff points, enabling you to get perfect results in mere seconds. What's more, you can make minute adjustments using **Shift**/**Alt**/**Ctrl** commands when moving the joystick, so you can really hone in on that ideal cutoff point. In fact, Brainworx are so confident about the quality of bx_cleansweep V2, they recommend using it as the first plug-in on every single channel in your productions.

To back this up, Brainworx note that high- and low-pass filters were included on every famous mixing desk you could possibly think of, including SSL and Neve models, the reason being that these two simple filters are so vital to music production. Care to put their claims to the test? Grab your cover disc and give it a whirl.

g200kg
KeroVee PC



Sure, KeroVee can do that typical auto-tune sound, but why not use it to try something a little more subtle?

What is it? Pitch-correction tool
Web www.g200kg.com
Format VST
System requirements **PC** VST host

Technically speaking, this plug-in should have featured in our utilities section. As you're probably all too aware, however, pitch correction has been applied in an extreme fashion for many years, particularly in the R&B, hip-hop and pop worlds, to create that distinctive 'auto-tune' or 'T-Pain' vocal effect. Here, then, for those of you who haven't yet tired of this overused effect – and for those that want to use it in far subtler and more interesting ways – we have an amazing free pitch correction tool.

KeroVee has three modes of operation. In MIDI to Note mode, the plug-in takes MIDI note information from either the piano roll or notes played manually on a controller keyboard, and snaps any incoming audio to the desired pitch. In Scale mode, the user selects the 'allowed' notes on the left-hand side of the plug-in's GUI. You can also use the Scale and MIDI to Note modes in tandem, with the latter taking priority whenever a MIDI note is present. Finally, in Off mode, no pitch correction is applied, but other effects, such as the transpose and formant, are still active.

The wet signal is actually passed through two identical Tone modules that are set up in series, enabling a greater degree of control over the pitch correction process. Each module has controls for the level, panning (on stereo signals only), transpose and fine tune, formant shift and formant preservation (that is, maintaining the formant of the input material). The speed of the pitch correction can also be adjusted.

Togu Audio Line
TAL-Reverb II PC MAC

What is it: Ambience effect
Website: kunz.corrupt.ch
Format: VST/AU
System requirements: **PC** 32-/64-bit VST host **Mac** AU/VST host

The second Togu Audio Line plug-in to feature in our effects selection is a real knockout. Despite its rather basic set of parameters, it possesses a very lush reverb sound, thanks to its gorgeous vintage plate algorithm.

TAL-Reverb provides standard controls over the Room Size (or decay length, essentially), Pre Delay (the time it takes for the initial reverb sound to be heard, as occurs in real-world acoustic spaces) of up to one second, and Stereo Width. Added to this are independent sliders for the Wet and Dry mix, just in case you want to use the plug-in as an insert effect rather than in the more traditional auxiliary effects setup.

Rusty Trombone
Erectifier PC MAC

What is it: Doubling/phaser effect
Website: www.rustytrombone.se
Format: VST/AU
System requirements: **PC** VST host **Mac** AU host

Despite its rather childlike appearance, Erectifier was developed by the programming genius that is Shuriken.se and is most definitely worth a try. It's designed to both widen and thicken any audio sources you put through it, in a similar way to analogue-style chorusing. The developers describe it as a "doubler, or demented phaser", which is pretty much on the money. There are four independent channels, Left 1 and 2 and Right 1 and 2, each of which can be set to Low-, High- or All-pass filter modes, which makes it incredibly versatile. Separate LFOs (with Speed and Length controls) are applied to each channel, too, which control the variation in delay time. Distortion and Amp (or level) parameters complete the picture.

elysia
niveau filter PC MAC

What is it: Tilt EQ unit
Website: www.elysia.com
Format: VST/AU/RTAS
System requirements: **PC** VST/RTAS host **Mac** AU/RTAS host

The concept behind this plug-in from elysia is simple, but its potential for transforming your mixes is beyond question. Taken from the company's commercial offering, mpressor, niveau filter does a fantastic job of reducing the low-end frequencies of your input signal while boosting the high end, or vice versa. For this reason it's called a tilt EQ, as it shifts the frequency balance of any source to enable you to easily mix sounds that would otherwise clash.

There are two main controls. The EQ Frequency, namely, the point at which the tilting



Niveau filter enables you to clear up your mix by shifting the frequency balance of any source

effect should 'pivot', is selectable from 26Hz to 2.2kHz (or 260Hz to 22kHz with the Freq x10 switch engaged). With the EQ Gain, meanwhile, an anti-clockwise turn boosts the low-end and reduces the high, and a clockwise turn produces the opposite effect.



Sinus
FreeverbToo PC
www.sinusweb.de
This highly adaptable reverb unit from Sinus offers a really great sound, as well as a Gate mode for 80s-style drums and a Freeze mode for taking a snapshot of the reverb effect and extending it out into infinity. Lovely stuff.

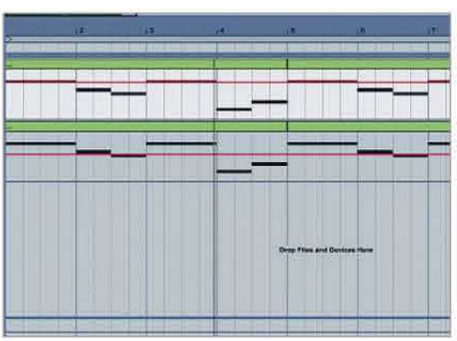


Togu Audio Line
TAL-Tube PC MAC
kunz.corrupt.ch
We couldn't resist putting another of Togu Audio Line's effects on the coverdisc, so here we have TAL-Tube, an absolute go-to plug-in for generating anything from subtle harmonic excitation to total analogue-style saturation.



7AIR
ZA8 Dual Delay PC
www.7air.co.uk
Called ZA8 Dual Delay because it offers both standard Echo and Ping-Pong modes, this excellent plug-in is well worth investigating, especially if you're after dub-style echo effects. Try automating the various parameters in real time to create some crazy, ever-shifting delay sweeps and other special FX.

> Step by step
Separating clashing sounds with niveau filter





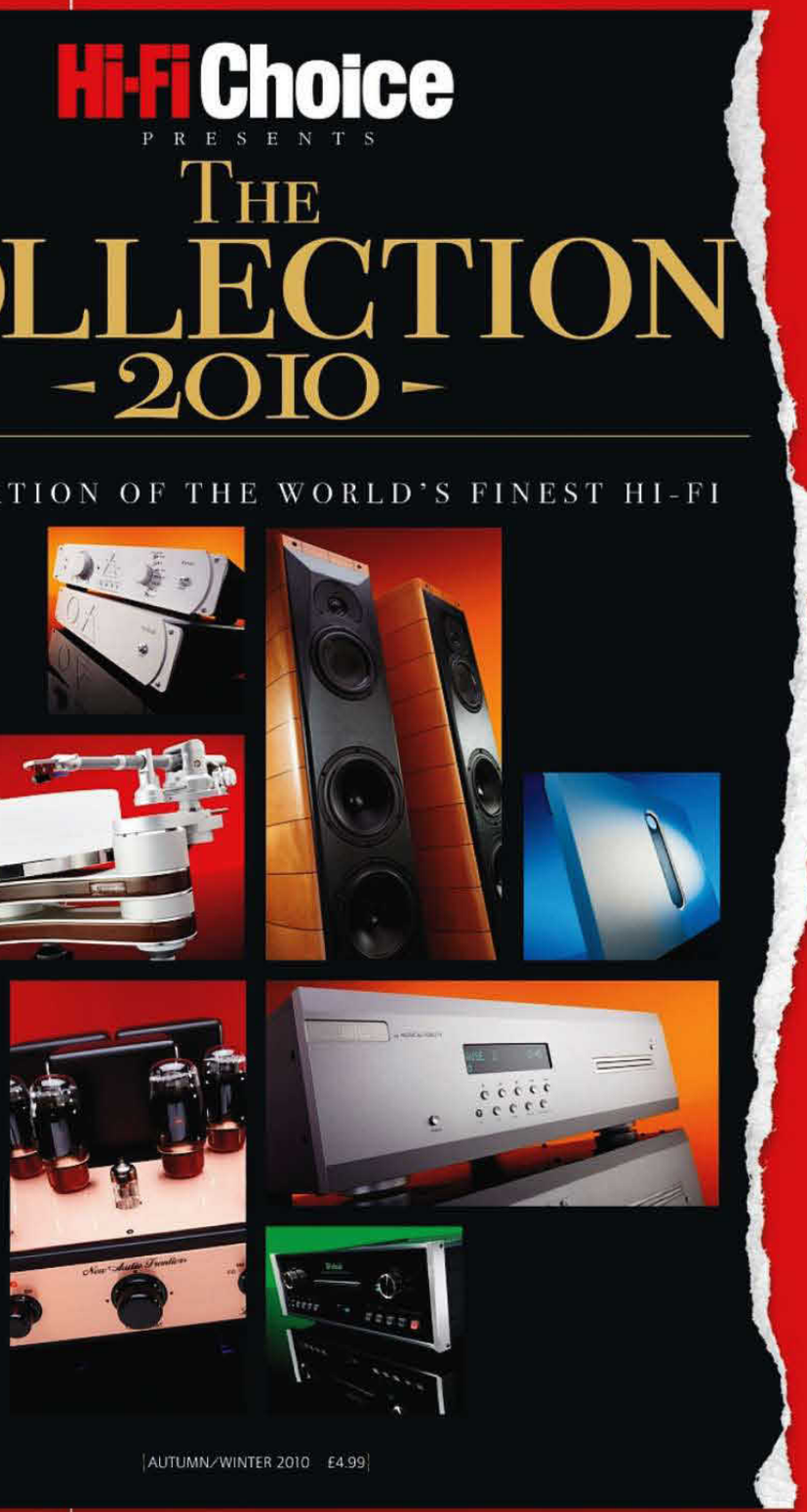


1 > First we get two bass sounds on the go: a sine-based sub-bass, and a detuned sawtooth synth patch with some resonant filter modulation. While they sound great in isolation, they are quite muddy and ill-defined when played together, due to their clashing frequencies (**Tutorial files/Effects/Cluttered Bass.wav**).

2 > Let's load up niveau filter on the first sound – the higher, resonant bass – and get to work. Hit **Activate** to get the plug-in going, then turn the **EQ Gain** clockwise up to **6** in order to highlight the upper frequencies, reduce the lows and provide space for our sub. Set the **EQ Freq** to **200Hz** as the tilt point.

3 > Now for the sub, using another instance of niveau filter. This time we don't want any upper frequencies coming through, so we set the **EQ Gain** at the **Lo** position, effectively giving us a low-pass filter. Again we set the **EQ Freq** to **200Hz**, perfectly blending our two sounds together (**Uncluttered Bass.wav**).

LOVE MUSIC?





Hi-Fi Choice: the ultimate guide to high-performance audio

Don't buy hi-fi without it. Awards special on sale now!



Welcome to electronic music nirvana. With this huge selection of synths you'll have all the tools you need to produce a weird, warm or wonderful sound for every possible occasion

Big Tick Audio
Angelina

PC

What is it	Synth for making breathy vocal effects
Web	www.bigtickaudio.com
Format	VST
System requirements	**PC** Windows 2000

With so many virtual analogue synths out there in freeware land, Angelina is quite literally a breath of fresh air. The synth may use standard oscillators plus a noise generator – so common on many analogue-type synths – but instead of pointing them towards your bog-standard filters, amps and envelopes, it aims them fairly and squarely at vocal formant generators, resulting in a synth that will, wait for it, take your breath away.

OK, enough puns. The layout of Angelina is very straightforward: basically the sound generators, each with eight waveforms to choose from, combine with a noise generator. There are three types of effect plus an excellent and very visual envelope editor, which can be edited by clicking and dragging. This enables you to change the envelope shapes of each of the three oscillators (shown simultaneously, with the one you are working on highlighted) across eight presets (load these in from the files supplied on download). Introduce a quicker attack on the noise generator, for example, and you get a breathier sound.

The best part of Angelina is found in the Morphing section. Each oscillator is sent to a formant selected from a bank of 25 voice types (Bass, Soprano etc). You can morph between each bank simply by dragging the graphical point (or assigning it to a MIDI controller), and as there are both X and Y locators, you can morph between two banks simultaneously. This produces the most interesting results you are going to get from Angelina, with added movement and interest. The breathy side of things is obviously the forte of Angelina, but in this section you can make things sound a little more off the wall and artificial.

If you haven't guessed by now, Angelina is an ideal resource for pads, albeit pads of a decidedly vocal nature. From feather-light, airy siren songs to menacing, neo-Gregorian groans, Angelina imparts that extra bit of atmosphere, and with so many features geared towards evolving the sound over time, your pads needn't remain static. It's quite easy to do a bit of envelope tweaking or throw in some live manipulation and in the process create a dynamic, shifting timbre reminiscent of a classic vector synthesiser. And if that's not enough ambience for you, you can sweeten the sound with the plug's built-in chorus and reverb processors.

With so much to be played with, Angelina is a great performance tool. We liked it back when it was a pay-for download, and it's no less valuable now that Big Tick are giving it away. If we're honest, it is probably quite limited in its use – you're not going to be using it as a bassline generator, for example – but there are so many synths available for all those other tasks, and this is precisely what makes Angelina so good. It's different and, as such, deserves your attention.

MORPHING AND FORMANTS SECTION
Great for real-time sonic manipulation as you can move between formant types for each oscillator and hear the results on the fly

MAIN & UNISON STAGES
Control the main volume, plus the number of voices that can be played back simultaneously here. The Unison section defines the number of detuned notes that can be triggered

OSCILLATORS AND BREATH
Two oscillators lie at the heart of Angelina, with the option of eight waveforms each to choose from. Mix in the (third) Breath oscillator for more voicey sounds



ENVELOPES SECTION
Various envelopes for all three oscillators (including the Breath section) are shown here

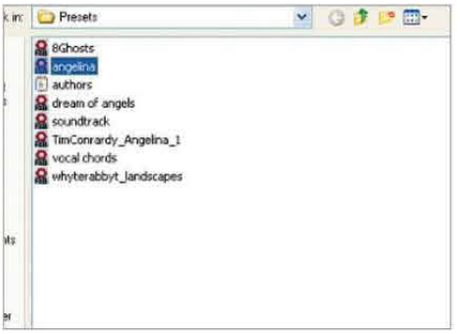
GRANULAR, CHORUS AND REVERB SECTIONS
The main effects section. The Granular stage introduces some great, off-the-wall effects by adding delays (with feedback and timing controls) to both oscillators. Chorus thickens the sound while reverb adds more atmosphere

VELO MOD
This stage defines how the envelope reacts to velocity. The Time parameter controls how the note velocity affects its timing characteristics. The Level parameter increases the note volume and breathiness

> Step by step Get up and running with Angelina



1 > Before we start, install the software as normal by putting the plug-in in your **VST Plugins** folder, then launch your DAW. Assign Angelina to a track – in our case it's on Track 9. Open the synth.



2 > Now load in the presets. Click the **Load Bank** icon at the bottom right of the screen and select the **Angelina** folder. There are a number of presets to choose from – we've gone for the second one down, called, unsurprisingly, **Angelina**.



3 > You can step through the eight presets simply by clicking the eight icons beneath the envelope screen or by clicking the name in the dropdown menu (in this case, **Mellow Choir** is shown). Note how the envelopes change to indicate each different preset's volume characteristics over time.



4 > Angelina has three adjustable oscillators (**Osc 1**, **Osc 2** and **Noise**). To alter the sound, you can select an oscillator and drag the pointers around on the waveform to change the shape of the volume envelope. Here we're adjusting the Noise generator envelope rather dramatically on the **Mellow Choir** preset.



5 > Now we're adjusting the volume envelopes for Osc 1 and/or Osc2 to alter the sound even more . Extra drama is to be had by mixing in more noise from the noise oscillator and increasing its attack curve to add (a lot!) more breathiness to the sound.



6 > Now change the preset to **Hitman**, by selecting the second preset down from the dropdown menu or the second icon (of eight) beneath the envelope screen. By increasing each of the effects (Granular, Chorus and Reverb) you can really hear the effect that each one has, especially, in this case, the Chorus and Reverb. The Granular effect is more subtle.



7 > The Velocity Mod section alters the level, breathiness and time of the sound according to its velocity. The best way to test this out is to play some notes yourself, triggering sounds in Angelina, or simply by drawing in notes at different velocities, as shown. It's sometimes a subtle effect, depending on the type of sound you have selected.



8 > Now for the Formants section. The XY grid enables you to morph your sound between formant types. You can select a mix of four formant types with the dropdown menus, as shown. Dragging the cursor from left to right morphs between the top two formants...



9 > ...while dragging it top to bottom morphs between the bottom two, so you can effectively control the levels between all four over two axes. Cool, eh? And with MIDI-assignable controls, you can use external controllers and record your actions.

VoltKitchen Group
MinimogueVA PC

What is it	Recreation of the classic Minimoog
Web	www.glenstegner.com
Format	VST
System requirements	**PC** Pentium 4 2GHz, 250MB RAM, Windows 98/Me/2000/XP/Vista/7. Professional-grade soundcard highly recommended

This is one of two classic soft synth emulations from the same set of developers featured in this **cm** *Special*. Glen Stegner and original designer Richard Brooks, together with the rest of the VoltKitchen Group, have emulated what are arguably the best two synths of all time in software, and made them free! You can read all about Arppe2600va, their take on the classic ARP 2600 sound, on p30, while here we're showcasing their MinimogueVA.

MinimogueVA is obviously based around the original Minimoog, a piece of hardware that has become embedded in synth folklore since its debut in 1970, not least because its original designer, Bob Moog, was the founding father of the synthesiser. The Minimoog featured in many classic electronic recordings, including such timeless examples as Kraftwerk's *Autobahn* and Gary Numan/Tubeway Army's *Are 'Friends' Electric?*, not to mention the prog outings so favoured by this plug-in's creators (see our mini-interview with Glen Stegner, right).

The design of MinimogueVA is very close to that of the original – right down to the dials – and the front panel is just as easy to navigate, as it follows the classic analogue synth oscillator/filter/mixer structure. As with the original Minimoog, any dial you turn will have a major impact on the sound, so it's a great way to get some hands-on learning on the basics of synthesis. MinimogueVA does bring a lot more to the party though, including five-note polyphony, an arpeggiator, a step sequencer and a great deal more control over the sound.



Based, as it is, on the classic Minimoog, MinimogueVA is a great way to get to grips with the basics of synthesis

And talking of the sound, how does it fare? Well, it's punchy where it needs to be, with organ and bass sounds easily delivering the low end and leads fighting their corner too. Inevitably some of the 100+ presets lack body, with a few of the wind emulations falling flat and most of the effects seemingly being little more than fillers – but the original was never any good at emulation anyway, so you could argue that Glen and the team have got this one spot-on!

There have been a number of commercially available Moog emulations around for some time and many of these do a fantastic job, with more (and arguably better) presets. Some of them also add more sheen, while others favour increased authenticity. But MinimogueVA can certainly stand tall with the best of them, and it's free. It provides the perfect learning environment to easily get to grips with the basics of synthesis. Follow our simple tutorial below to do just that, and at the same time, you'll come to understand why the original, pure Minimoog sound was – and still is – loved by so many music producers and music fans around the world.

Behind the scenes

VoltKitchen's Glen Stegner got into plug-in development "mostly for my own fun, learning and personal use, although the thought of providing quality, free versions of the Minimoog and ARP 2600 to people was definitely a plus," he says.

"In classic 70s prog rock and jazz fusion, these two synths were the ones that were played by all of my keyboard heroes, and learning how to design them in software was a very rewarding experience for me. Credit must also be given to my co-designers and programmers, Gunnar Ekornås and Gabriel Abney. Since the plug-ins' release we've had nothing but praise, though all I really wanted was to create something useful for myself, and then to share the results with the world."



Developer Glen Stegner was raised on the sounds of the Minimoog and ARP 2600

> Step by step The basics of synthesis with MinimogueVA







1 > Fire up MinimogueVA and select the preset **Hip Hop Sine Wave**. All sound starts off as a wave, and in this case we have three waves combined. You can see these within the Oscillator section – the three oscillators are all set to a sine wave, making this preset one of the purest sounds you can hear.

2 > Alter the waves of each of the oscillators so that one stays on a sine, one sets to a triangle wave and one to a square. Alter the volumes of each within the Mixer section using the volume knobs and you will hear how different each type of wave sounds. You are now hearing the most basic ingredients of sound.

3 > Mix all three oscillators back in and switch the waveforms to the sawtooth type, then take the middle oscillator down an octave. Adjusting the **Cutoff** knob within the Filter section now causes a dramatic change to the sound, so you can hear that subtle changes to the component waveforms can make a big difference.

de la Mancha FMMF

PC

What is it	FM synthesiser emulator
Web	www.delamancha.co.uk
Format	VST
System requirements	**PC** Windows XP/Vista/7, VST-compatible host

One thing that becomes ever clearer the more free synth plug-ins we test is that you certainly can't judge a book by its cover – or, in this case, a synth by its front panel or description. The beauty of producing synths in software is that you don't have to stick to any hardware rules and are not restricted by a hardware electronic plan. So in the world of soft synths you'll come across analogue-based synths that throw in a bit of FM synthesis and, as with de la Mancha's FMMF, an FM synth that does analogue sounds as well!

FMMF is a glorious-looking four-operator FM synth that the developers produced, in their own words, to "make FM synthesis as accessible and user-friendly as possible". Even an FM newbie could spend five minutes with it and get to grips with its basic operation. FM was once the preserve of the synth genius, with the legendary Brian Eno often cited as one of the few people able to get his head around it. Making an easy FM synth has therefore always been a bit of a holy grail for developers, and praise indeed must go to de la Mancha for this plug-in.

FMMF gives you four operators that can be combined in 17 different algorithms. Each has 11 waveforms that are easily selectable from dropdown menus, and their volumes are also easily controlled by sliders. The real fun begins in the section below where you can adjust each operator's waveforms, algorithms and envelopes. You can drag nodes or select preset wave shapes to change the contours and even add stages. This gives you total control over how the sounds are combined and how they develop over time, and also over how the effects work.



With their FMMF plug-in, de la Mancha have taken on the formidable challenge of making FM synthesis simple

The flexibility here is enormous, and while you might not always start out knowing what you're doing or how it will affect the outcome, you'll quickly learn. What's more, the tempo sync feature ensures that whatever you do will usually sound OK within the context of your track.

The effects section includes a filter, distortion and delay, so you can really get deep, down and dirty. This is not something that FM synthesis is necessarily renowned for, but it's in this section that you'll start getting into those analogue-like characteristics that we mentioned earlier. These are ably demonstrated by FMMF's 64 presets, which cover a multitude of styles. You get some very un-FM-like bass and arpeggiated sounds, and a good range of pads and leads.

FMMF really comes into its own with sounds that develop over the course of a track, and is definitely a synth to sit down and spend some serious time with. In fact, we'd urge you to do just that so you can create your own moving sounds. We'll give you an overview of how to get started with FMMF in our quick tutorial below.

Behind the scenes

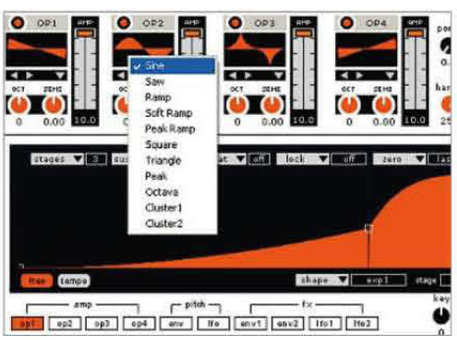
We asked de la Mancha's Steve Brambley how he got into software development. "I was looking for a simple MIDI-latch effect, so I decided to try and make one myself," he says. "Once I had the bug, I just couldn't stop! I get some very nice emails of thanks and praise, sometimes with links to music, reviews or blog posts. It's great when people take the time to let me know they like the plug-ins and how they use them."

Even now, Steve develops plug-ins according to what he needs. "Yes, usually it's something I would use myself in my music", he confirms. "I also get great suggestions from friends, users, developers and forums. The developer community is quite friendly and open, and I've had a lot of helpful advice and suggestions from fellow developers."

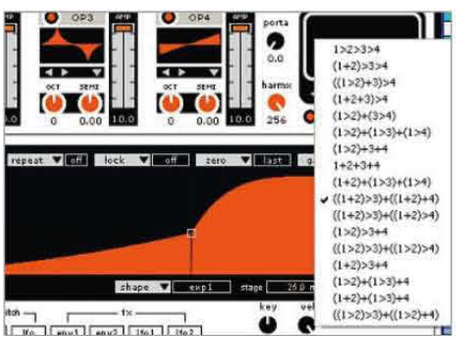


Steve Brambley started creating plug-ins after making a simple MIDI latch for his own use

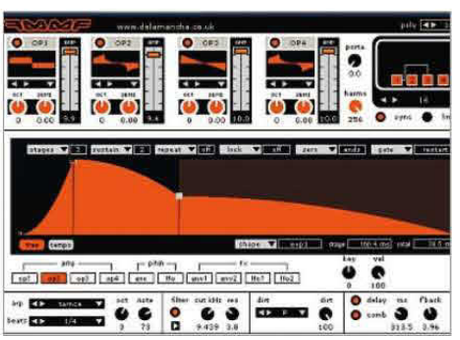
> Step by step Get fired up with FMMF



1 > Let's take a quick tour through the workings of FMMF. The four operators are shown in the top half of the panel, and each has a dropdown menu of 11 waveforms, as shown here, on the second operator. Note that with the preset we're using here, **ARP Play A Chord2**, four different waveforms make up the sound.



2 > You can select how these operators are combined by using one of the 17 algorithms in the dropdown menu to the right. You can also go into the actual waveforms of the operators. We've selected Operator 1's waveform – it's set in three stages, but you can easily adjust that for a more dynamic sound.



3 > Select the preset **ARP Porta ARPS** to hear the impact of the delay and filter on the sound. It's quite a simple sound that doesn't use too much in the way of algorithms, but if you need some overall effects, try the simple arpeggiator (bottom left), filter (bottom middle) and delay (bottom right).

VoltKitchen Group
Arppe2600va

PC

What is it: Recreation of the classic ARP 2600
Web: www.glenstegner.com
Format: VST
System requirements: **PC** Pentium 4 2GHz, 250MB RAM, Windows 98/Me/2000/XP/Vista/7. Professional-grade soundcard highly recommended

Glen Stegner and the rest of the VoltKitchen team also have a Minimoog emulation on offer in this **cm** *Special* collection (see p28), so they're really going for the classics! Here we have an ARP 2600-type emulation. ARP were right up there with Moog at the dawn of electronic music and won a huge number of passionate fans and users, including such leading lights as Depeche Mode, Kraftwerk and Brian Eno.

Arppe2600va is a reasonably accurate emulation that doesn't dress the sounds up or drench them in effects. It's raw, it's sometimes not comfortable, but it is sparse and searing enough to sound like the real thing. You'll have to work with it to get the best from it, but that was the case with the original, and it's all part of the fun. There are over 70 presets on offer if you're feeling lazy, but that would really be missing the point. With machines like this it's all about messing around and revelling in the happy accidents and random results.



Arppe2600va is VoltKitchen's recreation of the ARP 2600 synth used by the likes of Brian Eno and Kraftwerk

Ugo Audio
Texture 1.2

PC

What is it: Virtual analogue synth
Web: www.ugoaudio.com
Format: VST
System requirements: **PC** Single-core 1.6Mhz SSE2 CPU, 1GB RAM, VST host, ASIO audio driver

Texture is one of two Ugo Audio synths in our collection, and this one shows the harder side of the developer with some gritty sounds and an edgy nature. Despite it being a virtual analogue, then, it often sounds quite digital in nature. This isn't meant as a criticism – just don't be misled into thinking it will offer you oodles of analogue bubbles and squeaks. While you get a few of those, Texture's character and memorable sounds are almost FM-like thanks to its propensity for metallic and percussive presets.

So how is it to use? Well, its structure is fairly straightforward, with its oscillator and filter dominating the top of the interface, the latter comprising simultaneously applicable band-pass and low-pass models. The filter adds a pretty decent amount of depth to Texture's sounds, but perhaps the real character comes from the effects, with a Metal section helping those sounds come to the fore. An onboard sequencer also adds movement, offering easy control over several simple patterns.



Ugo Audio's Texture is a virtual analogue with a dark side, offering gritty digital-style sounds

All in all, Texture is a characterful yet simple synth that will give your productions edge and menace. Sure, you can use it for analogue, but other synths do that better. Use Texture for its gritty side and you'll reap the benefits.

Big Tick Audio
Rainbow

PC

What is it: FM, AM, additive and subtractive synth
Web: www.bigtickaudio.com
Format: VST
System requirements: **PC** Windows 2000

Despite having been around for a while, Rainbow still packs a punch, largely due to the fact that it is a versatile and very easy to control synth. At one time it sold for around €70, but it's now available as freeware (you'll need to input the registration name and number, which you'll find in the included ReadMe file in the Rainbow folder).

Rainbow has a wide range of sounds on offer thanks to its onboard FM, AM, additive and subtractive synthesis. Some of these provide great richness, with up to four oscillators per voice (and up to 24 playing simultaneously, if your PC can handle it). There are plenty of banks of presets, including Experimental and Elektro. With its highly flexible routing capabilities (oscillators can act as LFOs and so on) and wealth of synthesis options, Rainbow's sound is, well, colourful, giving you everything from rich basses to shimmering pads.

What Rainbow excels at is versatility. It doesn't offer anything new, but it does offer a lot of everything: flexibility, sound and punch. It's very good at what it does, and you can understand why people once paid good money for it.



Rainbow is a great little all-rounder that's stood the test of time, and it's now available for free

emusic

EMUSIC
THE GREAT CRATE DIG IN THE SKY.

Seek the diamonds or the rough. Explore our crazy music universe and you'll come away laughing. How can something cost so little yet be so fun? Find out for nothing:



50 FREE TRACKS, on us.

Go to: www.emusic.com/ComputerMusic



Get up to 50 free downloads free with a 7-day eMusic trial subscription. Offer available to first-time eMusic customers only. Internet access, registration, and credit or debit card required. Limited time offer. Offer and eMusic's prices are subject to change and are subject to eMusic's terms of use. eMusic and the eMusic logo are either registered trademarks or trademarks of eMusic.com Inc. in the United Kingdom or other countries. All rights reserved. eMusic is notresponsible for products, services or claims made by Future Publishing.

mp3 100% COMPATIBLE

Togu Audio Line
TAL-Elek7ro

PC MAC

What is it Virtual analogue synth
Web kunz.corrupt.ch
Format AU, VST
System requirements **PC** Pentium II or AMD equivalent, VST 2.4-compatible host **Mac** Intel or PPC

Togu Audio Line's synths have made regular appearances in **cm**, in particular TAL-BassLine, which is an emulation of Roland's classic SH-101 synth. So with TAL-Elek7ro, you might be expecting more great bass action, and you won't be disappointed. What is surprising, though, is that despite this being a virtual analogue synth, and very capable where those bass sounds are concerned, it comes packed with enough extras to take it up a sonic notch or two.

Layout-wise there's all you have come to expect from an 'analogue' here: a couple of oscillators, a filter, an amplifier and an envelope, plus a couple of LFOs. However, throw in a sub-oscillator and noise oscillator, frequency modulation and hard sync features, not to mention a Poly mode with up to six voices, and you suddenly have a simple-looking synth that is capable of a lot more than it lets on, as a trawl through the presets reveals.

There are over 100 sounds, including around 30 basses, 15 effects, 15 percussion sounds, approximately 30 keyboards and leads, and the same again for synths and pads. Think 'hard and punchy' and you'll get a general idea of the presets on offer – most are aimed fairly and squarely at the type of dance/electronic music where the quality (rather than the quantity) of sounds in the mix is tantamount. The basses yield some beefy backdrops and great detuned sounds, while the drums section offers all of the classic dance percussion standards, with some great top-end effects – we found the 808 hat particularly effective.



TAL-Elek7ro is a polished, versatile soft synth that's capable of dealing with just about any element of a track

The keyboards, pads, effects and leads sections are nice bonuses, and there are some interesting inclusions. Again, the detuning presets stand out, as do some of the harder sync sounds. The leads offer some great counterpoints to the basses, really filling out your audio spectrum. The pads do seem to have been included merely to, well, pad the selection out a little – some are useful for background ambience and spooky atmosphere, but we suspect you probably wouldn't turn to a synth like this for these sorts of effects anyway.

Overall, though, there's plenty of variation on offer here. In fact, if you were to stack a load of TAL-Elek7ros up, or make the most of the multi-outs, you could easily produce a full (and full-on) track with this. There's enough flexibility, routing and options to have a lot of programming fun creating your own sounds, and it's also nice to see so much back-up and support documentation with a piece of freeware.

Behind the scenes

"I like programming and I like music," says TAL's Patrick Kunz. Making plug-ins was an obvious occupation for him, then – but not a professional one. "In real life I work for a software company that has nothing to do with audio", he says. "I like to make the plug-ins without having any pressure – it should be just fun! I like the design and noisy sound of old analogue gear – that's what inspires me the most. First I make a sketch of the plug-in, and then I begin a prototype. It usually changes in style during the developing process. The possibilities are nearly endless today, and there are so many great plug-ins out there."

So, is there anything exciting in the pipeline? "I'm currently working on a new subtractive synth project. I get a lot of user feedback that I'm trying to incorporate. I hope people will like it. It's a lot of work, but that's life!"



No pressure – Patrick Kunz likes to keep his synth-creating activity strictly recreational

> Step by step
From filler to killer with TAL-Elek7ro







1 > TAL-Elek7ro is a very easy synth to get to grips with, as this tutorial will show. In it we're going to take a very simple bass sound and show how you can easily fatten it up. First up, select the preset sound **BS Deep Smooth Bass**. As you can hear, it's useful but inoffensive – so let's get ready to make some noise...

2 > Switch on the hard Sync Mode for the oscillators. This syncs them to the frequency of the sub-oscillator, so making variations to that oscillator has a dramatic effect on the overall sound. Detuning each of the main oscillators enables you to play with the detuning that's so effective in TAL-Elek7ro's presets.

3 > Already the sound is more interesting, but here you can take it from bass to lead simply by increasing the filter **Cutoff** for pitch and **Resonance** for character. Of course, these are always the most dramatic controls on an analogue synth, but the detuning effect gives this sound a whole new punch.

H.G. Fortune AlioNoctis Free PC

What is it Atmospheric synth
Web www.hgf-synthesizer.de
Format VST
Test system **Mac** MacBook Pro 3.06Ghz Intel Core 2, 4GB RAM, running Windows XP under Boot Camp

H.G. Fortune have developed many commercial soft synths with associated cut-down free versions. AlioNoctis Free lacks the full version's polyphony (having five notes instead of ten) and full comple ment of presets (although it does come with 64) as well as one or two other bells and whistles. What remains is certainly enough to be getting on with, though, and as you start to explore what AlioNoctis is capable of, you soon realise that – as with some of Fortune's other synths – atmosphere is the key element here.

AlioNoctis offers plenty of lushness and lots of textures, but also some rhythmic elements. Stepping through the presets, we like the fact that the developer has not tried to throw everything in there, as many others tend to do. So what you don't get are small amounts of bass, bits of percussion here, or bits of piano there – instead, it's shimmering glassiness all the way. It won't be to everyone's taste, but if you're a fan or producer of electronica, prog rock or ambient, you simply must give this a go. Sure, you can probably make it sound like a 'normal' synth by programming it yourself, but that's not really the point – AlioNoctis is more about digital sheen and glimmering movement.



AlioNoctis is an excellent choice if you're looking for ambient sounds and shimmering atmospherics

Image Line Autogun PC

What is it An adventure in sonics
Web www.image-line.com
Format VST
System requirements **PC** 2GHz AMD or Intel Pentium 4 with full SSE1 support, 512MB RAM, 130MB hard drive space

There are some synths that come pretty heavily loaded with presets, but we can say with some certainty that there aren't many that come with 4,294,967,296 of the buggers. As Image-Line admit, it would take you around 136 years to check out the whole lot, so this isn't a synth that you're going to use to get a quick preset for your current composition. Think of it more as an inspirational tool than a workhorse synth.

Each copy of Autogun starts off in a different sonic place by creating a unique preset number for every user. You then simply explore from this starting point or dial in another number and see – or hear – where that takes you. It's a great concept, and especially useful if you don't have any plans for the afternoon.

We started off with some fairly hard-hitting sounds, from beefy bass notes to percussive plucks. Of course, there will be some of the billions of sounds that don't tickle your fancy, but this is a synth you might like to keep permanently switched on in the background just to run some notes through to see if you get any ideas. It might not be the one you'd start with, but it could certainly help you finish.



Want presets? Autogun's got presets. An almost unbelievable four billion-plus of them, in fact

SuperWave P8 PC

What is it Virtual analogue synth
Web www.superwavesynths.co.uk
Format VST
System requirements **PC** 800MHz+ CPU, monitor with 1024x768 screen resolution and 24-bit colour depth

P8 is SuperWave's freeware virtual analogue and comes with eight notes of polyphony and 64 preset sounds that, like AlioNoctis above, veer towards the pad end of the spectrum. You get a couple of oscillators and a couple of filters, but what helps lift it are its two LFOs, its modulation section and its routing capabilities.

Sound-wise, it might be pads again, but the similarities with AlioNoctis end right there. While that synth concentrates on the weird and wonderful in terms of its pad formations, the SuperWave P8 offers a more, shall we say, traditional, set of pads, leads and even basses, so you get classic sounds and trance-like textures rather than anything too alien. There is less movement too, but the synth is far more analogue in nature. In fact with preset patch names like *Oxygene Part IV* and *Are 'Friends' Electric?*, you can see that this is more about the big sounds of yesteryear and how they are still used in electronic music today.



The SuperWave P8 is a virtual analogue with sounds that'll take you back to the early days of electronic music

Ugo Audio
Rez 2.0 PC



Looking like something out of *Tron*, Rez is a beautifully presented plug-in – and the sounds it makes are no less glossy and professional

What is it: Virtual analogue synth
Web: www.ugoaudio.com
Format: VST
System requirements: **PC** Single-core 1.6MHz SSE2, 1GB RAM, VST host and ASIO audio drivers

Rez 2.0 is one of two synths from Ugo Audio in our collection. Whereas Texture (see p30) concentrates on in-your-face, dramatic sounds, Rez is a much more rounded, bassy beast with a lot more depth and fullness. As the developer probably had in mind, then, the two plug-ins do complement each other rather well.

Rez not only looks great but is simple enough to program and create sounds with plenty of movement and character. Not that there aren't enough of these on offer already, with 128 presets available. Within these you will find plenty of resonating basses (hence the name), as epitomised by the great Rez preset, which bops along like a bottom-end bee in search of a song to pollinate. Elsewhere you get some more fighting, screeching sounds, but this synth does lean very much more towards the more pleasant side of the electronica genre, taking in trance and a spot of drum 'n' bass along the way.

Have a look at the architecture of Rez and you'll quickly understand why this is the case. Beneath the super-cool blue fascia you discover a synth that is obviously analogue in nature, replete with oscillator, filter and amp stages. The movement so prevalent on almost every preset comes by way of a simple delay section, and there's an arpeggiation stage for even more excitement should you wish. These two sections – along with the filter section described in our tutorial below – really do bring alive almost everything you program, adding a glossy sheen to even the dullest sound. The Phaser section is arguably what gives Rez its distinct sound, ensuring that the character is wide and vibey as well as being in constant motion.

Rez may be a virtual analogue synth, but just as we've seen some freeware plugs that concentrate on authenticity, it also offers additional features to give its sounds a modern gloss, like some commercial plugs. Certainly there is enough freeware out there to offer you both traditional sounds and modern sheen, but you won't often find a synth that offers you both with such ease of use.

Behind the scenes

"I honestly just enjoy being able to give something back to the online communities that have been such a help to me over the years," says Ugo Audio's Chris Sciurba when we ask him why he produces freeware. "Also, keeping my commercial plug-ins low-priced helps musicians on tight budgets obtain some new sounds without resorting to warez.

"People really appreciate it when they find a piece of freeware that fits their music and inspires them to create something of their own. Sometimes I get sent a link to something that's been created with my freeware, and that makes me feel great.

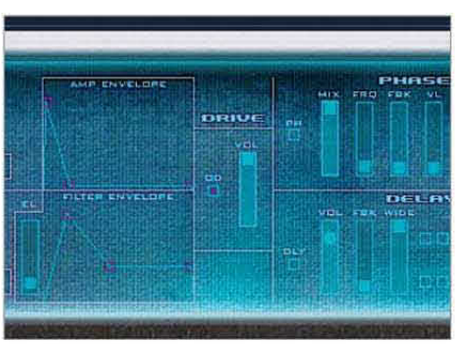
"My inspirations are my own musical needs, so when I create a plug-in, it is to obtain something my rig is lacking – I therefore tend to develop plug-ins with a somewhat unique character."

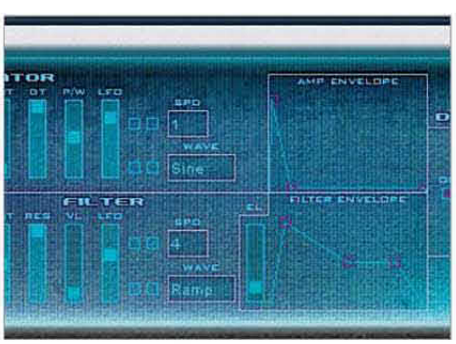


Keeping the prices of his plug-ins low is vital to Ugo Audio developer Chris Sciurba

> Step by step: Rezonation with Rez







1 > Rez really is great at getting those filtered basses that are so useful in all sorts of electronica, and it can do it in the simplest of ways. The best way to see this in action is with the **Rezy Nation** preset. Dial it up – as shown above, there really isn't a lot going on that you can see yet.

2 > The delay section is not being used, nor is Rez's great Phaser, and the oscillator is pumping out little more than a pulse wave. The drive feature is enabled, so push it up and hear how it affects the sound by adding a bit of grunge. Now turn your attention to the filter section and you'll quickly see that this is where the action is.

3 > The filter is being opened and closed by the filter envelope. Experiment with both the envelope shape, as shown above, and with the waveform of the LFO. Change it to **Ramp** and note the more gradual effect. Increasing the speed of the waveform (**SPD**) increases the tempo of the modulation.

Krakli Software S3B

PC

What is it	Atmospheric pad synth
Web	krakli.com/krakli-free-synths
Format	VST
System requirements	**PC** Pentium 4 or AMD 1.6GHz

Krakli's S3B lends itself incredibly well to textures and pads, and features some very expressive and dramatic sounds with plenty of movement and ambience for the chillout and electronica composers among you. Within the presets are several shimmering sounds that are great for creating moody 'staring into the distance wondering about life and stuff' backdrops. This mood is helped by several sections on the synth, including the Vibrato and Phaze modules, which help add 'wow', and the Noise section, which adds a breathy other-worldliness.

Stepping through the supplied 64 presets, it's the rich atmosphere that stands out, although the Pulse presets really show off the movement that S3B can generate (from its Pulse control combined with its unusual oscillator section – see our tutorial below), offering punchy and rhythmic sounds that will inspire with a single chord. There are plenty of great mini sequenced patches included as well.

As we've hinted at elsewhere, it's nice to see and hear an instrument concentrate on doing something well and not trying to do too much else, and with S3B you get just that: lots of mood, lots of long decays and texture, and little in the way of in-your-face brashness. If it's hard dance sounds you're after, look elsewhere – this one's a dreamer, and all the better for it.



S3B's Pulse section is great for adding rhythmic elements to the synth's dreamy, atmospheric sounds

> Step by step Checking for a Pulse



1 > S3B comes with an unusual but effective oscillator section (in the middle of the GUI), which also offers a punchy **Pulse** section for added rhythmic elements. Let's take a closer look at what you can do with it by first dialling up the preset **PUL Lost In Space**.



2 > The section with the nine elements and volume dials is essentially used to access nine different waveforms. Within it you can also transpose the elements up and down by several octaves. Note that all nine elements within this section are lit by red lights with this preset, because it's a big sound, as you can hear.



3 > To get an idea of how the elements make up the sound, click on the nine red lights beneath each element to switch them off. Gradually the sound gets thinner as you reduce the number of oscillators in action. In the screenshot above, we're down to four.



4 > Now let's take it right down to one element. We've left the first one on and it's triggering W7, which sounds like a square wave to us. Now we're listening to a raw wave, albeit with a little noise. Adjust the tone of the noise so you can hear how it helps to make up the sound.



5 > Now adjust the oscillator wave by clicking on W7. This makes it cycle through all the nine waveforms available. The noise is unaffected at this point. Can you hear the extra pulse-like effect with notes jumping out occasionally?



6 > This is thanks to the **Pulse** section to the right being turned on. This movement effect adds a pulse to the sound and can be sped up by clicking within the **Pulse** section. We've switched on all the parts that trigger the pulse to show how much pulsing can affect the sound.

DSK Music
Synthopia 2

PC

What is it? Three synths in one
Web dskmusic.blogspot.com
Format VST
System requirements **PC** Pentium II, Windows (any version), 2GB RAM

DSK have been in the business of free plug-ins for a while now, and we've covered some of their simpler freeware apps in the past. Synthopia takes the simple approach again, but fattens the concept up big time. You get three layers of sounds, selected from a bank of 128 presets, which can either play simultaneously or as a multitimbral sound module.

Synthopia 2 comes with just 22 combinations – these are variations of the 128 sounds included with the synth – but these are meant merely as a starting point to set you on the road to creating your own. The raw elements that make these combinations up – the 128 sounds lying at the heart of the synth – include loads of synth sounds, choirs, and pads. It's lushness through and through, and there's little in the way of short, sharp attack sounds, so this really is a synth to fatten your arrangements out rather than add punch in the bottom.

An effects section (with chorus and delay sends, plus a reverb) completes the picture – and what an easy picture it is. Indeed, it's the sheer simplicity of the concept behind Synthopia 2 that makes this synth such fun to play with. Fire it up and after a few tweaks and twiddles here and there, you'll be thinking of yourself as some kind of sound designer extraordinaire in next to no time at all.



Synthopia comes with a solid selection of lush, deep sounds and is almost criminally easy to use

Majken
Chimera

PC

What is it? Out-of-this-world synth
Web www.majken.se
Format VST
System requirements **PC** Windows XP/Vista

Some synths claim to be great at bass, some great at leads, and some great at atmosphere. Some even claim to do everything. Majken's Chimera makes few claims, however, perhaps largely down to the fact that it is so hard to categorize. At its heart lie three noise generators that are sent through band-pass filters to create, well, everything you can't imagine.

There's additional filter, delay and distortion sections, plus one of the most comprehensive modulation sections we've seen, whereby seemingly every element – from bandwidth to modulation depth – can quite easily connect to and modulate another.

The results are different, moody and quite beyond what most of the other applications in this collection offer in terms of sonic scope. To describe the presets as 'alien' or simply 'atmospheric' doesn't do them justice. In fact, some of the 50 or so supplied sounds don't do the synth itself justice, so don't judge it on what you hear at first. The real results come when you go into the modulation section or simply tweak the filters. Turn the Width controls or Warp fader on the noise generators for great drama, or simply pull down random elements on the modulation section dropdown menus. Things start happening with the sound that you might not be able to explain, but if you consider yourself experimental in any way you'll be stroking your chin in appreciation. This isn't a synth for all, but if you want something that goes to places others don't, rack it up now.



One for the experimentalists out there, Chimera sounds quite unlike anything we've heard before

Dash Signature/NuSofting
daHornet

PC MAC

What is it? Classic virtual analogue synth
Web nusofting.liqihsynth.com/freeplugins.html
Format VST, AU
Test system **Mac** MacBook Pro 3.06Ghz Intel Core 2, 4GB RAM, running Windows XP under Boot Camp

Dash Signature and NuSofting's daHornet is a virtual version of the classic Wasp synth. We say 'classic', but the Wasp is actually remembered by most simply as a raspy-sounding synth with an unusual keyboard. It was cheap, cheerful and many people's first experience of a synthesiser back in the 70s, but it wasn't exactly highly regarded for its sound. By contrast, daHornet scores surprisingly highly in the sound stakes, albeit over a limited range.

As you might expect from an early analogue emulation, the sounds are punchy, short and dirty, and consist mostly of leads or basses. Sure, daHornet makes some attempts at pads, but so many other synths in this collection do those better. Where this baby scores is its bottom end. Presets like Elastic Bass will shake your speaker cones, and as you step through more of the bass sounds, you soon realize that these are daHornet's speciality. Further down the list of 100+ presets, you also get some ear-splittingly fierce delay-type sounds that are sure to find good homes in hardcore compositions, while the detuned sounds like Bad Party and Some Broken will surely end up fronting some club classic, if they haven't already.

In short, daHornet is a pleasant surprise – a classic analogue emulation that's got more balls than the World Cup (remember that?) and is louder than any vuvuzela (let's forget those).



Unlike its real-world ancestor, the Wasp, daHornet is capable of producing some glorious sounds

Krakli Software R.I.P. PC

COMPUTER MUSIC EXCL

What is it	Atmospheric pad synth
Web	krakli.com/krakli-free-synths
Format	VST
System requirements	**PC** Windows, Pentium 4

We're proud to introduce R.I.P., a special edition dual two-oscillator synth created by Krakli Software especially for **cm** and the celebration of freeware that you now hold in your hands. It looks great, it sounds great, and despite appearing a little complex at first, it is actually very straightforward to use.

Think of R.I.P. as two synths in one, each one with two oscillators and each of those with five waveforms to choose from. For each of these there are plenty of effects on offer (including phaser, reverb and echo), a great arpeggiator, which we'll come to later, filter and amp envelopes, and filter mod controls. You can trigger each engine via different MIDI channels for greater flexibility or layer both engines together for big and bold sounds.

Indeed, stepping through R.I.P.'s 128 presets reveals some instantly attractive and dramatic sounds. All have great energy and atmosphere, and all are eminently usable in a variety of genres, from dance to chillout – although electronica artists will probably benefit the most, as you'll hear if you follow our walkthrough.

You start with a bunch of arpeggiated presets, which offer some great instant melodies and show off R.I.P.'s excellent yet simple arpeggiator. Once again, each of the synths' two sound engines can access this arpeggiator simply by switching in one of the six presets, with variable tempo, latch and octave controls on hand for more variety.

In fact, Krakli's Ian Webster has so much confidence in the arpeggios that after stepping through some great leads, basses and pads, you find yourself in another section of them when



R.I.P. has been created by Krakli especially for this cm *Special*. We have the coolest friends...

trawling through the 128 presets. And why not, when arpeggiations are this synth's strong point. It's a fine selection that gets even finer when you bring the rest of the synth into play. Trigger a few arpeggiations while tweaking R.I.P.'s Fazer, Filter and Amp envelopes, for example, and you'll soon realise the breadth and depth of what's available – rest assured you'll be reaching for the record button in no time.

After this section things get a bit more random but nicely atmospheric, as R.I.P. serves up a smorgasbord of weird and wonderful electronic sounds. What these sounds really show, however, is that R.I.P. is a synth enthusiast's synth, filled to the brim with proper, synthy electronic noises. It's almost like a 'best of' compilation of the finest sounds to be produced by electronic machines over the last three decades. It might not be complex enough for some, nor is it particularly 'out there', but if you want great atmosphere, the sound of pure electronics and simple programming, then you need look no further than this top-notch plug-in.

Behind the scenes

"I am an organisation of one, so I'm CEO, chief cook and bottle washer!" says Krakli's Ian Webster. "I had always been interested in DIY synths, making my own modules back in the 70s. The move to software synths seemed a natural progression, and as I was using SynthEdit I felt it fairer to offer these for free. I wanted Krakli plugs to stand out, either sonically or via the interface. I really appreciate the comments I get, and I especially enjoy it when I get sent music created with Krakli plug-ins. I would love it if I heard that a commercially successful act was using my plug-ins."

Ian is currently looking at creating boutique hardware synths: "I have been intrigued by the interest in circuit bending and feel that a Krakli hardware synth would be a popular item."



One-man development house Ian Webster has been tinkering with synths since the 1970s

> Step by step Programming your way around R.I.P.



1 > Load up the **PD Pluck & Phase Pad** preset and run a sequence of notes through the synth. You will hear two main elements. Reduce the volume of the top layer to zero using the dial on the top right side. This reveals how the sound is made up, with the top layer providing the pad and the bottom layer the delays.



2 > Now we've isolated a sound, let's adjust the OSC1 waveform. Click it from **5** to **1** and you have a much subtler sound already. Only one oscillator is playing at the moment, so adjust the **OSC Mix** dial to the centre to bring in the second one. Because this is playing three octaves higher, a new, brighter sound is introduced.



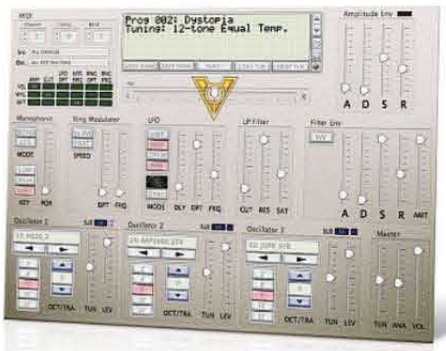
3 > Now let's bring in the arpeggiator. There are two lines of arpeggiator controls between each of R.I.P.'s synth engines, and these control the movement of the sound. Click on a pattern in the lower set of arpeggiator controls (we've selected the 'Up' one) for some instant melody. We've also increased the **Tempo** to **4**.

Victor Cerullo
Vogue Quattro Mk2 MAC

What is it: Quirky microtonal polysynth
Web: launch.groups.yahoo.com/group/16tone
Format: Standalone
System requirements: **Mac** OS X 10.5 (10.6 recommended), 2.26GHz Intel processor

Victor Cerullo's Vogue Quattro is unusual in many ways. For starters, it's a standalone instrument – there are no plug-in variants currently available. If you want to record it into a host, you'll need to patch it up using something like JACK (the developer provides a PDF tutorial that explains precisely how this is done). Add to that the fact that it is designed with an emphasis on supporting microtonal tunings and you have an instrument that is anything but run-of-the-mill.

As the name implies, Quattro is a four-voice synthesiser. It offers three wavetable oscillators with access to 88 different waveforms. These waveforms are culled from classic synthesisers like the Prophet-5, DW-8000 and Fairlight CMI. Each oscillator can be bolstered by a sub-oscillator before being put through the resonant low-pass filter. Modulation is provided in the form of a pair of ADSR envelopes and a single LFO, and there's a ring modulator and a mod matrix to shuttle MIDI and onboard modulation sources to their destinations.



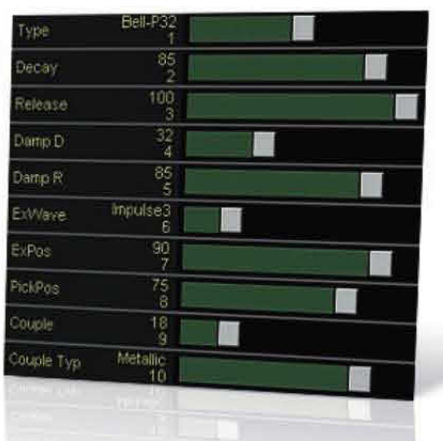
Quattro has a sharp, crystalline and somewhat digital sound that is all too rare in these retro-minded days

Obertone Audio
PhysiX PC

What is it: True physical modelling synthesiser
Web: www.obertone.com
Format: VST
Test System: **PC** Intel 2.4 Core 2 Duo, 4GB RAM, Windows XP SP2, M-Audio Fast Track Pro

Sometimes an instrument is released into the wild with no fanfare, no hoopla and seemingly little concern for public reception. Such is the case with PhysiX. This remarkable little instrument was developed by some of the folks responsible for the marvellous ReFX plug-ins. However, PhysiX was thought to have little commercial value and so was loosed upon the world in an unrefined (but not unfinished) state. Few, it seems, took notice. We certainly didn't – it appeared in neither of our previous freeware **cm** *Essential Selections*. You can't blame us for missing it, though; developers Overtone Audio have all but washed their hands of the thing, vowing no further development or support, and it has no GUI of its own, relying instead on the host's default VST interface.

And yet this little fellow offers something few other freeware instruments can provide: true physical modelling in its rawest state. Based upon the 'nodes and mass' model, PhysiX offers 23 different node and mass models and 11 different excitement modes. This basically means you get control over the stuff that makes up an acoustic sound. You can elicit various responses using the exciters, and these will set into motion the materials that make up a physical object. By tweaking the various parameters on offer, you can create realistic-sounding drums, bells, plucked strings and other acoustic tones that can be far more satisfying to play than static samples.



PhysiX allows you to create complex virtual simulations of real physical objects, and then hit them with things

Togu Audio Line
Vintager PC MAC

What is it: Simple-to-use monophonic analogue synth
Web: kunz.corrupt.ch/?Products:VST_Vintager
Format: VST
System requirements: VST host

Togu Audio Line instruments have long been held in high regard in the **cm** camp. The developers have consistently provided superior-sounding freeware for both the Windows and OS X platforms. But while TAL's Roland emulations might garner the most attention, it'd be a crime to overlook the developer's joyfully simple monophonic analogue synth, Vintager.

Why? In short, the sound. With a pair of band-limited oscillators, a huge sub-oscillator and a fabulous filter with growl and squelch galore, Vintager has a quality of sound that is hard to beat, even from instruments that cost a bundle. Yeah, it's pretty spare, with only the very basic parameters on tap, but such simplicity is often a virtue, particularly when you need a sound in a hurry.

Mind you, we don't want to sell it short – it does come strapped with a pair of four-stage envelope generators and two LFOs that can be synced to host tempo. Add to that some FM and pulse width modulation and you have an instrument that can provide all of the sounds associated with classic monosynths such as the Minimoog or ARP Odyssey and a lot more besides. Best of all, it sounds nothing short of apocalyptic, with its bin-shaking basses, screaming leads and far-out effects.



Togu Audio Line's Vintager plug-in can produce all the sounds you'd find in the classic monosynths of yore

KX77FREE
KX-Synth-X16

PC

What is it Semi-modular analogue synth inspired by the EMS VCS3
Web kx77free.free.fr
Format VST
System requirements **PC** Windows XP, P4 or AthlonXP, 1.5 GHZ, (no minimum RAM specified)

Made famous by Pink Floyd, Roxy Music, Jean Michel Jarre and David Vorhaus, the legendary EMS VCS3 and its suitcase-enclosed twin the Synthi A have become sky-high-priced collectors' items. Oddly, there have only been a handful of attempts to recreate the VCS3 in virtual form. Luckily, one of the best recreations turns out to be absolutely free! It's from KX77FREE and draws upon meticulous analysis of the waveforms and behaviour of a real-world VCS3 MkII.

Like the original, KX-Synth-X16 is semi-modular and comprises a trio of oscillators, a resonant low-pass filter, envelopes and effects. Sounds like fairly standard stuff, but it is the method by which patch connections are made that sets both the original article and this virtual recreation apart. Instead of a tangled mess of patch cords, KX-Synth-X16 uses a grid-based 'matrix' to connect its various components. Sources are arranged vertically along the grid, while destinations are splayed out along the horizontal axis. This allows virtually any component to be connected to anything else, or even fed back into itself, and also enables the user to send one source to many multiple destinations and vice versa. It's a truly inspirational method of sound creation.



Like the VCS3 synth on which it's based, KX-Synth-X16 replaces patch cords with a grid-based 'matrix' system

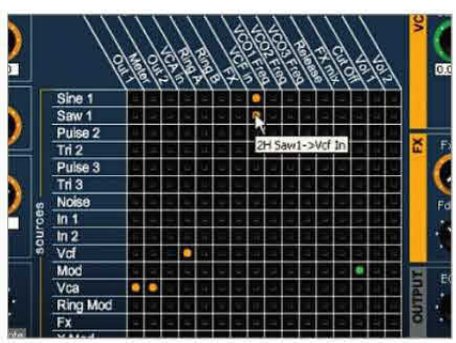
> Step by step KX-Synth-X16 – the basics



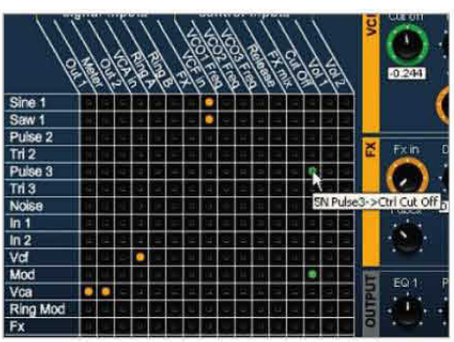
1 > KX-Synth-X16 offers a staggering amount of synthesis power, but it can be a little intimidating to the uninitiated. Fear not – we can get you going in a few quick steps. Let's load up an instance into our host application and dial up the preset called **126 POLY INIT**.



2 > Take a look at the matrix. As you can see, there are four 'pins' patched into some patch points. Note that the signal and control inputs run from left to right and the sources run from top to bottom. Look for the source labelled **Vca**. It is currently patched into **Out 1**. Click on the point just to the right of Out 1 in the Vca row.



3 > Play and hold a note – you'll see that the VU meter in the lower left-hand corner now registers a signal. Now you're starting to understand how the matrix functions. Next, let's connect the Saw 1 source to the VCF in. **Saw 1** can be found second from the top; the **VCF in**put is eighth from the left.



4 > Play a note or two. No sound? That's because we need to increase the level of the saw wave being produced by VCO 1. The VCOs are in the top left-hand corner of the GUI. Crank up the **Saw** knob and try playing again. Now, find the **Pulse 3** source and patch it into the **Cut Off** control input.



5 > Again, nothing changes because we need to crank up the level of the pulse wave being output by the VCO (this time it's VCO 3). Do that now, and reduce the **Kbd** control of VCO 3 to **0.000**. Turn the frequency control knob (to the right of the **Kbd** knob) to a value of **-1.575**. You should hear the filter being modulated by VCO 3.



6 > The joystick is one of the coolest things about the VCS3, and KX-Synth-X16 gives us something similar with its CTRL-XY MOD module. Find the X Mod source in the matrix and patch it into the **VCO 3 Freq** input. Now, play a note and move the X/Y controller with your mouse. Awesome!

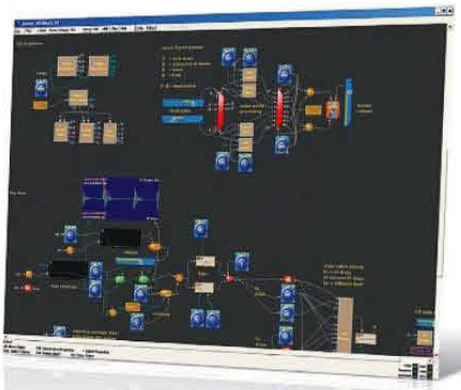
Andyware
Analog Box 2.0

PC

What is it Modular synthesis system
Web www.andyware.com
Format Standalone
System requirements **PC** Pentium II/III/4, Celeron, Athlon, 4MB RAM, Windows 95/98/2000/NT/XP

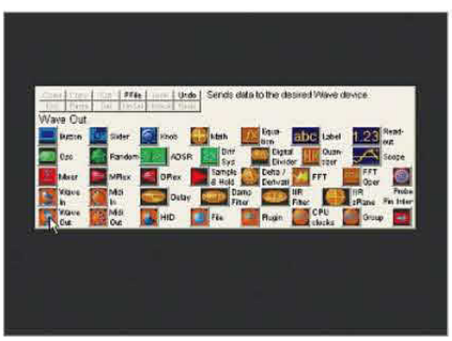
A glance at the screenshots that accompany this review is enough to clue you in to the fact that Analog Box isn't new. Indeed, it's been around for over a decade in one form or another. It's now at version 2, and is, obviously and thankfully, free. Also apparent from the screenshots is the fact that Analog Box is much more than the pedestrian analogue synth suggested by its name. No glossy GUIs here, thank you. Analog Box gets right down to the gritty guts with unadorned knobs, oscillators and all of the other modules that might be expected from a sophisticated modular synthesis system.

Unashamedly digital, Analog Box offers modules that have no precedent in the analogue realm. For instance, you'll find FFT and FDP operations sitting alongside z-plane filters. This one is for those of you who get off on academic experimentalism and odd generative patches, as well as those who simply want to string together a few pulsating percussion loops. No, it isn't going to be your first stop when you need a familiar trance stab or 303-alike bass (though it' s more than capable of providing either). Instead, it invites you to open up your imagination and explore the deeper realms of synthesis. So go ahead, take the plunge – it's awfully exciting out there in the deep end!

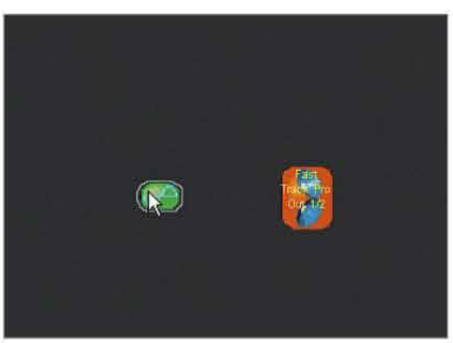


Analog Box is a serious modular synth. It might not look too pretty, but it certainly knows its stuff

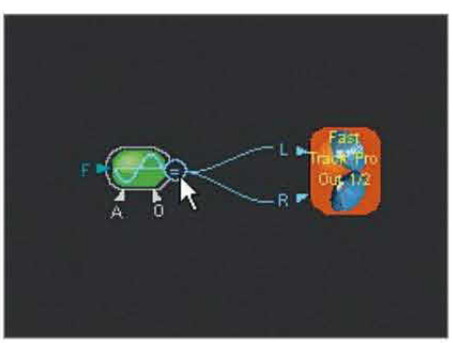
> Step by step
Simple patching with Analog Box



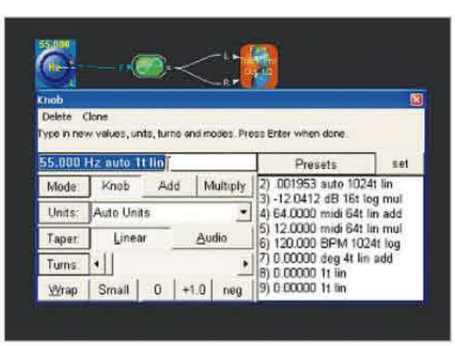
1 > A patch is called a 'circuit' in the parlance of Analog Box. Let's build a basic circuit consisting of an oscillator, a mod source and an audio output, with some knobs to control them. Start with a clean slate. We need to hear what we're doing, so right-click to call up the object menu. Select the **Wave Out** object.



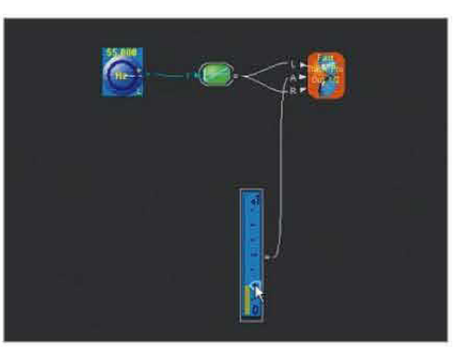
2 > Place the object somewhere in the empty circuit. Right-click on it and choose the audio interface you wish to use as your output. Now, let's add an oscillator. Again, right-click on an empty area to call up the object menu. Click on the **Osc** object. You can then drag it into the circuit, just to the left of the Wave Out object.



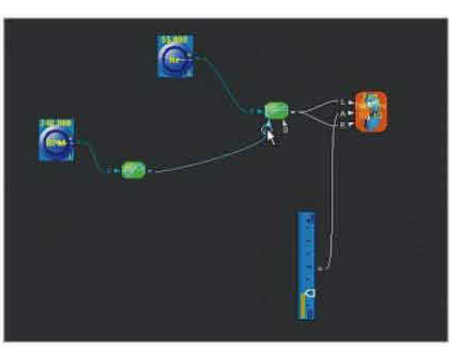
3 > Hover your cursor over the Oscillator. You'll see the inputs and outputs appear. The output is the **=** sign. Click on it and drag a wire over to the Wave Out object, where you'll see inputs labelled **L**, **R** and **A**. Connect the wire to the L input. Now drag another wire from the R input back to the Oscillator's output.



4 > Next, go to the **Object** menu and select a knob. Place it to the left of the Oscillator. Drag a wire from its output to the **F** input of your Oscillator. We're going to use this knob to control the pitch of our Oscillator. Right-click on the knob to bring up its editor. Enter the figure **55.000 Hz auto 1t lin** into the field at the top.



5 > Click the **Play** button at the top of the screen. You should hear a low sine wave. Now, right-click on the Oscillator and switch the waveform type to **Ramp**. Next, add a **Slider** object. Patch it into the **A** input on your Wave Out module. Open the Slider's editor and switch it to **Vertical**. You can now use it to control the output level.



6 > Now, some modulation. Again, create an **Osc** object with a knob driving its frequency input. Open the knob and switch the **Units** to **BPM**. Enter **240 BPM** in the field. Open the new Osc and choose a triangle wave. Run a wire from the new Osc's output into the **A** input of the initial Osc. You should hear a cool, pulsating tone.

Chris Wolfe
Jasuto 1.2.2

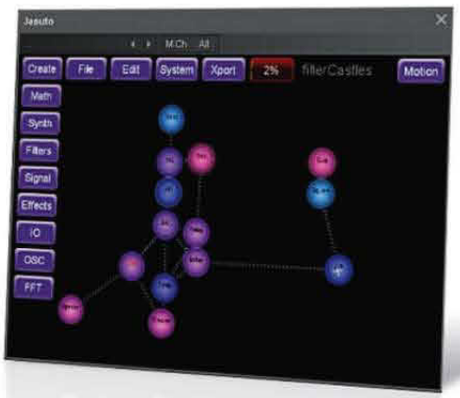
PC MAC

What is it	Powerful, fully modular synthesiser
Web	www.jasuto.com
Format	VST, AU
System requirements	**PC** Windows 32-bit
	Mac OS X 10.5

Modular synthesisers are, without a doubt, some of the most powerful tools available to the modern musician. After all, they allow you, the user, to determine what sort of (and how many) components should be available in a given patch and leave the routing of the signal path to your discretion. Why settle for the same old dual-oscillator-through-a-low-pass-filter design? You want 12 oscillators? No problem, so long as your CPU can handle it. Want to patch the reverb before the filter? Again, this is up to you.

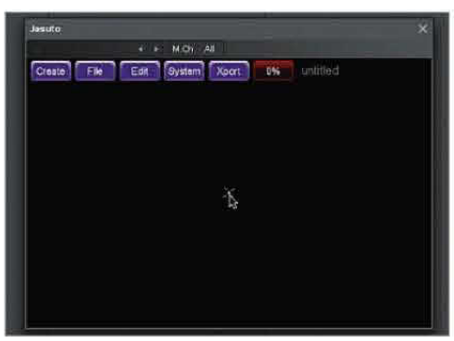
When it comes to modular synths, Chris Wolfe's Jasuto sits somewhere near the top of the heap. Truly cross-platform with iOS and Android versions, the plug-in incarnation of Jasuto 1.2.2 is freely available to both Mac and Windows users.

Jasuto offers an unusual interface wherein modules are represented by illuminated circles. The signal path flows from top to bottom, and you can control signal levels simply by dragging the modules around the interface. It takes a bit of getting used to, but once you get it, it becomes an obvious and inspirational way to make sounds. Sampling, synthesis and effects are all available, along with some esoteric modules that might leave the uninitiated – and even some old hands – scratching their heads.



Jasuto's interface is unusual, but once you understand it you'll find it highly instinctive and a blast to play with

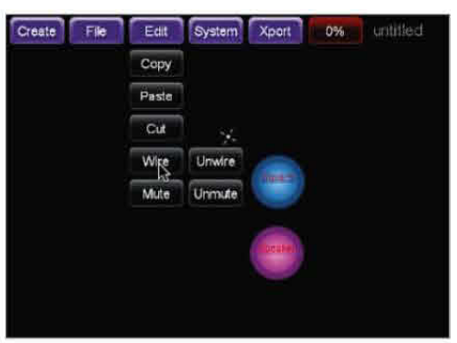
> Step by step
Patching things up with Jasuto



1 > Jasuto is deeper than deep, but we can get you started with some basic patching. In this tutorial we'll work up a sequenced-based synthesis patch with effects and filtering. Fire up your host and load an instance of Jasuto. You should be presented with a new, blank screen. If not, choose **New** from the File menu.



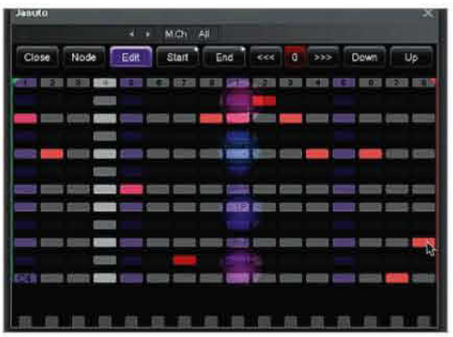
2 > All synths need oscillators, so let's start with that. Click on the **Create** button and select the **Synth** category. An octet of synth modules will appear at the bottom. Click on the **Square** button. You should now see a circle labelled **Square** in the main area. Note that Jasuto's menus remain open until you click the menu buttons. Leave the Create menu open.



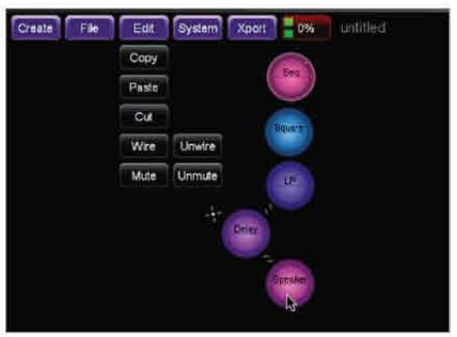
3 > Now we need to insert a Speaker module. Click on the **IO** category in the Create menu. Click on **Speaker** when it appears. Drag your Speaker module to just below the Square module. Double-click above and left of the Square module, holding the second click and dragging to select both modules. Now, select **Wire** from the **Edit** menu.



4 > Drag the Square module away from the Speaker module to reduce the volume. Select both and disconnect them using the **Unwire** command. From **Create**/**Filters**, insert an LP filter below the Square. Connect all three in series. Double-click the **LP** to edit it. Drag down on the **Cutoff** to 0.0582. Drag up on the **Res** to 0.3000.



5 > Close the LP editor. Go to the **IO** category in the **Create** menu and place a **Sequencer** module above your Square module. Wire them together. Now we need to enter some notes into the sequencer grid. Double-click the Sequencer module to open its editor. Click on some steps in the grid to create some notes. Close the editor.



6 > Let's add a **Delay**. You can find this module in the **Effects** category of the **Create** menu. Select the **LP** and **Speaker** modules and unwire them. Stick your Delay in between them and wire it up. You should now have a neat little sound playing on its own! Try experimenting with the various parameters of each module.

de la Mancha Plastique

PC

What is it	Casio HT-700 recreation
Format	VST
Web	www.delamancha.co.uk/plastique.htm
Test system	**PC** Intel 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

As you may already be aware, there are loads of plug-ins available that have been built with Jeff McClintock's SynthEdit environment. Plug-ins so constructed often get a bad rap because of the wealth of dabblers who have had a bit of a play with SynthEdit and released the half-baked results to the world at large. However, serious developers like de la Mancha are consistently issuing professional-quality SynthEdit plug-ins that can go toe-to-toe with any slick commercial product on the market.

Plastique is such an instrument. Built upon 31 waveforms sampled from the Casio HT-700, Plastique is, for all intents and purposes, a ROMpler, yet it is equipped with all of the features and functions one would expect of a quality synth. And why not? After all, the hardware industry has been passing off ROMplers as synths for decades. Regardless of what technical distinction one makes, Plastique belongs here in our synths section by virtue of its sound.

Plastique provides a pair of sample-based oscillators, a resonant low-pass filter, LFO, arpeggiator and ADSR envelope. There are built-in chorus and delay effects to sweeten the signal, and you can choose various methods of degrading the signal for a lo-fi sound. Some excellent presets range from arcade-style bleeps to deep, digital pads.



Plastique rises clear above the hordes of throwaway plug-ins created with the SynthEdit environment

> Step by step: Sound design with Plastique



1 > Yeah, analogue gets all of the glory, but when it comes to creating spiky, toothy bass sounds, ROMplers are hard to top. Plastique is an ideal tool for quick 'n' dirty sound design, and is especially suited to cool digital timbres, so let's go exploring. Fire it up and call up the **INIT** patch.



2 > Play some notes to get a feel for the sound. Nothing terribly exciting so far. The oscillator waveforms are displayed in the upper left-hand corner; currently, **Osc 2** is selected. Click over to **Osc 1** to see the waveform assigned to that oscillator. Looks like a stair-stepped sine to us.



3 > Let's scroll through the waveforms on offer. Play and hold a note and turn the big knob next to the waveform display. You'll hear the gritty 'gargling' sound familiar to PPG and Microwave users. We've decided to select waveform number **28** for our patch. Let's reduce the pitch by clicking on **Octave** and selecting **-1**.



4 > Play a low note. That's some gritty, growling grunge right there! Click back over to Osc 2 and select waveform number **10**. Play some notes. Nice and nasty! Now that we've selected our waveforms, let's activate the filter. Click both the **Osc 1** and **Osc 2** buttons in the filter section and select the 4 pole filter mode.



5 > Reduce the filter's **Cutoff** frequency to around **1.24** and crank the **Resonance** up to **4.8**. Not bad! Still, we need to shape the notes a bit. Let's adjust the volume envelope. Set the **Attack** to **5.0**, the **Decay** to **101**, and the **Sustain** to **0**. The **Release** should be **417**. Play some quick notes.



6 > Finally, let's get lo-fi. Our bass is gnarly and harsh right now, and that would be perfect for some styles, but we want to reduce the resolution. Find the **Quality** button up in the top right corner. Choose a value of **1/4**. Now that's edging into Commodore 64 territory (**Tutorial files/Synths/CM64bass.fxp**)! Save your sound.

H G Fortune
AvatarST Basic

PC

What is it	Atmospheric synth
Web	www.hgf-synthesizer.de
Format	VST
System requirements	**PC** Windows XP/Vista/7, 1GB RAM, 100MB hard drive space



Dark side of the sound: AvatarST Basic excels at broody atmospheres, menacing pads and shimmering ambience

It's blue and it makes strange noises, but those are probably the only two things that link this synth to that film. Oh yes, and it's virtual too, so we can make that three.

Moving swiftly on, AvatarST Basic is a cut-down version of H G Fortune's brand new AvatarST Pro synth. It's available in two different colours (the full version has six!) and understandably lacks some of the power of its commercial counterpart. It has four voices (the Pro has 16), 64 patches (compared to 128) and 256 internal waves (compared to 384). While that might seem quite a dramatic difference, in practice you are still left with a great-sounding synth that's full to the brim with options.

You'll realise the extent of the options available when you boot up AvatarST, as it looks quite complex at first. What it boils down to, though, is a set of four oscillators – two each on sets A and B – in which you can drop a whole list of waveforms. We're not talking simple sine and square waves here, though – this is more like one of those classic 90s wavetable synths where you effectively get all sorts of odd sampled waveforms as your initial ingredients. Also lifted from one of those classic digital synths is an X-Y pad that lets you blend between oscillators for some great real-time sound morphing.

The real heart of the synth arguably lies in the grain processor and 'Mystify' sections, which add subtle 'bright' and 'soft' controls as well as some not-so-subtle filter and noise changes to your waveforms. By playing around with these you'll find you can create just about anything from fairly standard pads and basses to scary indescribableness! The 16-step modulator is also a great addition as it adds timing and rhythmic variations to the sounds, meaning that the ambience can change quite dramatically the longer you draw the notes out.

So we move on to the sounds themselves, and the word that leaps to mind is 'atmospheric'. AvatarST is brimming with broodiness, with menacing pads, shimmering and detailed ambience and plenty of sci-fi weirdness. If you're into film scores or industrial music, or if you just like using oddball textures to take whatever genre you work in to a slightly darker level, you will love AvatarST.

This is a synth that you'll want to spend some time with, to learn how to get the most out of it. It's well worth the effort (and there are some YouTube videos to help, if you can ignore the *Top of the Pops*-style 70s LSD visuals!). As freeware synths go, this is one of the most flexible, complex and ultimately fulfilling ones out there. And if the time should come when you want even more, the Pro version only costs €39.

Behind the scenes

"Freeware is good for those who have a null or near-null budget but want to make some music," H G Fortune tells cm. "They can have a clean conscience and there is no need for them to pirate something. The enhanced, registered Pro versions of my plug-ins are for those who can afford it and want to support my work to keep on developing new instruments.

"I've been fascinated by floating atmospheric pads and soundscapes for a while. My style is quite a niche as I'm doing synthesisers that can provide quite complex sounds while still being relatively easy to edit."

As well as updates to his existing range, H G is planning other projects: "I want to do a really strange-sounding thing with just a very few knobs, but this may take a while yet!" We can't wait...



H G Fortune believes freeware is the answer for cash-strapped musicians with scruples

> Step by step
Getting your head into AvatarST Basic







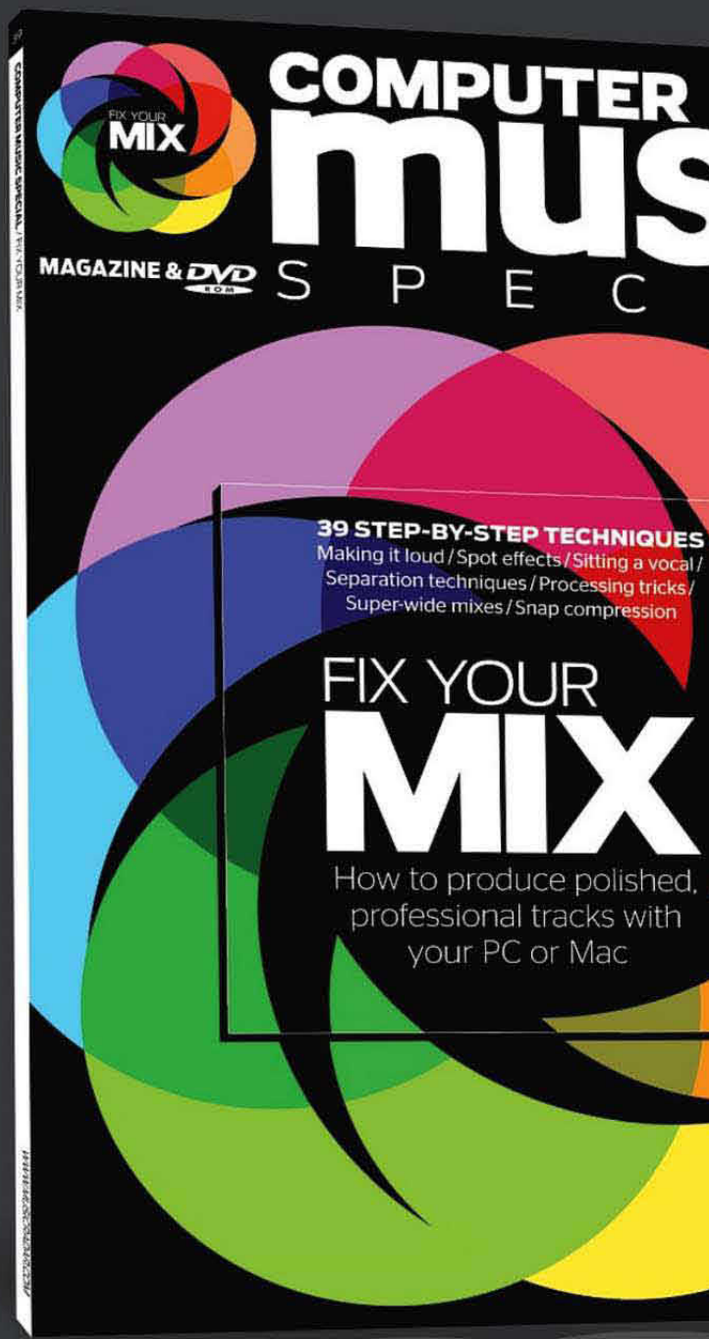
1 > First things first – dial up any of the presets (using the dropdown menu) and jump straight into the two pairs of oscillators on the left-hand side. Click on these to reveal the waveforms available to each one. Change the waveform and you'll instantly hear how the sound changes quite dramatically.

2 > With so much going on at any one time, it's often hard to decipher which oscillator is doing what. Fortunately there's an easy solution – to the right of the main oscillators is a mix section in which you can mute each one. We've muted three (which are now green) to isolate one sound.

3 > Now you have one sound isolated, it's easy to hear what some of the more subtle sections do to it. Try experimenting with the Mystify section associated with your unmuted oscillator to hear the light and shade on offer. Then adjust the Modulator for some rhythmic action!

COMPUTER
music
SPECIAL

SAVE 35% WHEN YOU SUBSCRIBE



Computer Music Specials is the bi-monthly spin-off of Computer Music magazine. Dedicated to helping you make better music with your PC or Mac, each issue focuses in-depth on a particular topic or a popular music production software package, with step-by-step tutorials, advice and software. Example topics include: mixing, Ableton Live, Propellerhead Reason, dance music, synthesis, and recording.

WHY SUBSCRIBE?

- Save 35% off the shop price - pay only £5.89 every three months!
- Never miss a Computer Music Special
- Six issues per year delivered free to your door



SAVE 35% AND NEVER MISS AN ISSUE!

Click myfavouritemagazines.co.uk /z801

(Please use the full web address to take advantage of this special offer)

Call 0844 848 2852 quoting code z801 (Lines open 8am-9.30pm / 8am-4pm Saturdays)

This offer is for new CM Special subscribers only. You will receive 6 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.



Whether you're on the hunt for traditional or unique sounds, this collection of samplers, workstations, ROMplers and experimental instruments will provide plenty of sonic fuel for your productions

UVI Soundsource
UVI Workstation

PC MAC

What is it ROMpler
Web www.uvisoundsource.com
Format VST, AU, RTAS, MAS
Test system MacBook Pro 3.06Ghz Intel Core 2 Duo, 4GB RAM, running Windows XP under Boot Camp

We looked at UVI Player in one of our previous freeware round-ups. UVI Workstation is essentially the latest incarnation and, like Best Service's TITAN Free (see p48), it's really a promo tool for sound collections that are available to install... at a price. However, as well as a few sounds that come with UVI Workstation, there's also a free 715MB-plus collection that you can install, so there's no need to spend a penny up front – what's more, it's on our coverdisc, so you don't even have to spend time downloading it!

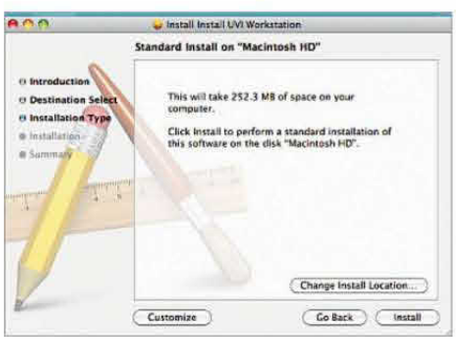
The free version showcases sounds from many of the commercially available UVI packs, so you get examples from the Beatbox Anthology, Electric Toy Museum, IRCAM Solo Instruments and many more. And while you don't get that many from each pack, they are all great quality because, as with TITAN Free, the developers want you to buy the real things. The beats all load and play in time and there are some nice atmospheric pads and in-your-face leads and subs.

So it's win-win for you and UVI because, while you might well buy a few packs eventually, for the moment you can sit back and enjoy some freebies from some very diverse collections, all within a very easy-to-use player.



UVI hope their free Workstation will inspire you to shell out for some of their sound libraries

> Step by step
UVI Workstation: using the free sounds



1 > You'll need around 250MB of disk space to install both the player and the first demo sound pack. You'll find the software in the **Other instruments** folder on the DVD. Double-click the installer – this will load the player and a small demo sound set to get you up and running.



2 > As you can see here, the free version has eight slots into which you can load presets. Either click on the folder icon (top left) or double-click on a slot so you can load in some of the supplied sounds. As good as they are, there aren't that many, so it's time to load in the bigger Soundpack Demo collection from the coverdisc.



3 > Mac owners will need to copy the collection from the coverdisc to their **Library/Application Support/UVISoundBanks** folder, while PC owners will have to drop it into their **Program Files/UVISoundBanks** folder. We're using a Mac for this tutorial.



4 > Click on the green **Browser** (folder-like) button to the left of the main screen and either click **Search** to find the sounds you've just transferred or navigate there yourself by clicking the desktop folder and disk icon. The new bank of sounds will then load in and become accessible.



5 > As you can see, the Soundpack Demo is now available in the **Soundbanks** folder. Now it's time to fill up your eight slots with some quality sounds. Go to an empty slot, navigate through the demo packs and double-click a sound to load it.



6 > Once you've loaded in a few sounds you can experiment by playing them all on the same or different MIDI channels. There's even basic mixing for level and pan, as shown above, so all the sounds can be controlled on one DAW channel, making this a very flexible instrument.

Best Service TITAN Free

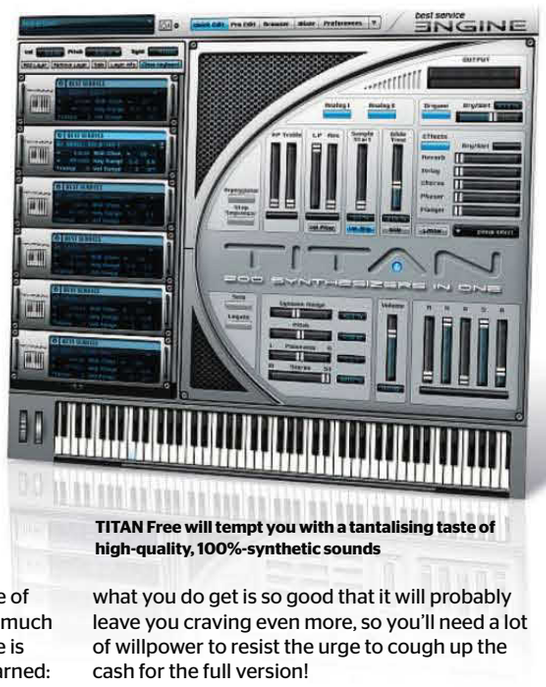
PC MAC

What is it ROMpler
Web www.bestservice.de
Format VST, AU, RTAS, standalone
System requirements **Mac** PowerMac G4 or Intel 1Ghz, 512MB RAM, OS X 10.4, 350MB hard drive space **PC** Pentium/Athlon XP 1.4Ghz, 512MB RAM, Windows XP/Vista, 350MB hard drive space

The trend for big manufacturers to offer free versions of their software with limited sounds continues with TITAN Free from Best Service. This Mac and PC ROMpler is a cut-down version of the full '200 synths in one' package, which offers some 35GB of top-quality synth action. The free version is obviously not as big, with just a dozen sounds included alongside an unlimited version of Best Service's ENGINE sample player. As such, this is a great, unlimited piece of software, albeit one that's pretty light on content compared to the real thing.

What you do get is obviously designed to showcase the commercial version, however, so the sounds on offer are pretty good. The filtered bass that opens things up is suitably squelchy, the dance organ is very atmospheric, and all of the pad sounds demonstrate a great dynamic range.

As this is a cut-down version of a couple of hundred synths, you shouldn't expect too much in the way of real instruments – TITAN Free is synthetic through and through. And be warned: what you do get is so good that it will probably leave you craving even more, so you'll need a lot of willpower to resist the urge to cough up the cash for the full version!



TITAN Free will tempt you with a tantalising taste of high-quality, 100%-synthetic sounds

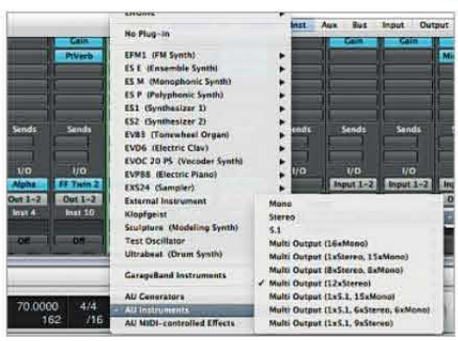
> Step by step Setting up TITAN Free



1 > If you haven't already installed ENGINE, double-click the installer icon and select a destination before confirming you have read the licensing information. You can, if you wish, do a custom install, where you select component parts to install.



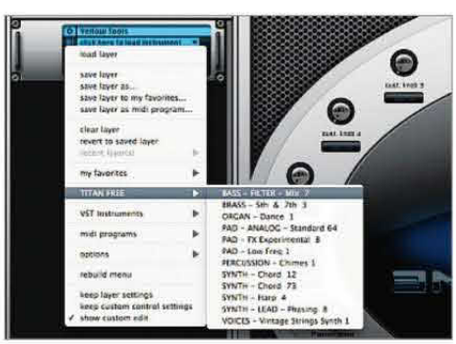
2 > Next, double-click the TITAN Free installer. This will install the dozen or so presets that come with the free version to the TITAN folder you specified in Step 1. Make a note of the location of the **ENGINE** root folder from Step 1, because you might need to tell your DAW where it is on first booting up the software.



3 > Once installed and with your DAW booted up, it should simply be a matter of selecting the instrument on a track just like any other. Here we select ENGINE within Logic.



4 > The empty ENGINE will appear as shown above, as a regular instrument. Make sure you have a MIDI keyboard triggering it externally or some MIDI notes copied to the part to trigger it internally. No sounds? Yep, you need to load some in...



5 > Click on **Click to load preset** and you'll be given a drop-down menu. Go down to **TITAN Free** as shown above and select one of the 12 supplied presets.



6 > There might only be a few presets to load, but the engine does allow you to change the supplied sounds quite dramatically. Here we've added effects and altered the resonance of the bass, and you can easily change its pitch and volume characteristics as well.

DSK Software
Virtuoso PC

What is it Six instruments in one ROMpler
Web dskmusic.blogspot.com/
Format VST
Test system MacBook Pro 3.06GHz Intel Core 2 Duo, 4GB RAM, running Windows XP under Boot Camp

DSK also have their Synthopia 2 software featured in this **cm** *Special*, and these two plug-ins are quite similar in their simplistic approach. Synthopia comes with three synths that you can layer together (or indeed trigger from separate MIDI channels), and Virtuoso takes the concept one step further by allowing six instruments to be triggered simultaneously or separately. This means you can have huge single-pad sounds combining many real instruments on one note (including strings and guitars) or trigger them separately like a six-part sound module.

The beauty with all DSK software seems to be that it is simple to get good results. While you can't tweak the actual synthesis of the sounds, with Virtuoso it's all about mixing and matching. The elements, when combined correctly, can give you some great results simply by using a handful of dropdown menus and level dials. A few effects help when blending sounds (chorus, delay and reverb) and ADSR envelopes allow tweaking of volume over time, but it is the speed at which you can get good combinations going that really helps with your compositional process.



Virtuoso, like all software from DSK, makes it very easy to get great-sounding results

Artifake Labs
RedTron_400 PC

What is it Mellotron M400 recreation
Web sites.google.com/site/artifakelabs/
Format VST
Test system MacBook Pro 3.06Ghz Intel Core 2 Duo, 4GB RAM, running Windows XP under Boot Camp

RedTron_400 is a great little application that harkens back to the days of the Mellotron and many of those other musical devices that originally attempted to recreate real instruments, but ended up being used for their own quirky sounds and characteristics.

Its front panel is incredibly simple, with three large dials controlling volume, tone and pitch. Each of RedTron's presets is made up of a blend of two voices, which can be mixed with a simple slider or changed by way of a dropdown menu. Simple effects (reverb and delay) can be applied to each, as can filter cutoff and resonance controls. Other controls on offer include pan, loop and transpose.

There's nothing too fancy going on here, which is pretty much what you got with these kinds of synths back in the day. Stepping through the presets, it's the Mellotron choirs that stand out, with enough happening to inspire those Beatles-y intros and Kraftwerk-like robot choruses. Some of the presets have enough swirl to generate Lesley-type effects, while the detuning on others will conjure up all sorts of 50s-style sci-fi themes.

RedTron_400 doesn't do much beyond what you'd expect, but what it does do, it does very well. It's specific, tight, easy to use and unfussy – a plug-in (and indeed a philosophy) that many developers could learn from.



RedTron's retro styling echoes some of the classic Mellotron-esque sounds it produces

> Step by step Getting atmospheric with RedTron_400



1 > Load RedTron on an instrument channel and run a MIDI note sequence through it so it's continuously playing a riff. Next, load up a simple preset like the very first one: **Vintage Violins**. It's quite weedy, so let's fatten the sound up.



2 > Pan the middle slider hard left so you only get one voice. Change this voice to a choir (partial/preset number 2, as shown). You should only be able to hear this part. Click on the reverb and crank up the **Release** dial to almost maximum. Note how the sound takes longer to fade away, which already adds some atmosphere.



3 > Now simply copy the reverb settings (switch reverb on and increase the **Release** time) to the right-hand sound – that is, the violins. Mix the violins back in by sliding the middle slider back to the right until it is in the centre. Your previously fairly weak violins are now an atmospheric choir in a cathedral. Easy!

Spacedad Shekrs

PC

What is it: Sample-based shakers
Format: VST
Web: www.spaceraiders.co.uk/spacedad.html
Test system: Intel 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

The concept here is pretty simple – you get a handful of shakers splayed across a few keys. These shakers aren't your usual maracas and gourds, however. Instead, they are made from yoghurt pots, loo rolls and paper cups. If you think such an instrument ought to be simple, you're way off of the mark. The colourful interface is anything but spartan, with a slew of controls thrown about the place. It's brash, even garish, but it gets the job done. Legending is almost entirely absent, leaving you to discover the possibilities through experimentation.

You'll quickly discover that the shakers can be looped or played as one-shots, and their speed can be doubled. There's pitch modulation, and even a few effects that you might never have thought about applying to a shaker track. For instance, it would never have occurred to us to lob a shaker through a bitcrusher or distortion effects. With Shekrs you can, and it's perfectly in keeping with the quirkiness of the idea. Some of the controls are a bit on the small side and can be difficult to adjust, but that won't stop us using Shekrs to spice up a rhythm or two.



Shekrs may look like a primary school art project, but it offers a surprising amount of complexity

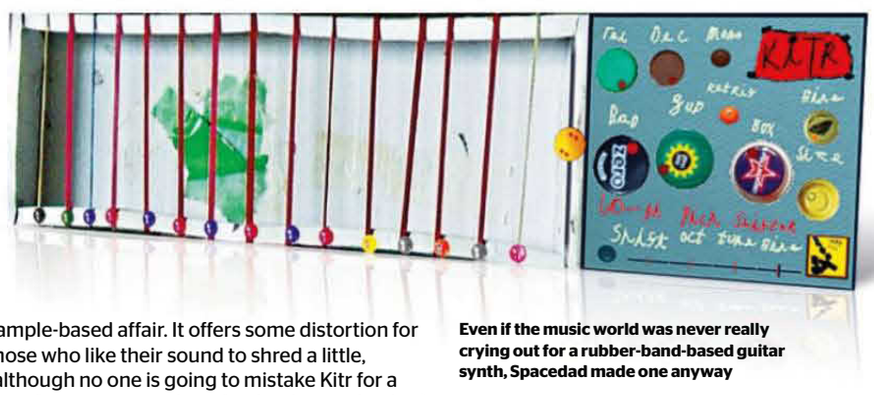
Spacedad Kitr

PC

What is it: Sample-based rubber band guitar
Format: VST
Web: www.spaceraiders.co.uk/spacedad.html
Test system: Intel 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

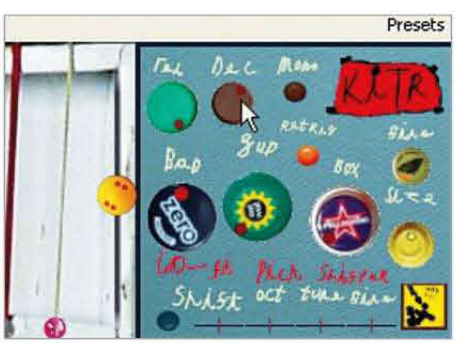
Another study in quirkiness, strangeness and charm from Spacedad. This time around, the focus is rubber bands. Yes, we said rubber bands. Once again, the interface is a photorealistic representation of something a five-year-old might cobble together from bits of pasteboard and glue in an arts and crafts class. We're not criticising... it's supposed to look that way. In a way, Kitr comes across like a physical modelling job, with controls for the box size, and release and decay parameters that work in tandem to define the character of the sound, but this is a sample-based affair. It offers some distortion for those who like their sound to shred a little, (although no one is going to mistake Kitr for a note-for-note recreation of a classic metal guitar). Lo-fi pitchshifting is also available, just in case you feel as if you're working with too high a quality of rubber bands!

All in all, there is enough on hand to wrangle up a wide variety of terrific twanginess. You can get some passable banjos out of the thing, along with some nice thumb pianos. It's all pretty good fun. If you're the kind of musician that scours through secondhand stores searching for children's instruments or disused and broken bits of gear, you'll find Kitr to be right up your alley (next to the junk bin where someone left it). Hmm... somehow that didn't come out as complimentary as we meant it to!

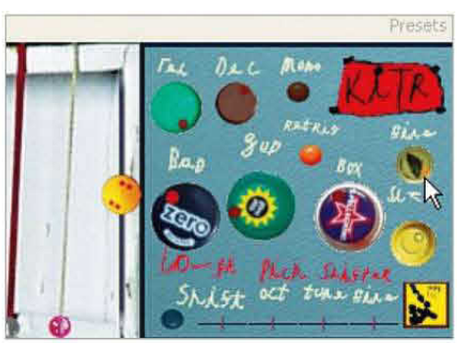


Even if the music world was never really crying out for a rubber-band-based guitar synth, Spacedad made one anyway

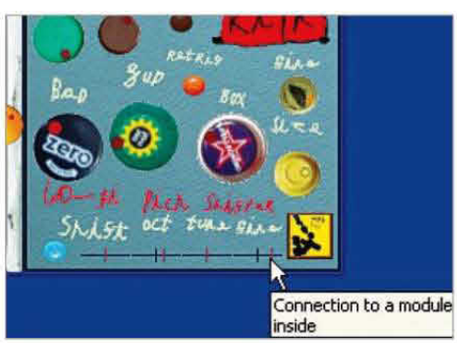
> Step by step: Band practice with Kitr



1 > Kitr is based on a somewhat 'folk art' approach to stringed instruments, but you can make some interesting sounds with it. Fire it up and play some notes from your MIDI controller, while at the same time turning the **Rel** knob up and setting the **Dec** knob to about 1 o'clock.



2 > As you can plainly hear, this has the effect of changing the perceived tension of the rubber bands. Just these two knobs can make a big difference to how the thing sounds. Set the **Box** knob to around 11 o'clock. Turn the ochre **Fine** knob up almost all of the way. Play a few notes. It's sounding almost as if we're playing a koto.



3 > Finally, let's screw the sound right up. Click on the little blue button at the lower left of the control panel. Note the four tiny horizontal sliders at the bottom. Adjust the **Oct** slider while playing some notes. Next, try pushing the **Fine** slider a good way to the right. That sound is ripe for a horror movie soundtrack!

Kong Audio Mini Erhu

PC

What is it Sample-based bowed instrument
Format VST
Web www.chineekong.com
System requirements **PC** Windows XP or above (32- and 64-bit), 32-bit VST host



Mini Erhu is a sample-based instrument that recreates the evocative sound of the Chinese violin

There are few sounds as evocative as the erhu, a two-stringed bowed instrument, sometimes called a Chinese violin. Its rich, resonant cry has been heard in Chinese music for a thousand years, and remains popular today in both traditional and modern styles. You might not know the name, but a quick play with Kong Audio's Mini Erhu will likely make it apparent that you've heard the erhu's haunting sound before. As with the Mini DiZi (see below), the Mini Erhu is a chip off of a commercial instrument.

The seven presets cover a range of expressions, from slow-drawn tremolo to fast strikes across the strings with the bow. A built-in reverb imbues the sound with a bit of ambience, and you can adjust the pan position, volume and tone of the instrument. A four-stage envelope generator shapes the sound, and both monophonic and polyphonic play is available. There's a Glide function for monophonic performances and a fine-tune knob to get you in (or out of) key.

The GUI isn't quite as polished as that of Mini DiZi, but this is still a great-sounding plug-in.

Gersic.com Preparation P

PC

What is it Sample-based prepared piano
Format VST
Web www.gersic.com/preparationp.html
Test system Intel 2.4 GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

'Aven't 'ad enough avant garde? Then you'll be glad to get to know Tom Gersic and his Preparation P plug-in. Based around a sample-playback instrument built with OutSim's SynthMaker, Preparation P is comprised of a full 61 samples of a prepared baby grand piano recorded by Mr Gersic himself. What do we mean by 'prepared' piano? That's the term used to describe a piano that has had its strings altered from their normal mode of operation in some way. The most common sort of prepared piano is one that has had tacks shoved into its hammers to create the familiar honky-tonk sound. However, there have been a number of composers, such as John Cage, Arvo Part and Conlon Nancarrow, who have written music for other types of prepared pianos. Preparations range from objects stuck between strings to alternative means of exciting the strings – strumming them, for instance.

Preparation P isn't meant to be played in a traditional, chromatic fashion (where each sample corresponds to the note to which it is assigned), but works well when used almost like a collection of sound effects. You can't do a lot of tweaking – there is a simple ADSR-style envelope in addition to pitch controls for each sample – but there is more here than you are ever likely to use.



Take a piano and vandalise its hammers and strings, and you'll get the idea behind Preparation P

Kong Audio Mini DiZi

PC

What is it Sample-based bamboo flute
Format VST
Web www.chineekong.com
System requirements **PC** Windows XP or above (32- and 64-bit), 32-bit VST host

It almost goes without saying that electronic musicians are an up-to-the-minute lot – a thoroughly modern bunch with high-tech instruments and cutting-edge ideas. Much of our music is, of course, technologically driven, laden with new and unusual sounds and production techniques. Yet every so often, we catch wind of an extraordinary sound from times long past. No, we're not talking about some vintage synth or tube amp, but rather an ancient Chinese bamboo flute called a dizi. The dizi has been around for over 8,000 years – how's that for retro? It's popular in Chinese folk music, opera and orchestral music. It has a distinctive, resonant tone and is rich with character.

Kong Audio have long been purveyors of high-quality sample-based instruments that bring traditional Chinese instruments to the desktop. Mini DiZi is a cut-down, free version of one of their commercial plug-ins, but is in no way limited. There is a smattering of parameters available to fine-tune the sound and a few presets that do a fine job of showing off the instrument. For those unfamiliar with the dizi, Kong have provided a tutorial (with MIDI files) to give you an idea of how it's played. There are a few expression styles included in this free version – more than enough to add some Eastern mystery to your next track.



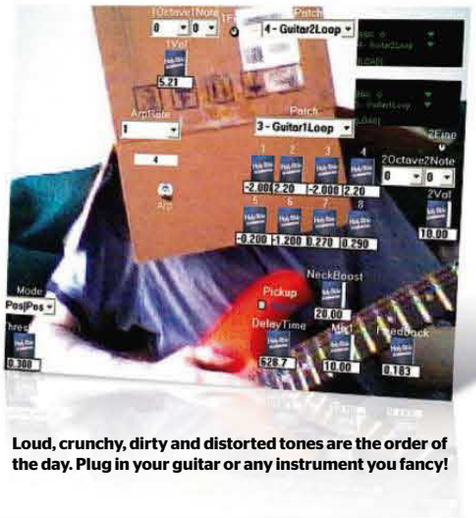
Another classical Chinese instrument from Kong Audio – this time it's the haunting dizi flute

RunBeerRun
Plastic Guitarist PC

What is it Audio-triggered SoundFont player
Web runbeerrun.blogspot.com/
Format VST
Test system Intel 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

Nobody will ever accuse RunBeerRun of going with the flow. Even fewer will suggest that the developer hire himself out as a graphic designer, at least not based on the decidedly homespun GUI found on Plastic Guitarist (actually, we're being a bit hard on the erstwhile SynthEdit cobbler – some of the interfaces found on his site have an agreeable psychedelic appeal). This SoundFont-based plug-in is technically a ROMpler, in that the sound it produces is generated by SoundFonts loaded into its two oscillators. However, it loads as an effect and requires an incoming signal to trigger the synthesizer itself. It was specifically designed for use with a guitar, though you can trigger it with just about any source. The included samples are all derived from stringed instruments, with a pair each of guitars and basses, most of them looped. There is a built-in arpeggiator and a delay effect to add some swirling echoes.

Plastic Guitarist won't appeal to everyone, and the quirky, unrefined interface may put some users off, but we like the fact that the developer has gone for something distinctly different.



Loud, crunchy, dirty and distorted tones are the order of the day. Plug in your guitar or any instrument you fancy!

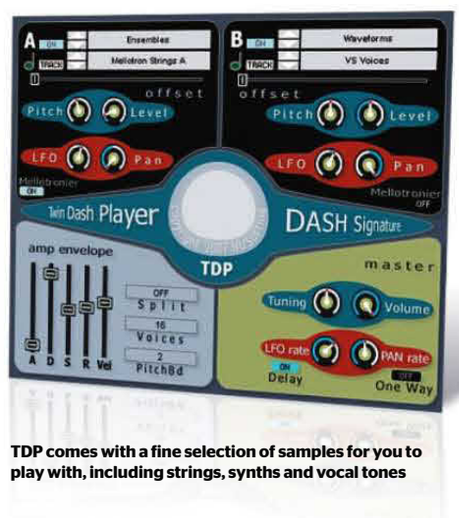
NUSofting
Twin Dash Player Free PC

What is it ROMpler
Format VST
Web www.nusofting.liqihsynth.com/index.html
System requirements **PC** Windows XP, 512MB RAM, disk space depends on samples used, VST 2.3, 2.4

Boy oh boy, what a coup! After realizing to our great dismay that Twin Dash Player (TDP) hadn't made it into our previous two freeware collections, we were devastated to find that it was no longer available. Thankfully, the developer is nothing if not gracious, and not only provided us with TDP for our coverdisc but also loaded it up with new samples just for you, the **cm** reader!

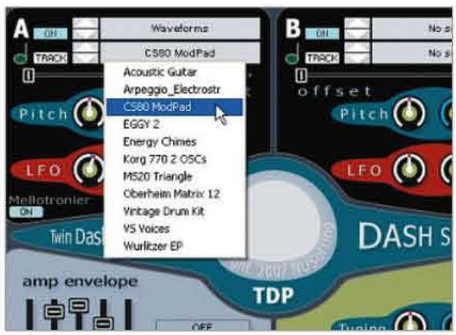
TDP is simple yet powerful, providing two slots into which sounds can be loaded. Multisamples can be stacked or split across the keyboard, individually tweaked and then sweetened with a bit of delay. Wusik-formatted sounds can be brought in using the included conversion software. Not that you'll need it – the included sample sets are all excellent, with a particularly fine selection of artificial strings. Buzzy synth sounds abound, and there are a few nice, moody vocal-like bits – in other words, just about anything you'd need to patch up proper pads in a pinch! You'll be thrilled at how many different tones can be achieved just by shuffling through the included sample sets. Don't take our word for it – fire it up and follow along with our brief tutorial and you'll be a true believer in no time!

One note: since this is an older product, NUSofting would like you to be aware that the developer info in the manual is out of date. Fortunately, a plug-in that sounds this good will inspire you for a long, long time!



TDP comes with a fine selection of samples for you to play with, including strings, synths and vocal tones

> Step by step Create a moody pad with TDP







1 > Fire up TDP in your host and call up an empty preset. You may still hear the last sample loaded into the B slot, but that's OK. Look at the two dropdowns at the top of section A. Select **Waveforms** for the top slot and **CS80 Mod Pad** for the bottom.

2 > You'll probably have to turn the **Level** of Osc A down a bit, as the waveform is quite loud. We've set ours to **0.2**, and the **Pan** to **L19%**. For Osc B, we've chosen the **Zvon_Rhodes_light_Eve** category (top slot), and the **Soft_gong** sample. Set the **Level** to **0.7** and the **Pan** to **R27%**.

3 > Return to the Osc 1 section and turn off the Mellotronier. Set the amp envelope **Attack** to **554** and the **Decay** to **7021**. The **Sustain** should be **0.5579** and the **Release 2128**. Play a note or a chord. Gorgeous! Our sound is on the coverdisc (**Tutorial files/Other instruments/CMTDPLayers.fxp**).

Native Instruments
Reaktor 5 Player

PC MAC

What is it Instrument and effect playback engine
Format VST, AU, RTAS, standalone
Web www.native-instruments.com
System requirements **PC** Windows XP/Vista/7, P4 or Intel Core or AMD 64 processor, 2GB RAM **Mac** OS X 10.5 or 10.6, Intel Core Duo, 2GB RAM

Native Instruments have been around for ages, etching out their reputation with products like Reaktor, a modular environment that enables the user to build original instruments, sequencers, effects and more using various individual interconnected components. Want a sampling drum machine with a built-in reverb, or a reverb effect with a phaser strapped to its outputs? No problem. You can create pretty much anything you can dream up with Reaktor.

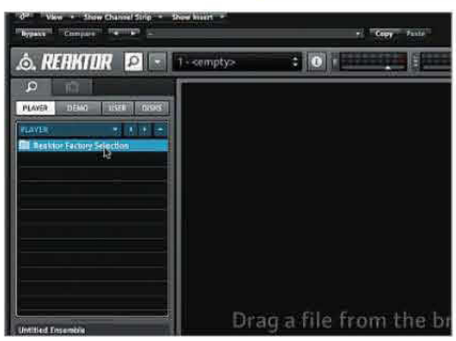
Reaktor 5 Player is the latest offering to trickle down from the Reaktor well-spring. From the name, you might expect it to offer access to the massive Reaktor User Library of pre-rolled toys, but sadly, this is not the case. At this point, Reaktor Player will only load instruments from the free Factory Selection, Komplete Instruments and Effects powered by Reaktor, and content dedicated specifically to the Reaktor 5 Player. However, the above options still provide a considerable amount of music-making power.

The Factory Selection includes a trio of Reaktor gubbins re-tooled to run in the Player. These include the rather spiffy Space Drone, a generative instrument that pumps out atmospheric drones, and Newscool, an unusual interactive rhythm sequencer. Last but not least, there's the magnificent Carbon, a subtractive synth with all the trimmings.



Reaktor 5 Player is packed with power and has the potential to grow as more instruments are added

> Step by step: Getting into Reaktor 5 Player



1 > Before you start, you'll need a serial number to get up and running. You can get one by registering at **www.native-instruments.com/r5p**. Once you've got both Reaktor 5 Player and the Factory Selection installed, you can open up Reaktor 5 Player as a standalone or in your DAW. We're using Logic here. Our Factory Selection is shown in the browser.



2 > The Factory Selection includes three different instruments, and you can see their names listed in the bottom section of the browser. Let's have a play with Carbon, a subtractive synthesiser. Click on its name in the browser and drag it into the empty window. Reaktor Player provides a preset browser above the main window. Use it to audition some factory patches.



3 > Select the **Init** patch and play a note or two from your controller. Pretty boring so far, but we have to start somewhere. Take a look at the Oscillators section. Osc 1 has a sine wave selected (shown as **SIN**). Let's select a more interesting waveform. Use the dropdown waveform menu to select the sawtooth or **SAW** wave.



4 > Each oscillator can be routed to the filter or not, using the Routing function above the waveform selection menus. By default, we're already pumping our sawtooth through the filter. Now head over to the Filter section and use the dropdown menu to select the **LP4Pro5** filter mode.



5 > Play some notes. The sound should now be significantly duller, as the filter weeds out the high frequencies. Set the **Resonance** at around **0.66** and the **Cutoff** at about **21**. Play some more notes. That's much better – there's now a classic sort of filtered 'quack' to the sound.



6 > Next we click the **Effects** tab and add a bit of chorus and delay to liven things up – we also adjust the master volume. Unfortunately you can't save the Ensemble in the Player, but it will save as part of your host project.

de la Mancha Manic

PC

What is it Random sample player
Format VST
Web www.delamancha.co.uk/manic.htm
Test system **PC** Intel 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro



Craving some creative chaos? Conjure up a cacophony with de la Mancha's marvellous Manic

Need a quick 'n' easy way to drum up some chaotic – even glitchy – mixes? Have no fear – de la Mancha comes to the rescue with the ever-so-appropriately-named Manic!

This glitchy green gremlin is comprised of eight individual slots into which you can load 16- or 24-bit mono or stereo WAV files. Once loaded, Manic will play them back in a semi-random manner. You tell it how often to play each sample, but Manic determines when each sample will be triggered. It will also randomise each sample's level, pan position, pitch, delay and playback direction. The sequence can be looped, and you can change the sequence 'seed' over MIDI. Random pitches can be quantised in order to provide more melodically stable results. There's also a built-in delay processor to add a bit of echo, and the plug-in features control over feedback level and a filter for a retro sound.

There are a few different versions of Manic available: a bare-bones edition and a much larger download that includes 246 samples and a couple of dozen presets to get you started. It's all great fun to use and provides surprisingly useful results. The included samples are well-chosen, but you'll have the most fun when you lob in a handful of your own files.

> Step by step Manic impression



1 > Manic is absolutely nuts – a lurching, looping bit of lunacy that pours lighter fluid all over your creative spark! Let's start it up in our host. If you installed the full version it'll start doing its thang straight away, using the factory samples. That's great fun, but let's start with a blank preset.



2 > As you can see, eight sample slots are arranged down the left-hand side of the plug-in. Let's load a loop into the first slot. You can use some of your own, or bring in loops from the coverdisc. We've put in the loop called **Kick.wav** from the **Tutorial files/Samples** folder. Audition the loop with the slot's **Play** button.



3 > The real fun begins when you engage the plug-in's master transport. You won't hear anything at first, because Manic relies on you to tell it what the probability of the sample playing should be. Slide the **Probability** fader over to around **44**. You should now hear your beat playing.



4 > With this channel selected, we can boost the random nature of the playback by tweaking the knobs at the bottom right. Give a boost to the **vol rnd**, **pitch rnd**, and **rev rnd** knobs. Turn off the **loop** button to activate the randomness.



5 > That's better... depending on how you look at it! It's now sounding quite random. Let's load in a hi-hat loop – you can use **Hats.wav** from the coverdisc. Push its **Probability** up to around **29**. Select the slot and then adjust the **pitch** for the sound, along with the **pitch rnd**.

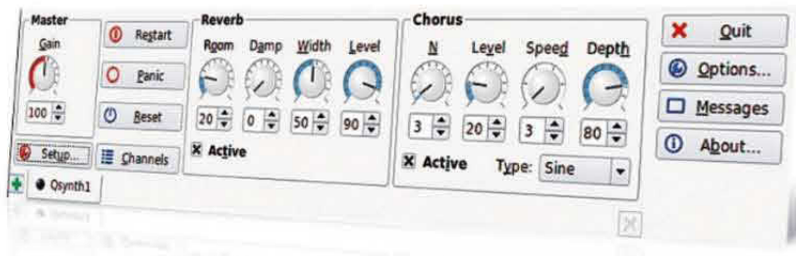


6 > This is getting crazy! Now load the file called **RezBass.wav** into slot 3. Push the **Probability** up to **51**, and crank the **pitch rnd** knob up. Ouch – that's dissonant! We can fix that by turning up the **pitch quant** parameter. Feed the track through some delay to get really industrial!

Project FluidSynth
FluidSynth

PC MAC LINUX

What is it Real-time synth based on SoundFont 2 spec
Format Standalone
Web sourceforge.net/projects/fluidsynth
Test system **PC** Intel Pentium 4 3.GHz, 2.4GB RAM, Ubuntu 9.10, Qsynth, JACK



More than just a sampler, FluidSynth allows musicians and developers access to the world of SoundFonts

If you're already familiar with LinuxSampler (see p57), you'll notice a simil arity to FluidSynth. Like LinuxSampler, FluidSynth is an open-source 'engine' that has no interface of its own. Instead, it is designed to be integrated into another application (recommended for advanced users only – see the Readme file on your cover disc) or used with a front-end application such as Qsynth (on Linux, can also be compiled on Windows), fluid~ (Pd, Max/MSP) or Z-Maestro, a Windows program similar to GarageBand.

FluidSynth has been used for everything from piano instruction software to portable multimedia players. It was designed to provide a SoundFont-based software synth for those without an SF2-compatible soundcard. Needless to say, developers seized upon the possibilities!

If you're using FluidSynth as an SF2-based sampler you'll likely want to use it with Qsynth, pictured above. Qsynth gives one access to the necessary basics of SF2 playback. You get a full complement of reverb and chorus controls, and you can pile on 16 channels of SoundFonts for full arrangements, making FluidSynth ideal for intuitive playback and tweaking of SoundFonts.

Sonic Assault
Mixed Reaction!

PC

What is it DJ-style 4-track player and recorder
Web homepage.ntlworld.com/jez.price
Format VST
Test system **PC** Intel 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

Jez Price, aka Sonic Assault, produces so many useful plug-ins that we find ourselves a little spoiled for choice. Case in point: we wanted to include Mixed Reaction! in our sampler category last time, but we bumped it for the superlative Sam! This issue, Mixed Reaction! gets its due.

Mixed Reaction! isn't a sampler in the normal sense. It isn't made to stack multisampled layers of individual drum samples, nor is it intended for use as a loop masher like some of the others we've featured. Instead, Price has forged a powerful DJ-style audio playback and mixing tool that works from within your host of choice. Four 16- or 24-bit WAV files take centre stage, and each of the four sections is festooned with a not-quite-bewildering array of controls. Each section gets volume, pan and pitch controls, naturally, but there's also an independent transport section for the sounds, along with low- and high-shelving filters. Great care has been taken with the monitoring features and each section gets independently switchable monitor outputs, assuming your host has the routing facilities to support it.

Since this plug is aimed at DJs, you'll find auto and crossfade functions for the channel pairs and a deep graphic EQ. A reverb offers ambience, and you can record your on-the-fly performances. There's MIDI learn, too, if you don't want to be tied to the mouse. The complete package!



Sonic Assault's Mixed Reaction! is a DJ-style playback and mixing application with a wealth of controls

> Step by step
Working with channels in Mixed Reaction!







1 > Let's look at one of the cooler features offered by Mixed Reaction! As you can see, there are four sections, and each has a file loader. Click on the folder slot for channel A, and load **DrumTrack.wav** from the **Tutorial files/Samplers** folder on your coverdisc. Raise the level fader and click the **Play** button for channel A.

2 > Now let's add another file, this time into channel B. We'll use the file called **EPTrack.wav**. Raise the channel level fader and play the sound through to get a feel for it. Adjust the pan position of each of the two channels so that A is a little to the left and B a bit to the right.

3 > If you engage both channels, they will now be mixed together. Note the fade slider at the bottom of the two channels. Push it all the way to the left. Now play channel A and then engage B. Next, hit the arrow button to the right of the fade slider. The fader will automatically fade from channel A to channel B. Sweet!

AcousModules OctoMag

PC

What is it Plays eight stereo wave files
Format VST
Web acousmodules.free.fr
Test system **PC** Intel 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

OctoMag is a classic piece of freeware from AcousModules, a French developer who specialises in multichannel performance. Surround sound is only the beginning for AcousModules, and OctoMag 1.3, featured here, is a multichannel monster, with 16 outputs on tap. That works out to eight stereo channels, into each of which may be loaded a WAV file.

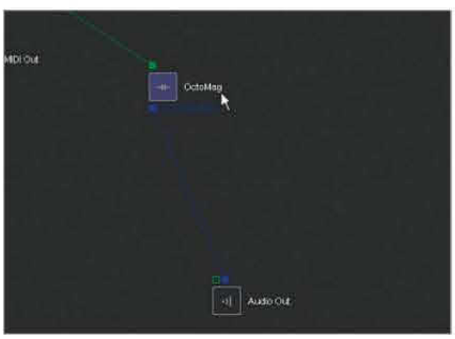
Loops are the order of the day here, and OctoMag provides lots of ways to affect their play. Each channel gets its own transport controls and can be fired off independently. There are global and per-channel reset functions that'll restart the loops when you need to get 'em into sync with one another. You can affect the pitch/speed of the loops and adjust the loop start and end times on the fly. Samples may be played in looped or one-shot mode, and you can reverse them as well. It's important to understand that each sample will play out of its own channel by default, so you'll need a host that allows the expected number of outputs or a means by which the outputs may be mixed or grouped together, otherwise you might be left wondering why you can only hear the first channel.

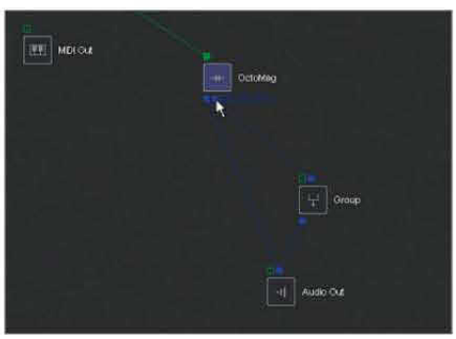
OctoMag has been around for yonks and it isn't the last word in looping, but it's an enjoyable way to knock together some arrangements.

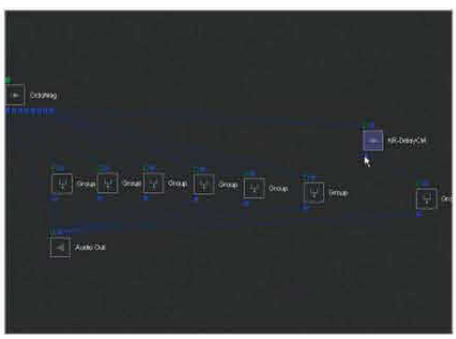


Bring out your inner cephalopod – AcousModules puts eight samplers at your fingertips with OctoMag

> Step by step Eight-channel madness with OctoMag





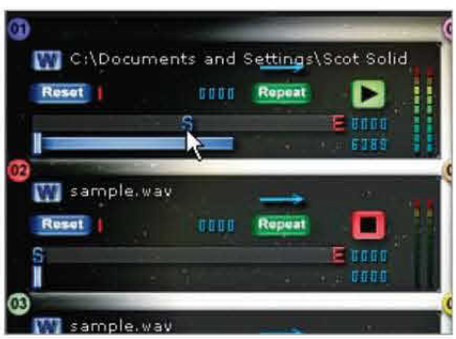


1 > As noted above, OctoMag is designed for eight-channel performance, but if your host allows it, you can mix the outputs together. That's what we're going to do here in energyXT2. We start by dragging an instance of OctoMag into the modular view. As you can see, it has eight stereo outputs, but only one pair is used.

2 > Next we need to combine the output signals and feed them to the **Audio Out** module, and energyXT2 has a Group module that makes it easy. Right-click in an empty area and select the **Group** module. It will automatically be routed to the Audio Out module. Drag a lead from OctoMag's second out to the new module.

3 > Repeat this procedure for each of OctoMag's six remaining stereo outputs until you have all eight routed to the **Audio Out** module. Just for kicks, you might try sticking an effect plug-in or two on some of the outputs. Therein lies the joy of the modular host environment!







4 > Open the OctoMag editor and load a kick drum loop into channel 1 (use **Tutorial files/Samplers/Kick.wav** from the coverdisc if you don't have one handy). To hear it, click the big red button in either channel 1 or at the bottom of the GUI. Try clicking the arrow to reverse the playback.

5 > Cool. Now, return the playback to the proper direction and we'll move on. Let's try adjusting the loop start. This is done by dragging the little blue **S** horizontally to the centre of the section. If you're very careful, you can line it up so that exactly half of the loop is played back.

6 > Now try loading some other loops in (there are a few on your coverdisc in **Tutorial files/Samplers**). Adjust the loop starts or ends and try dragging the red pitch bar next to the individual channel's **Reset** button. You'll soon discover that you can produce lots of very unusual effects.

The Linux Sampler Project
LinuxSampler

PC MAC LINUX

What is it Cross-platform sampler
Format Standalone, VST/AU/LADSPA plug-in support
Web www.linuxsampler.org
Test systems **PC** Intel Pentium 4, 3GHz, 2.4GB RAM, Ubuntu 9.10 **Mac** 2.4GHz Intel Core 2 Duo, 4GB RAM, OS X 10.5.8, M-Audio Fast Track Pro



LinuxSampler has no face of its own, hiding instead behind a range of different GUIs

'Flexible' is the word that best describes LinuxSampler, an open-source and exceedingly open-ended streaming sampler. Though designed and built initially for Linux users, there are now Windows and OS X versions available.

LinuxSampler is modular in design. No, we don't mean that you string components together via virtual patch cables, à la Reaktor or Moog Modular V – we mean the software itself is modular. The LinuxSampler 'engine' is not inherently tied to a user interface. Instead, you can call upon a number of available GUIs, including the lightweight QSampler or the rather spiffy Java-based Fantasia interface. Plug-in 'back ends' are available that will connect to the application and allow you to use it inside your host, as we demonstrate in our tutorial below.

LinuxSampler provides no in-built sample editor, but can call on one from within the app. There is support for loading and streaming Giga, Akai and DLS instruments, so there are plenty of sounds available. If all of this sounds confusing, rest assured that it is anything but in practice. In fact, LinuxSampler feels impressively mature, robust and professional, particularly when you're using a slick GUI. Hats off to the project!

> Step by step: Getting started with LinuxSampler



1 > We're using the OS X version of LinuxSampler with the Fantasia interface for this tutorial. We've already installed it, along with the AU plug-in back end. Now we'll make it go in GarageBand. Start a new GarageBand project and create a Software Instrument track, then choose LinuxSampler Unit as the instrument.



2 > Click on the **Sound Generator** button to open the manual editor. It doesn't look like much, but that's because this plug-in exists only as a sort of router for the actual software. LinuxSampler itself isn't a plug-in, and this AU lets the LinuxSampler engine connect to our audio and MIDI hardware through GarageBand.



3 > We keep harping on the fact that LinuxSampler is only a software engine and that it lacks an interface, and this is where the various front-end software packages come in. There are a few nice GUIs out there, including the Java-based Fantasia, included with LinuxSampler. Open it up alongside GarageBand.



4 > Instruments are loaded into the rack in the centre, with the Instrument Map Manager on the left. Connected MIDI and audio devices are indicated on the right – ours lists **(Plugin)** for both. When we play a note from our MIDI controller, it's highlighted in the keyboard at the bottom.



5 > The focus here is on Giga files, as defined by the late, lamented GigaStudio. Fantasia calls collections of instruments 'orchestras' – click the tab to open the Orchestra manager, and click the upper left button to create a new one. We've named ours **CMDigi**.



6 > We've included a couple of Giga files on the coverdisc (**Tutorial files/Samplers/Gigas**). Click the **Add New Instrument** button in the bottom-left pane and browse to the Giga files, then add them to our Orchestra. Now we can right-click on them to add them to a sampler channel.

better

faster

cheaper

www.th•mann.de





musicradar.com™
The No.1 website for musicians

GEAR NEWS ▪ EXPERT REVIEWS ▪ PRO TUITION ▪ DOWNLOADS ▪ TIPS
VIDEO LESSONS ▪ PODCASTS ▪ COMPETITIONS ▪ FREE TAB ▪ USER REVIEWS

From the makers of COMPUTER MUSIC



Plug in and play with this potent selection for switched-on guitarists and heat-seeking studio-heads. From classic tube emulations to experimental tone shapers, it's all right here

BTE Audio
Juicy77 PC

What is it: High-gain amp sim with speaker emulation
Web: www.bteaudio.com
Format: VST 2.0
System requirements: **PC** Intel Pentium 1.7GHz/AMD Athlon 1800, 128MB RAM

Juicy77 is something of a 'name' in the freeware world. This two-channel amp sim came about as the result of a research project investigating different methods of modelling analogue signal processors. It has a preamp section inspired by the acclaimed Soldano S-77 hardware amp (hence the name), a separately adjustable power amp section and a cabinet simulator that features seven classical cabinet types.

In our test, Juicy77 yielded a full-bodied, clean sound right out of the box. Punching in the Lead channel produced a warmer tone that spanned the range from slightly rough to full-on heavy rock, with a good range of drive levels. British- and American-style cabinets are both on offer, including the kind of classic and modern configurations beloved of blues and rock players.

The EQ section is impressively responsive and smooth; the bass control delivers on warmth, the mid section adds punch without being harsh, and the treble adds a clear sparkle. The Thump control determines the cutoff frequency of a high-pass filter that in turn controls the amount of low frequency sent to the preamp. This is great for shaping the signal before it gets amplified, and can help with removing muddiness and tightening up the sound.



Juicy77 is very easy to use and is highly recommended if you just want to plug in and get a great sound right away

AuraPlug
California Sun PC MAC

What is it: Classic-sounding amp sim
Web: www.auraplug.com
Format: VST, AU
System requirements: **PC** Pentium 1GHz/Athlon XP 1.33GHz, 512MB RAM, Windows XP/Vista/7 32-/64-bit
Mac Intel 1GHz, 512MB RAM, Mac OS X 10.4+

One of AuraPlug's Freetortion Series of distortion-based guitar effects, California Sun is certainly aptly named – it provides bucketloads of warmth, and just looking at it, it's easy to imagine some laid-back, soulful tunes emanating from the classic-looking virtual cabinet, Summer of Love-style.

With a two-channel combo layout that will be familiar to most guitarists, it's easy to plug in and get a great sound out of California Sun without doing very much to the settings. If you're feeling ambitious, you can try playing around with the drive level, which sets the amount of distortion, and the two-band tone stack.

In our tests the Dirty channel exuded a full-bodied fuzziness, while at the same time delivering an extremely defined tone – think Deep Purple's *Smoke on the Water* or Dire Straits' *Love Over Gold*. Conversely, the Clean channel was so sparklingly bright and clear that it inspired us to play around with some jazzy Wes Montgomery-style octave riffs.

In short, if you're after classic sounds in a classic interface, this plug-in gets a big thumbs-up. If California Sun tickles your fancy, you might also want to investigate the Freetortion Series further (available from the developer's website), which includes a 60s-styled fuzz tone pedal, a real-time pitchshifter with distortion and a complete guitar rig in virtual stomp-box form. Right now, though, we're going to keep it clean for our walkthrough...



AuraPlug's California Sun can handle tones ranging from full-bodied rock to crystal-clear jazz

> Step by step: Warm jazz tones in the California Sun



1 > Jazz players need a clear sound to convey the nuances of their playing styles. To get a warm, mellow tone, we start by selecting the **Clean** channel, then back off on the **Level** slightly. Adjust this to suit the particular material you're playing.



2 > We want a sound that will be prominent but not overpowering. To achieve this, we set the **Drive** to a quarter of the way up. This will give the required push without dirtying up the sound.



3 > Next up, we add some depth to our sound by turning the **Low** tone pot three-quarters of the way up. Now we finish things off by turning up the **High** tone pot just over halfway to give it some definition and clarity. Ronnie Scott's here we come...

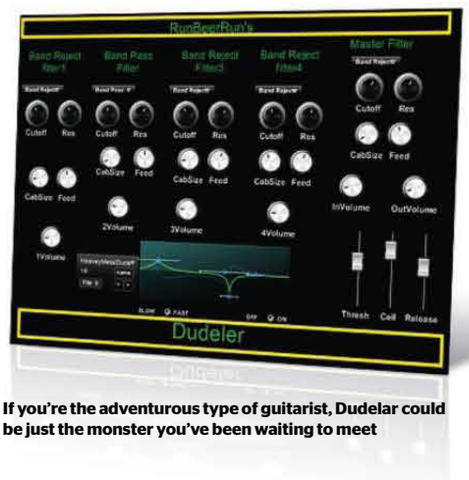
RunBeerRun Dudeler

PC

What is it: Out-there sound shaper
Web: runbeerrun.blogspot.com
Format: VST
Test system: **PC** WinXP, 3.4GHz Pentium D, 2GB RAM

Here's an amp sim that takes a completely different approach to the others in this section. For one thing, it doesn't look anything like a hardware amp head – in fact, it more closely resembles a retro synth. And while the supplied preset names might put you in mind of traditional amp tones, the plug-in will really shine in the hands of more experimentally minded guitarists.

Dudeler utilises four user-selectable filters for initial sound shaping – choose from low-, high- and band-pass, band-reject and peaking. The latter is a variation on a band-pass filter that applies gain to selected frequencies. Each filter has adjustable controls for cutoff frequency and resonance, and two additional controls affect the cabinet simulation: the CabSize knob utilises a comb filter to simulate perceived sound in relation to the position/distance from the cabinet, while the Feed knob determines the amount of resonance of the signal, giving it body. All four then feed into a master filter with a similar set of controls. A mouse-controlled paragraphic equaliser gives plenty of scope for sonic sculpture. This is all followed up by a limiter to tame the beast.



If you're the adventurous type of guitarist, Dudelar could be just the monster you've been waiting to meet

Kuassa Amplifikation Lite

PC MAC

What is it: Versatile amp sim with internal cabinet
Web: www.kuassa.com
Format: VST, AU
System requirements: **PC** Windows XP/Vista/7, Intel Pentium 4 or AMD Athlon XP or better (Core 2 Duo or Athlon64 recommended), 512MB RAM **Mac** OS X 10.4, PPC G4, 512MB RAM

Amplifikation Lite is a free plug-in based on one of the (eight) amp heads featured in its bigger, commercial brother, Amplifikation One. The particular model on offer here is named the Custom, and it's very good at producing classic sounds to suit a wide range of playing styles, from clean and pristine to warm and characterful to raunchy distortion.

Amplifikation Lite has three channels – Clean, Rhythm and Lead – which feed through a fixed tone stack consisting of the familiar bass, mid and treble controls. The Input dial sets the signal level before any gain is applied. The Presence control is extremely responsive, so even a light tweak will do the trick when you feel like giving the sound a bit more edge.



Amplifikation Lite is based on the Custom amp head featured in the full-sized Amplifikation One

The potential for realistic guitar tones becomes even greater when the included cabinet simulation is utilised. Kuassa have provided two options here: you can switch on the internal fixed cabinet or use Impulse Response files. While the internal cabinet noticeably adds depth and realism, the advantage of using IR files is that you can effectively access a huge range of cabinets recorded using industry-standard mics in a variety of recording spaces.

> Step by step: Classic blues tone with Amplifikation Lite







1 > Let's create a raunchy but controlled sound akin to Muddy Waters' *Mannish Boy*. Set the **Input** to about **5** and select the **Rhythm** channel. Keep the **Gain** somewhere between **2** and **3** to provide a good balance of raunch and clarity.

2 > To give the sound some attitude and make it a little harder, push the **Middle** up to around **7**. It still needs to be slightly brighter, so turn the **Treble** up to **7**, then add a small amount of **Presence**, about **1**, to give it some extra bite. To use the internal cabinet simulation, set **CAB** to **INT**.

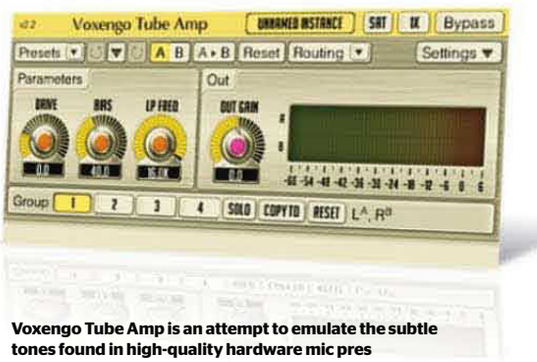
3 > Impulse Response files provide a wealth of possibilities by reproducing amp setups using different mics, rooms and cabinets. To use an IR file simply set **CAB** to **EXT**, click **Load** and choose the file you want. Here we're using one called **vox custom normal_u871** (from **www.grgr.de/IR**) to enhance the smoky blues ambience.

Voxengo
Tube Amp

PC MAC

What is it: Simulated tube amplification
Format: VST, AU
Web: www.voxengo.com/product/tubeamp/
System requirements: **PC** Windows XP and later, 32-bit and 64-bit, 2GHz dual-core, 1GB RAM **Mac** OS X 10.4.11 and later (Intel and Power PC), 2GHz dual-core, 1GB RAM

We have to admit our fires were stoked when we read Voxengo's assertion that Tube Amp simulates the same sort of asymmetric tube overdrive found in tube mic preamps. There is a scarcity of decent modelled mic pres out there, and freebies are few and far between. There's great appeal in the thought of accessing the sort of subtle shading and colour generally found on costly hardware pres.



Voxengo Tube Amp is an attempt to emulate the subtle tones found in high-quality hardware mic pres

Controls are limited to Drive, Bias, output Gain and a knob for the low-pass filter, and carefully balancing these can provide some of the subtle tube warmth we're looking for. Cranking up the Drive provides a reasonably satisfying – but not overwhelming – crunch. An admirable effort, and a product that studio jockeys might find useful.

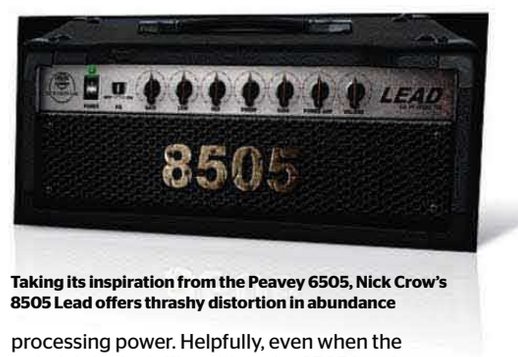
Nick Crow Lab
8505 Lead

PC

What is it: Heavy amp sim
Web: sites.google.com/site/nickcrowlab
Format: VST
Test system: **PC** WinXP, 3.4GHz Pentium D, 2GB RAM

Nick Crow's 8505 Lead was inspired by amp giant Peavey's renowned 6505 head, a tube amp that found favour with the likes of Ted Nugent, Bullet For My Valentine, In Flames, Sworn Enemy and a host of other hardcore luminaries. With that in mind, you won't be surprised to learn that it's designed to provide mild to thrashy metal-type distortion, with the attendant warmth that's associated with tube amps.

To take some the strain off your computer (always an important consideration when you're using CPU-hungry plug-ins), the 8505 features a handy control labelled 'HQ' – denoting 'high quality' – that can be turned off to save



Taking its inspiration from the Peavey 6505, Nick Crow's 8505 Lead offers thrashy distortion in abundance

processing power. Helpfully, even when the switch is in the 'off' position, the 8505 Lead automatically reverts to high-quality if you're saving to a WAV file (when mixing or exporting a track, for instance).



Silverspike
RubyTube

PC

www.silverspike.com

This tube preamp sim provides tube-like saturation and compression. There are a handful of controls, the behaviour of which are determined by the currently selected mode. Limiting is provided, and is controlled by the Drive knob. The Drive knob is ignored when using the Shaper mode. Shape values range from soft to hard. The overall effect is subtle, with a characterful saturation introduced gradually at extreme settings. RubyTube is not aimed at creating scorching guitar leads but is rather intended as a multipurpose studio tool, suitable for a wide variety of signals.



LePou
LE456

PC

lepouplugins.blogspot.com

Closely resembling the ENGL Powerball favoured by some famous metalheads, the LE456 packs a lot of power into a dual-channel amp sim. Channel A offers Crunch and Clean modes, while Channel B provides a choice between low- and high-gain modes. Otherwise the channels provide identical Low, Mid, High and Contour tone controls, plus a couple of switches that boost the low or high frequencies. There is a lot of flexibility here, and it's easy to dial in tones that range from piercing presence to crunchy distortion.

> Step by step: Very metal







1 > Metal guitar is all about distortion, so we kick things off by cranking the **Gain** up to **9**, before turning our attention to the EQ section. We're after depth and fullness first, which we achieve by turning the **Low EQ** knob all the way up to **10**.

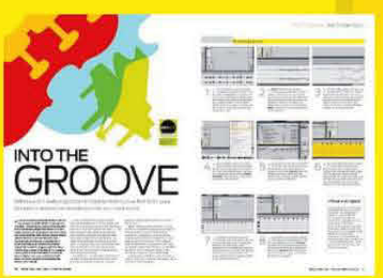
2 > The midrange is sweepable (from 500-900Hz), which will help define our sound more precisely. Many metal guitarists have a tendency to scoop the mids – we do this by backing the **Mid** off to **4**. In conjunction with this, we set the **Sweep** to about **7** (roughly 770Hz). Turning the **High** to **7** gives it a little more top end.

3 > A separate **Gain** control for the Power Amp helps to ramp up the distortion. We turn the dial to **7**. This also deepens the sound a little more before the signal heads for the output. Now we can be damn sure we're gonna feel the noize!

ESSENTIAL READING FOR ALL ABLETON LIVE USERS



TUTORIALS, PROJECTS, QUICK GUIDES AND MORE



Step-by-step guides to Live 8's core features, instruments and effects



Creative projects and masterclasses for Live users of all ability levels



Includes a DVD packed with exclusive samples from leading soundware producers

ON SALE NOW!

Available at Borders, WHSmith and all good newsagents, or buy online at myfavouritemagazines.co.uk

Native Instruments
Guitar Rig 4 Player

PC MAC

What is it Guitar amp and effects suite
Format Standalone, VST, AU, RTAS
Web www.native-instruments.com
System requirements **PC** Windows XP (32-bit), Vista, 7 (32- and 64-bit), Pentium or Athlon XP 1.4GHz, 1GB RAM **Mac** OS X 10.5 or higher, Intel Core Duo 1.66GHz, 1GB RAM

It's not easy to impress the old hands in the business, but Native Instruments have done just that with Guitar Rig. It's jammed with quality simulations of amps, speakers, EQs, effects and a few esoteric goodies like an analogue sequencer. There's even a foot controller that provides a familiar interface between man and machine.

Guitar Rig Player is, if you'll forgive the expression, a chip off of the big block. Its included Factory Selection includes the Jump amp and its matching cabinet, along with no less than 20 effects culled from Guitar Rig's rack. These include reverb, delay, modulation and, yes, the above-mentioned analogue sequencer (just one of five wicked modifiers).

Guitar Rig Player is a real coup for musicians. While you only get the one amp/cab combo, the included effects provide a lot of power and flexibility. And GRP isn't just for guitarists – its generous collection of effects is suitable for a wide range of applications and styles.

As with NI's Reaktor 5 Player (see p53), we've been provided with a landing page where you can grab your serial number, which you'll need when you install the software from the cover disc. It's at **www.native-instruments.com/g4p**.



This Native Instruments freebie is jam-packed with amps, effects and even an analogue sequencer

> Step by step
Playing around with Guitar Rig Player



1 > We decided to put Guitar Rig Player to the test with a wild, motion-filled psychedelic sound that could serve as a rhythmic accompaniment. Call up GRP in your host. You can use it as an insert on your favourite axe or wrap it around a synth, sampler or keyboard sound. It's best if you play short, staccato notes.



2 > As you can see, the rack takes up the lion's share of the interface, while a browser occupies the left-hand side. There are loads of presets, but we're going to build a patch from scratch, so click the **Components** tab. Let's start with an amplifier. Click the arrow to the right of the **Amplifier** category and drag the Jump amp into the rack.



3 > As you can see, the matching cabinet came along for the ride. Use the Amp's dropdown menu to select the **Dirty Clean** preset and have a play. Sweet! Let's put a little distortion into the path. Return to the **Components** browser, open **Distortion** and drag the Skreamer effect into your rack. Next, drag in the Pro-Filter from the **Filters** category.



4 > Reduce the filter's **Cutoff** to a value of around **280Hz**, and Crank the **Reso** knob up to about **30**. Turn the **Slope** knob all the way up to give a 24dB Moog-style filter response. Play some notes. Obviously, that won't do at all. We need to modulate that filter cutoff.



5 > From the **Modifiers** category, drag the Analog Sequencer in under the filter. Click its down arrow, and click **<none>** in the first slot. A box will appear. Drag it to the filter's **Cutoff** knob. Increase the **Mod depth** to **+0.75**. Next, create an interesting pattern with the sequencer's sliders.



6 > Change the Analog Sequencer's **Resolution** to **1/16**, and crank the **Slide** value right down. Drag in the Delay Man Delay and click the arrow to access the editor. Sync the delay to the host and set the **Time** to dotted eighth-notes (**Tutorial files/Amp sims/PsycheSequence.ksd**).



FutureMusic®
Technique and technology for making music

Future Music is the mag for the latest gear and how today's cutting-edge music makers use it. We've been making the future since 1992. Make sure that you're part of it.

COMPUTER music

SAVE 35% WHEN YOU SUBSCRIBE

GREAT REASONS TO SUBSCRIBE...

- Save over £27 on the cover price every year!
- Get a DVD-ROM with every issue, packed with all the software and samples you need to make music.
- Improve your skills with our easy to follow tutorials



START TODAY FOR JUST £12.69 EVERY 3 MONTHS BY DIRECT DEBIT!*

Click myfavouritemagazines.co.uk/cmu/z801

(Please use the full web address to take advantage of this special offer)

Call 0844 848 2852 quoting code z801 (Lines open 8am-9.30pm / 8am-4pm Saturdays)

(+44) (0) 1604 251045 quoting code z801** (for Europe & ROW orders)

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. **Payment will be debited in Pounds Sterling.



A selection of recording and sequencing software, including DAWs, VST hosts, and up-to-date and old-school trackers

Blip Interactive NanoStudio

PC MAC

What is it Portable software studio
Format Standalone
Web www.blipinteractive.co.uk
Test systems **PC** 2.4GHz Intel Core 2 Duo, 4GB RAM
Mac OS X 10.5.8, M-Audio Fast Track Pro

On the surface, NanoStudio doesn't seem like such an unusual concept. It sports a six-track piano roll-style sequencer, a mixer, a brace of sample-playback subtractive synthesizers and an MPC-inspired drum trigger/sample player. What sets it apart is its intended platform: it was designed from the ground up as a commercial product for Apple's iPhone and iPod Touch. Users of these devices will know that demo versions are a rarity, due to the way the App Store works.

Blip Interactive has come up with a novel solution: they give the desktop versions away for free. These are identical to the handheld edition in every way – including, sadly, the size of the GUI and the lack of MIDI input.

NanoStudio makes up for these limitations in its sound. The onboard synth, Eden, is flexible, powerful and capable of some breathtaking tones. Add to this the fact that WAV export, user sampling and even resampling is supported and you have an efficient, inspirational environment for producing killer loops or even full tracks. The developer warns that this free version is intended as a means by which the product may be test-driven, and thus may not feel as stable as the commercial version, but we've had nothing but good experiences with it.



Designed for the iPhone, NanoStudio now brings six tracks of superior synthesis to your PC or Mac

> Step by step Making a beat in NanoStudio



1 > NanoStudio will launch with a demo set. We want to start from scratch, so let's click the **Main Menu** button in the upper left corner. Choose **Manage**, and create a **New** project. You will be asked to name the project. You'll have to use the mouse on the keypad, as NanoStudio was designed for a touchscreen.



2 > Once we've created our new project we're met with the first of the Eden screens, so let's have a quick play. Call up presets using the **+/-** buttons. Some of them are terrific, but what we want to dig into are NanoStudio's drums. Click the **Main Menu** button again and choose the **TRG-16** at the top.



3 > The TRG-16 presents an interface familiar to anyone who has used one of Akai's MPC series. Click on the various pads to hear how the drums sound. Pretty good, but we could use a bit of customisation. To change the pitch of the snare drum, click on the **Edit** button. You'll be asked to select a pad to edit. Click on the **Snare** pad.



4 > As you can see, there are scads of options here, ranging from sampling to the direction of sample playback. Let's transpose our sample down to **-3**. Also, let's change the bus from **Bus 1** to **Bus 2** – this is accomplished by clicking the button in the upper right corner. You can audition your handiwork with the pad there.



5 > When you've tweaked the sound to taste, click **Done** to return to the main TRG-16 interface. Now let's lay down a track. You can spread the drums across tracks 5 and 6 – currently, track 5 is ready to go. Click the **Record** button in the upper right corner. You'll get a click and a two-bar count-in. Lay down a kick and snare beat.



6 > Click on the **Main Menu** button and select **Song**, and you'll see your recording in place on track 5. Click your new clip to select it. You'll see a new menu of options appear at the bottom. Choose **Edit** to reveal the familiar piano roll. Here, you can draw new notes and otherwise tweak your handiwork.

Sonoma Wire Works
RiffWorks T4

PC MAC

What is it: Multitrack software for guitarists
Format: Standalone
Web: www.sonomawireworks.com/T4
System requirements: **PC** PIII 1GHz, ASIO interface, Windows XP/Vista, 512MB RAM **Mac** G4 1.33GHz, OS X 10.4/10.5, UB, 512MB RAM

Guitarists are generally a more sociable lot than electronic musicians; they crave interaction and collaboration, and are less comfortable in the solitary environs of the desktop music studio. Sonoma Wire Works know this and have issued a number of applications that cater to guitarists and other like-minded musicians.

Such devotion to cause shows throughout RiffWorks, from the guitar-pick dock icon to the stomping InstantDrummer beat that propels the riffage. Riffs are what the program is all about – and once recorded, they can be combined with other riffs to build a song in the Song Timeline. It's the same concept used by pattern-based sequencers, only here we're talking about audio clips rather than MIDI sequences. VST effects are supported, and there are some terrific bundled effects that can be applied to both your riffing and InstantDrummer.

RiffWorks T4 is an enjoyable excursion and well worth a look for the savvy six-stringer.



Sonoma Wire Works' RiffWorks T4 was designed specifically for all the axe-handlers among us

Traverso DAW
Traverso

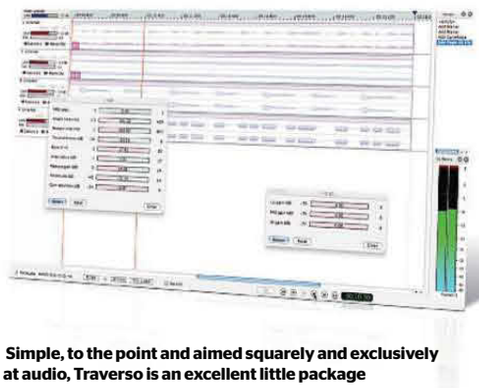
PC MAC LINUX

What is it: Audio recording/editing/mastering package
Format: Standalone
Web: traverso-daw.org
Test systems: **PC** 2.4GHz Intel Core 2 Duo, 4GB RAM, Windows XP, M-Audio Fast Track Pro; Intel Pentium 4, 3GHz, 2.4GB RAM, Ubuntu 9.10 **Mac** 2.4GHz Intel Core 2 Duo, 4GB RAM, OS X 10.5.8, M-Audio Fast Track Pro

A DAW without MIDI sequencing? It hardly seems conceivable. That's because so many of the most popular DAWs began life as MIDI sequencers way back when digital audio was in its infancy. Yet for musicians who simply want to record their acoustic and electric instruments, MIDI support amounts to little more than screen clutter.

If that describes you, you may want to take a good look at Traverso. It aims to present a simple, intuitive workflow, stripped of all the so-called features that many bedroom producers never use. So Spartan is Traverso that it makes GarageBand look like, well... Logic, actually! All of the necessities are in place, however. Recording, automation, mixing and mastering are here, along with CD creation. There's an included suite of LV2 plug-ins for sweetening your signals. LV2 is a plug-in format developed for Linux, but the LV2 plugs included in the OS X version of Traverso work on your Mac, too. Alas, the Windows version doesn't include these plug-ins – pity, as some of them are quite good! All versions, however, offer over 40 offline processes, courtesy of the open-source processing utility SoX.

Traverso is as easy to use as pretty much anything we've ever tried. Most of the things you need to do are handled with menus or simple right-clicking, and key commands abound to keep the workflow hopping. All in all, this is a lightweight package that carries a surprisingly heavyweight punch.



Simple, to the point and aimed squarely and exclusively at audio, Traverso is an excellent little package

Jokosher community
Jokosher

PC LINUX

What is it: Multitrack audio recorder
Format: Standalone
Web: jokosher.org
Test systems: **PC** 2.4GHz Intel Core 2 Duo, 4GB RAM, Windows XP, M-Audio Fast Track Pro; Intel Pentium 4, 3GHz, 2.4MB RAM, Ubuntu 9.10

You've got to hand it to those Linux folks: they know how to keep their DAWs simple. Well, OK, not all of them are simple, but there does seem to be an emergent trend towards basic, robust multitrackers that can be navigated without the need for spelunking gear.

Like Traverso (above), Jokosher is all about getting on with the job of audio recording. You get import and export of a variety of audio formats, including MP3, WAV, FLAC and Ogg Vorbis. A start-up screen guides you through the process of creating your first project, and editing is kept simple with obvious split, trim and move tools. Level automation is provided, and Linux users can avail themselves of the many LADSPA plug-ins available to their format of choice. The GUI is familiar, with an 'inspector' along the left-hand side and tracks travelling from left to right across the majority of the screen. It's all presented in a manner that contrasts sharply with the grey gloom of so many recent DAWs – everything about Jokosher is big, brash and vibrant. The mixer channels are huge and obvious, the track icons seemingly drawn in Crayola. That's not to say this is kid's stuff, though. Jokosher is capable of some serious production – provided MIDI isn't part of your workflow.



Another brilliant Linux DAW that's made the jump to Windows, Jokosher is all about audio recording

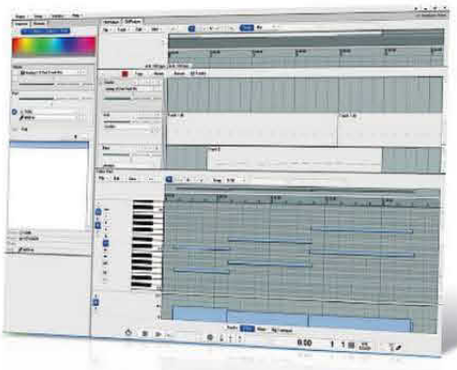
Zynewave Podium Free

PC

What is it: VST-hosting MIDI/audio recorder/sequencer
Format: Standalone
Web: www.zynewave.com
System requirements: **PC** 800MHz CPU, 512MB RAM, Windows 2000/XP/Vista/7, soundcard with MME or ASIO driver (ASIO recommended)

Sometimes we stumble onto a bit of freeware that leaves us asking, "How can something this good be free?" One such product is Frits Nielsen's brilliant Podium Free. Yes, it lacks some of the features of the commercial version (itself quite inexpensive) – you don't get multicore or 64-bit support, ReWire and surround sound are out, and there's only a single set of MIDI I/O. However, you are free to export audio and save your projects, and there are no nags or time-outs. This is not a demo, but a fully functioning DAW.

And what a DAW it is! The interface is gorgeous and easy to understand, and the workflow feels comfortable. It's laid out sensibly enough that we were able to achieve most basic recording and editing tasks without ever cracking open the manual. The interface is familiar: tracks are splayed out across most of the upper right, with an 'inspector' down the left side. The MIDI editor, Mixer and other such niceties expand across the bottom third of the screen, à la Logic or GarageBand. Using VST instruments and effects is possible, and automation is in play for hands-free mixing. You even can change the overall colour scheme to suit your taste.



If it sounds too good to be true, it's probably Podium Free. We still can't believe Zynewave are giving this away

Experimental Scene DarkWave Studio

PC

What is it: Modular virtual studio and VST host
Format: Standalone
Web: www.experimentalscene.com
System requirements: Windows XP/Vista/7

What could possibly be better than a free open-source virtual studio? A free open-source modular virtual studio, that's what! And Daniel Werner's DarkWave Studio is exactly that. Offering support for both x64 and x86 systems and even the ability to take advantage of multicore/multi-CPU systems, DarkWave Studio is nowhere if not squarely on the bleeding edge. ASIO cards are a go, as are VST instruments and effects. The latter can be strung together willy-nilly in DarkWave's modular Studio view, which also happens to be where the plug-in editors are accessed.

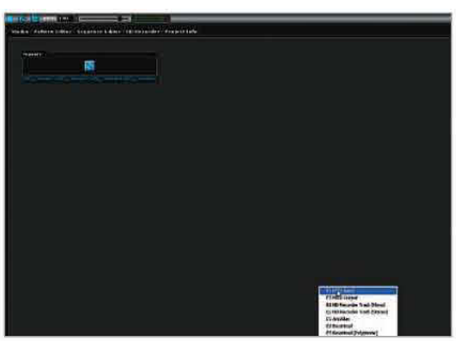
Speaking of plug-ins, the package comes bundled with some humdingers – there's a thumping, pumping drum machine, a dedicated kick drum synth, as well as reverb, delay and much more. In fact, some of the basics are instantiated as effects – this includes the MIDI and Audio I/O, and even the Mixer. Additional windows include the Pattern Editor, where, as you'd expect, musical passages are created and edited. There's a Sequencer view where said patterns are strung together to make arrangements and an HD Recorder view for recording and playback of audio.

Modular studios such as this one are ideal for the experimentally minded. Great fun can be had cobbling together combinations of instruments and effects – it's an exciting way to work. DarkWave Studio isn't bulletproof – we found it all too easy to introduce playback artefacts at times – but it offers so many possibilities that we won't hold any minor kinks against it. The source code is available for those of you who'd like to help develop it further.

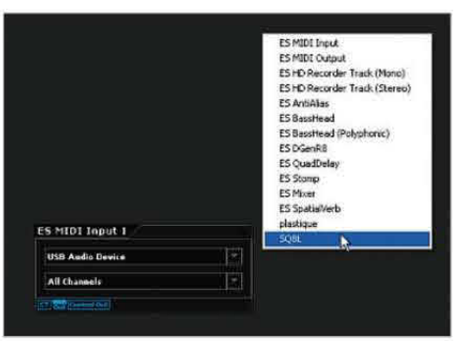


Control freaks can create their own custom studios using Experimental Scene's open-source DarkWave Studio

> Step by step: Setting up MIDI in DarkWave Studio



1 > Modular DAWs offer complete flexibility, but that flexibility means they are often a little difficult to set up. Not so with DarkWave Studio. Open it and make sure your audio interface is the device of choice in the **Options** menu. Assign your VST path and right-click in an empty area in the Studio view. Select **ES MIDI Input**.



2 > A MIDI input module will appear. Click on the blue square in the centre of the module to bring up its interface. Use the dropdown menu to select your preferred MIDI input hardware. We've chosen a USB interface. You can select the desired MIDI channel as well. Right-click in an empty area and select an instrument plug-in.



3 > Click on the **Control Out** area of the MIDI interface and drag a wire to the **Control In** area on the VST plug-in you installed. Click and drag a wire from the **Line Out** of the plug-in to the desired **Channel** inputs of your Master module. You can do this with the VST GUI open, too. Now you should be able to play your VST.

LMMS

LMMS

PC LINUX

What is it	Virtual studio/VST and LADSPA host
Format	Standalone
Web	lmms.sourceforge.net
System requirements	**PC** 1GHz processor, 512MB RAM. Multicore CPU recommended for VST and recent SVN copies of LMMS

What's in a name? Well, maybe too much or too little, depending on how you look at it. LMMS is short for Linux Multimedia Studio, a name that made perfect sense back when the software was being developed solely for Linux computers. LMMS is now available for Windows, however, and an OS X version is in the works. Obviously a name change is in order, and the developers have even put out a call for help coming up with a suitable moniker.

Call it what you like, but don't call it anything less than remarkable. LMMS is a full-featured virtual studio resembling, to some extent, FL Studio or GarageBand. Loads of instruments and effects come bundled with it and it can access plenty more, thanks to VST support. Even the Linux version has a built-in VST wrapper!

Pattern sequencing is the order of the day. Piano roll editing is in place, and there's the dedicated Beat+Bassline Editor for laying down rhythms and the Song Editor for stringing patterns together. The FX Mixer will aid you in knocking out that perfect floor-filling mix, and the per-track automation features will help you tweak it to perfection. And get this: it'll load FLP (FruityLoops) files too. Awesome.



Don't be fooled by the name – LMMS is a superb sequencer that's not just for Linux users any more

> Step by step Beat+Bassline in LMMS



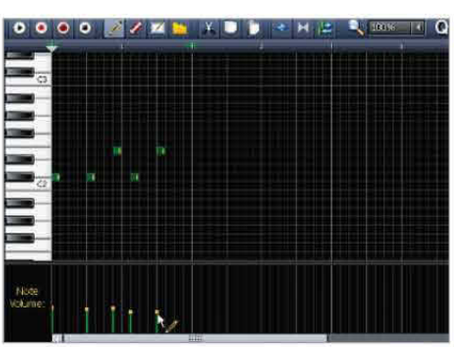
1 > LMMS provides a powerful virtual composition environment that bears no small similarity in appearance to a certain super-citric studio. The similarity is only skin-deep, though – you'll soon find that LMMS has its own unique character and workflow. Let's check it out. Fire it up, and adjust your hardware and choose your paths in the **Settings** menu.



2 > LMMS divides its sequencing into a couple of different, specific types. Most importantly, it offers a dedicated Beat+Bassline Editor that is used to lay down the basic rhythm. Click the window that says **Default preset** in the Beat+Bassline Editor (not the one in the Song Editor). This will bring up the default instrument, Triple Oscillator.



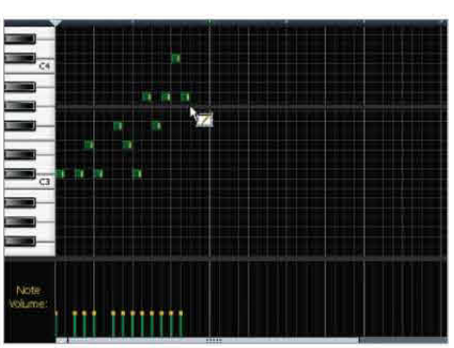
3 > There is currently only this one track in the Beat+Bassline Editor, and that's fine for now. Click on the little tool icon in this track if you want to assign your MIDI input device. The current sound is pretty dull, so we tweaked Triple Oscillator's parameters until we had a nice, juicy resonant patch (**Tutorial files/DAWs/Rezzy.fxp**). You can make your own or use ours.



4 > Now we lay down a basic rhythm track. Right-click on the sequence steps in the Beat+Bassline Editor and choose **Open in piano-roll**. Enter notes by left-clicking in the grid and remove them by right-clicking. You can re-size them and drag them up and down in pitch. Note volume is controlled via the pane just below the piano roll.



5 > The Beat+Bassline Editor has its own transport controls; you can use them to audition your pattern while you work. Let's add a kick drum. Click on the **Instrument plugins** button near the top left of the GUI. Find the Kicker plug-in and drag it into the Beat+Bassline Editor. Enter a few kick drum beats in the track Steps.



6 > Let's put our Beat+Bassline track into our song. The Beat+Bassline track is already assigned to a track. Click the loop markers at the top of the Song Editor to loop playback of a selected area. Drag another instrument into the first track in the Song Editor and enter some notes in that track's piano roll. Nice!

Alexander Zolotov
SunVox

PC MAC LINUX MOBILE

What is it Lightweight yet powerful multiplatform modular tracker

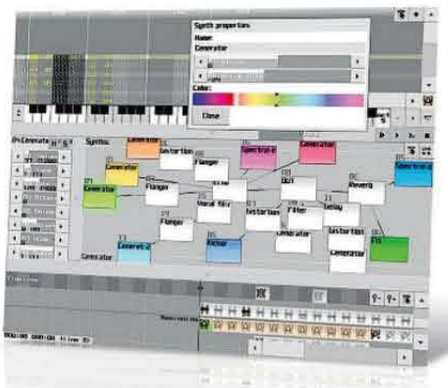
Web www.warmplace.ru/soft/sunvox

System requirements **PC** Windows/Linux (any x86 x86_64 distro), Pentium CPU, 256MB RAM **Mac** OS X 10.5 or higher, 1GB RAM **Mobile** PalmOS 5.0 or higher (ARM CPU, 200MHz or higher), Windows CE (ARM CPU, 200MHz or higher), iPhone/iPad/iPod touch

SunVox is a modular multiplatform tracker that's been designed to run on low-spec machines, so there's never been a better time to dig out that old laptop. Additionally, thanks to its unique and versatile design layout whereby the user can resize and focus on any portion of the screen, SunVox can be run using literally any display size.

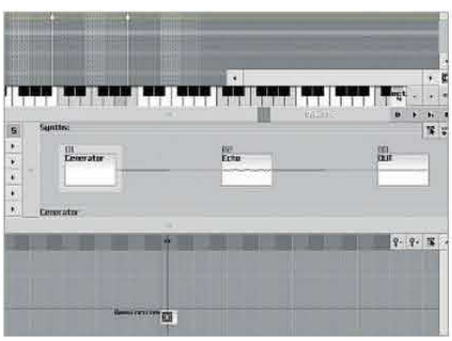
But don't let its low system requirements fool you into thinking this is anything but a modular music studio tour de force – even considering its incredibly small footprint, there's plenty of power under the hood. Synths, samplers and effects units are linked together to form sound chains, notes are arranged using the standard tracker pattern editor, and songs are created by placing multiple patterns both simultaneously and sequentially in the timeline.

And, of course, the versatility of this multiplatform application means you can begin composing on a Macbook Pro, do the middle eight on your desktop PC and tie up any loose ends on your PalmOS device. SunVox is also available on the iPhone and iPad, though you'll be charged a small fee for the privilege.

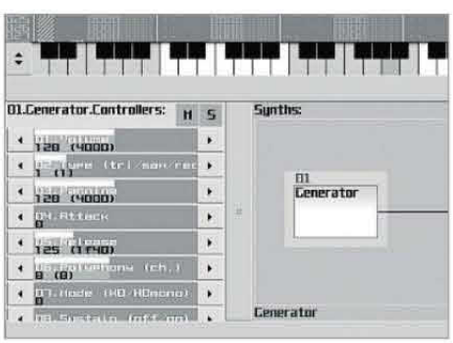


SunVox has been specifically designed to run on low-spec hardware, and in any display size

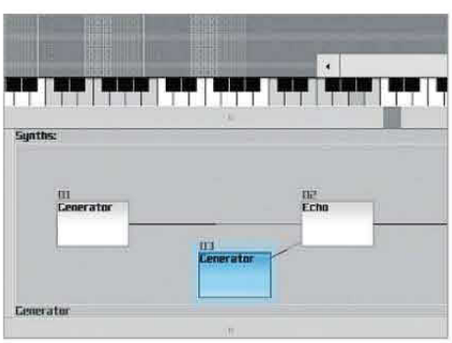
> Step by step: Hooking up with SunVox



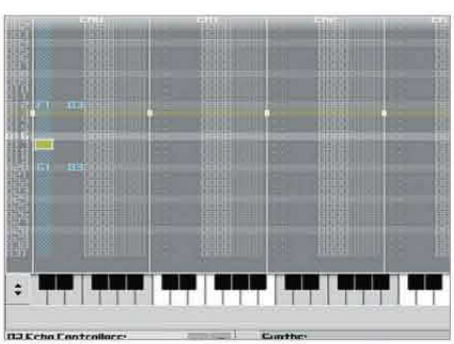
1 > Click the **Record** dot (or press the **Spacebar**) to enter edit mode. Input a melody with the Generator 01 sound that loads up on launch, using the QWERTY keys or on-screen keyboard. Use the arrow keys to navigate the pattern editor, or swipe if you're using a touchscreen device (**Tutorial files/Trackers/SunVox/CM_SunVox_1.sunvox**).



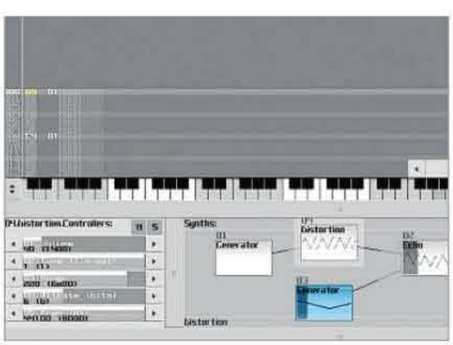
2 > Time to alter our sound. Click the **Play Pattern** button or press **F11** to hear our song as we go. Click on the **Generator 01** synth machine and change the second parameter to **Type 1** (saw wave) in the Controllers box. Then lower the **Release** value (parameter **05**) to about **125**.



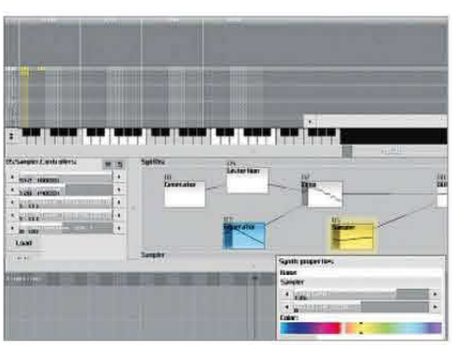
3 > Now let's create a new sound for a bassline. From the menu icon in the Synths section, click **New synth** and choose **Generator**. Double-click or choose **Additional synth properties** from the menu and change the Generator's colour. Connect it by clicking on the **Link** icon and then clicking on the **Echo** machine (**CM_SunVox_3.sunvox**).



4 > With the Generator 03 box highlighted, set the **Release** to about **350** and the **Sustain** to 'Off' (or **0**). Choose **New pattern** from the Timeline menu and drag the new pattern below the old one. Click **-** (minus) to go down in octaves and, with the new pattern highlighted, input a bassline in the Pattern Editor (**CM_SunVox_4.sunvox**).



5 > Click on Generator 01 and unlink it from the Echo machine. Under the **Synths** menu, choose **New synth** and invoke a **Distortion** effect. Now connect Generator 01 to the Distortion, and the Distortion to the Echo. Set the Distortion **Volume** to **40**, **Type** to **1**, **Power** to **220** and **Bitrate** to **6** (**CM_SunVox_5.sunvox**).

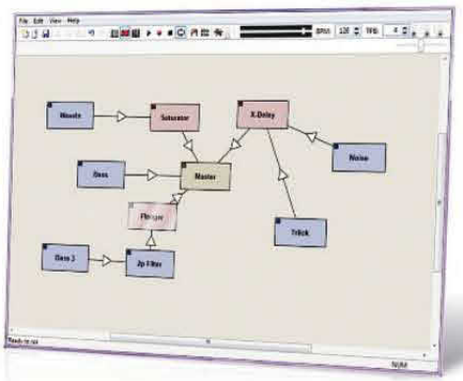


6 > Bring in a Sampler synth and connect it directly to the Out. At the bottom of its parameter list, choose **Load** and load in **Drumloop.wav**. Create a new pattern and enter **d6** (D6 = D, d6 = D sharp) at the top. Highlight the Sampler, choose **Additional synth properties** and change the **Finetune** to **135** (**CM_SunVox_6.sunvox**).

Oskari Tammelin
Buzz PC

What is it Modular tracker with ASIO support
Web jeskola.net/buzz
System requirements **PC** Windows 2000/XP/Vista/7

Beginning in 1997 as a somewhat revolutionary modular sequencer, Buzz was hailed as the first 'third-generation tracker'. It quickly gained popularity, but after lone programmer Oskari Tammelin lost the source code sometime in late 2000, many thought the project had seen its last update. Such a loss was this that, since then, many clones and Buzz-inspired projects have surfaced – Buzé, Buzzle, Buzztard, Aldrin, Nakalyne and Psycle, to name but a few. It wasn't until 2008 that Tammelin announced development would start again from an old backup, and Buzz has now been brought up to date and beyond. Buzz is a tracker that relies on modular synths and effects connected together in series for its sound generation, and the Buzz community has collectively authored many sound machines – and being independent of Buzz, it was unaffected by the eight-year outage in the software's development The result is that there are literally hundreds of top-notch synth and effect units to download and play around with at **www.buzzmachines.com**. The community is large and enduring, and will get you started on your quest to master Buzz – pay a visit at **www.buzzchurch.com**.



Tour de force: the original modular tracker, Buzz has oodles of power and myriad synths and effects

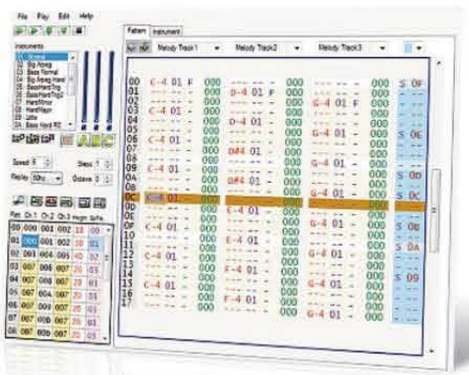
Julien Névo
Arkos Tracker PC

What is it Old-school chipmusic tracker
Web www.julien-nevo.com/arkos/tools.html
System requirements **PC** Windows-based PC with .NET framework

Once upon a time there was an electronics manufacturer called General Instrument that produced a three-voice programmable sound generator called the AY-3-8910. This sound chip and its variants (including the YM2149) would become permanent fixtures in the arcade machines and home computers of the 1980s. Arkos is a music tracker designed to emulate the squeaks and bleeps of the AY-3-8910 within the comfort of a Windows environment.

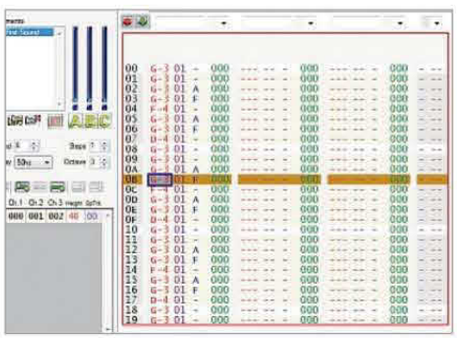
Arranging songs on Arkos Tracker is a somewhat different task than on other trackers in that each of the three tracks that make up a pattern are exclusive of one another, meaning that you can mix and match tracks in different patterns – this makes it very easy to repeat note information. As well as enabling you to export your music to WAV, Arkos also gives you an option to export as a YM or binary file, so you can even have the pleasure of listening to your retro tune on that vintage computer you have languishing in the loft.

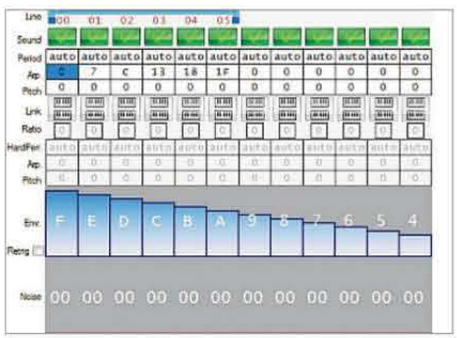
While it's not as in vogue as the dulcet sounds of the C64's excellent and much-sought-after SID chip, the AY-3-8910 series can produce some great noises and is certainly worth taking a look at. To get a taster of the kinds of timbres it has to offer, load in the demo song that comes with Arkos Tracker itself and give it a listen.

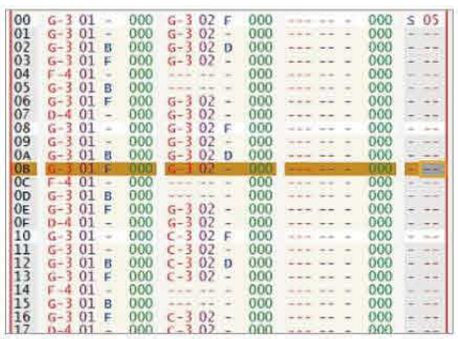


Arkos Tracker is the perfect tool for old school music production and the freshest in-vogue chip music

> Step by step Getting retro with Arkos Tracker







1 > Press the **Spacebar** to enter edit mode and enter a melody using the QWERTY keyboard. To set the track volume, use a hex value from **0** to **F** in the third column. Use the transport control at the top left or press **F5** to play and **Esc** to stop. **Ctrl+C** and **Ctrl+V** copies and pastes highlighted sections (**Tutorial files/Trackers/Arkos Tracker/CM_Arkos_1.aks**).

2 > Click on the **Duplicate Instrument** icon below the instrument list, click on the Instrument tab above the pattern editor and rename to **Arp**. Scroll to the right and drag the right end of the blue bar to line 05. Click inside each line's Arp box in turn and enter the hex values **0**, **7**, **C**, **13**, **18** and **1F** respectively (**CM_Arkos_2.aks**).

3 > On the second track, enter a rhythmic line using our new instrument. To automatically loop the arpeggio, click once on the blue bar in the Instrument editor so that it turns green. The tempo of the song is dictated by the fourth smaller track. Type **S** in the first column and then a value for the speed (**CM_Arkos_3.aks**).

OpenMPT development team

PC

Open ModPlug Tracker

What is it: Open-source tracker with VST hosting
Web: openmpt.com
System requirements: **PC** Windows 2000/XP Vista/7

Open ModPlug Tracker (or OpenMPT) is the open-source evolution of the ModPlug Tracker originally written by Olivier Lapicque. The early seeds of it were first seen as a browser plug-in, way back when Netscape Navigator and general MIDI were all the rage. After Lapicque stopped developing, ModPlug Tracker saw a few years of neglect before a team of meritorious open-source boffins resurrected his work, dedicating their time and effort in order to bring this classic tracker up to scratch. And their work has not been in vain, as OpenMPT is fairly bulging with great new features.

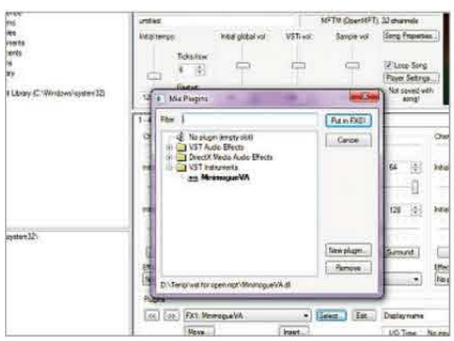
OpenMPT is a true successor to the classic Amiga and PC DOS trackers, supporting both loading and saving of Scream Tracker, FastTracker 2, Impulse Tracker and classic MOD files. It also makes editing and listening between songs very easy, as multiple files can be loaded at once and switched between using windows.

For QWERTY keyboard input, OpenMPT uses the three rows of keys starting with Q, A and Z for three octaves, each key to the right stepping up a semitone. In our walkthrough we'll be looking at using VSTs inside OpenMPT, so make sure you first setup your VST Plugins folder by clicking on **View»Setup** (or press **Ctrl+F1**) and entering your VST folder path in the box provided. We're using MinimogueVA and Glitch for this tutorial (available on the coverdisc), so make sure they're in your **VST plugins** folder.

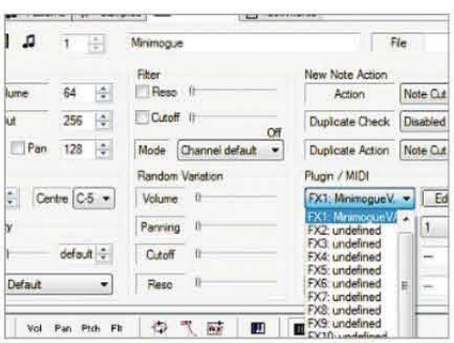


OpenMPT combines the traditions of old-school tracking with the power of modern VSTs in one elegant package

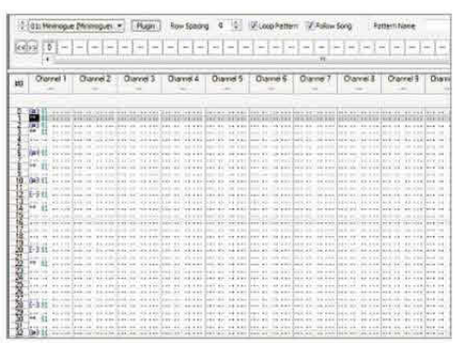
> Step by step: Opening up OpenMPT



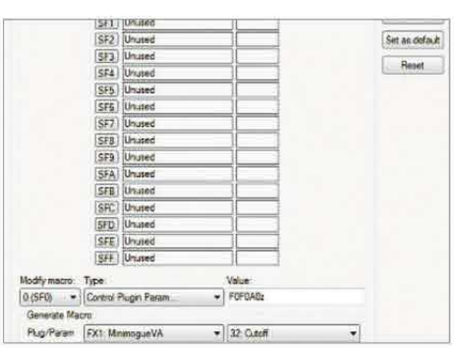
1 > Load up OpenMPT and click **File»New» MPTM** to open up a new song. Under the **General** tab, choose **Select** inside the **Plugins** area. Click **New plugin** and open the DLL file for MinimogueVA, which adds it to OpenMPT's plug-in list. Select MinimogueVA and click **Put in FX01** (**Tutorial files/Trackers/Open MPT/ CM_OpenMPT_1.mptm**).



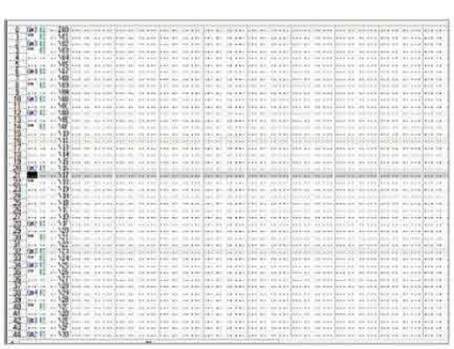
2 > Select the **Instruments** tab, click the **New Instrument** icon and name the Instrument 'Minimogue' at the top. In the box underneath **Plugin/MIDI**, choose **FX1: Minimogue VA**. You should hear the synth now when using the QWERTY keys. If your keyboard loses focus, click the up or down arrows next to the instrument number **1** (**CM_OpenMPT_2.mptm**).



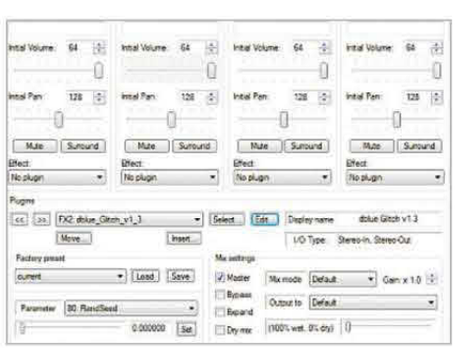
3 > Switch to the **Patterns** tab and make sure **01: Minimogue** is present in the instrument box near the top of the screen. Highlight the red 'record' symbol and enter in a bassline on Channel 1. Use the arrow keys to navigate the pattern and use the **=** symbol to enter a 'note off'. Use **F5/F6** to play and **F8** to stop your song (**CM_OpenMPT_3.mptmr**).



4 > To automate the cutoff, click the **Zxx** icon under the Patterns tab, change the Type to **Control Plugin Parameter**, then choose **32: Cutoff** in the box next to **FX1: Minimogue VA**. Note that this changes **SF0** above, which is set up by default in the song (**CM_OpenMPT_4.mptm**).



5 > Enter **Z00** in the first line of the effects column to set the **Cutoff** to 0. In the second line enter **\01** to slide to 1. Enter a value of **\30** further down the pattern, and with the mouse, highlight from **\01** to **\30**, press the right mouse button and choose **Interpolate Effect**. OpenMPT will fill in the missing values (**CM_OpenMPT_5.mptm**).



6 > Let's add Glitch to the effects for this channel. In the General tab, click the right arrow in the Plugins area. Hit **Select** and bring in Glitch (as in Step 1). Click the **Master** tick box under **Mix Settings** and play back your song. Click the **Edit** box next to **FX2: dblue_Glitch_v1_3** to tweak its settings (**CM_OpenMPT_6.mptm**).



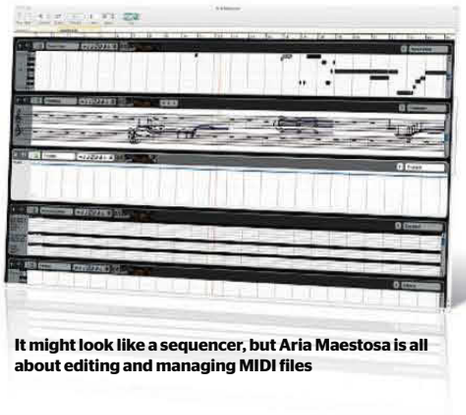
From studio essentials to one-trick wonders, we present a range of music production tools for just about any task you can imagine

Aria Maestosa
Aria Maestosa 1.2.2

PC MAC LINUX

What is it MIDI file player and editor
Format Standalone
Web ariamaestosa.sourceforge.net
System requirements **PC** Windows XP/Vista/7, Linux (ALSA) **Mac** OS X 10.4+ (PPC and Intel)

Why do we have an application that looks suspiciously like a sequencer listed among our utilities? Well, Aria Maestosa presents a bit of a dilemma. Sure, it looks like a MIDI sequencer, complete with piano roll, guitar, drum and notation editors, but its focus is squarely on importing and editing standard MIDI files of the sort that you might download from an online source. There is no facility for using plug-ins or even external gear. The aim here is to audition, manage and edit your MIDI files in a super-fast, intuitive environment. An imported file is automatically splayed across the screen, and the appropriate instruments assigned to each channel. You can select, move, draw and delete notes. You can select only certain notes (for example, you might select and move all of the G♯ notes in a track), and you can, of course, change the tempo of the track. When you hear something you like, it can be exported as a MIDI file or even as an audio track.



It might look like a sequencer, but Aria Maestosa is all about editing and managing MIDI files

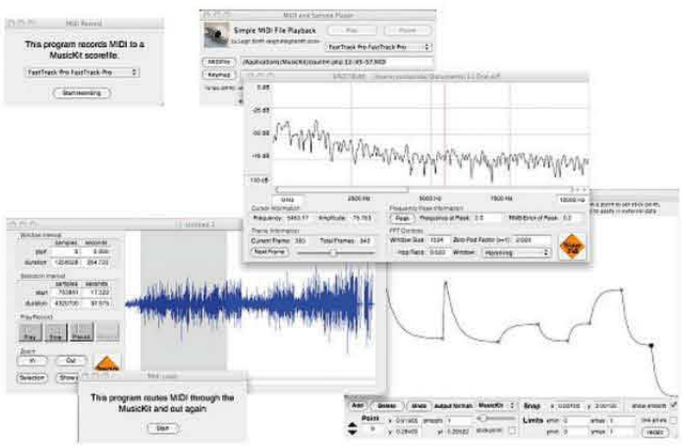
CCRMA
MusicKit

PC MAC LINUX

What is it Utility collection of players, music makers and processors
Web www.musickit.org
Test system **PC** 2.4GHz Intel Core 2 Duo, 4GB RAM **Mac** OS X 10.5.8, M-Audio Fast Track Pro

Stanford University's Center for Computer Research in Music and Acoustics has certainly earned its place in the history of modern music technology. The home of John Chowning, the man behind the FM synthesis technology that drove the digital synthesiser revolution of the 80s, is still going strong, exploring, experimenting and innovating. Of particular interest to us is the collection of gubbins compiled as MusicKit. Chock-full of analysis tools, recording and playback devices, modulators and more, this open-source package is described as "an object-oriented software system for building music, sound, signal processing and MIDI applications".

What that means to us is that it can be used by programmers to create a wide range of tools for performance, physical modelling and experimentation. Like PD and CPS, this is a language, not a software representation of a modular system. It makes our utilities list not for the code itself, but for what has already been done with it. There are plenty of cool mini-apps available, including signal generators, MIDI and sample playback and recording tools, a MIDI router, spectrum analyser, and a superb multisegment envelope generator.



Got an appetite for processing? MusicKit serves up a smorgasbord of tasty utilities for musicians

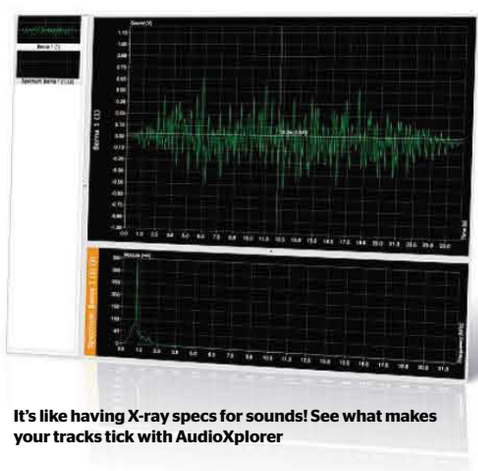
Arizona Software
AudioXplorer 1.3.1

MAC

What is it Spectrum analysis tool
Format Standalone
Web www.arizona-software.ch/audioxplorer/
Test system **Mac** OS X 10.5.8, M-Audio Fast Track Pro

Few things can help you get your head around your sound like taking a look at what's going on inside it. The folks at Arizona Software know this, and have created AudioXplorer just for that purpose. AudioXplorer offers both static and real-time analysis of audio. You can import any QuickTime-compatible sound (including MP3, MP4, WAV, SND and AIF), or record directly into the program. Once you've got the sound in, you can take a look at its innards using Fast Fourier Transform, Sonogram and Oscilloscope functions. Multiple views are available simultaneously. You can also apply AU effects and export your sound as an AIFF file (meaning you can use AudioXplorer as a quick file conversion tool). You can even export the images onscreen as TIFF, PDF, EPS or raw data files. Oh, and did we mention that AudioXplorer can generate sounds, too? Yep, it can produce sine, cosine, square, triangle and sawtooth waveforms with user-defined frequencies and amplitudes.

AudioXplorer was started way back in 2003 and has since been 'retired', meaning that the developer no longer actively supports it, though it is still available for download (along with the source code, should you need it). Retired it may be, but it remains a terrific toolkit that can teach you a lot about what you are hearing.



It's like having X-ray specs for sounds! See what makes your tracks tick with AudioXplorer

Paul Boersma/David Weenink
Praat

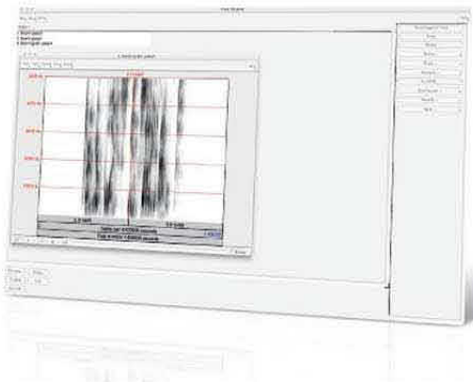
PC MAC LINUX

What is it A program to analyse, synthesise and manipulate speech
Format Standalone
Web www.fon.hum.uva.nl/praat/
Test system **PC** 2.4GHz Intel Core 2 Duo, 4GB RAM
Mac OS X 10.5.8, M-Audio Fast Track Pro

Praat is a deep and complicated program dedicated to the exploration of speech. It can analyse, synthesise and manipulate the human voice in a variety of ways.

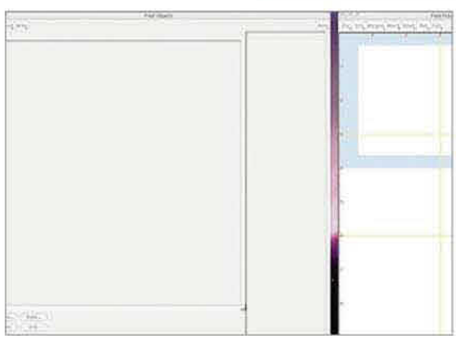
You've probably seen tools similar to those offered by Praat in use as parts of other sound manipulation applications. Experienced users will recognize spectrum and formant analysis, both of which are used in software that can change, say, the timing of a voice without affecting the pitch. Praat allows you to do similar things. You can analyse existing speech files, or record new ones directly into Praat. If you are studiously inclined, you could even create your own file from the ground up using complex mathematical expressions, though we have to admit that this somewhat brain-boggling prospect left us reaching for the aspirin!

Thankfully, a degree in physics isn't required to toss around a few vowels. Praat can be (and is) somewhat high-falutin', but that didn't stop us from having some serious fun fooling with our phonemes – and we gained a better understanding of human speech in the process. As an academic endeavour, Praat is designed not to be learned, but rather to help you learn. Still, we think it's a neat tool for sound design!



Praat provides powerful processing for the analysis, synthesis and manipulation of speech

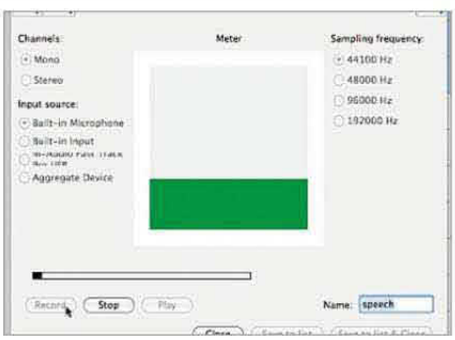
> Step by step Gender-bending with Praat



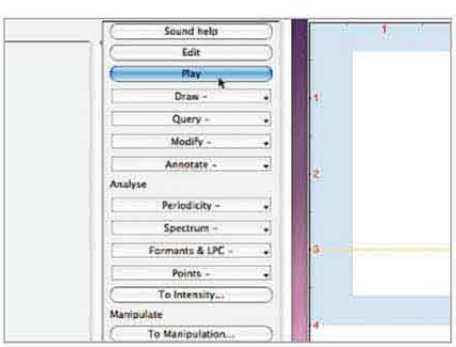
1 > Let's do a quick bit of formant manipulation using Praat. You may need to download and install some TrueType fonts in order to properly display phonetic characters on your screen. These are free and can be found at **www.fon.hum.uva.nl/praat/download_mac.html**. Having done that, we can start up Praat.



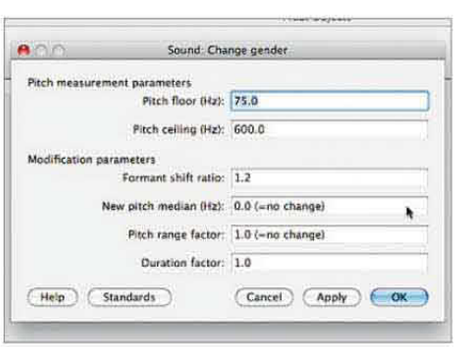
2 > We're not so academically inclined that we can generate a bit of speech from a mathematical expression, so we'll have to settle for recording one into the program. This can be done by selecting **Record Mono Sound** from the **New** menu in the Praat Objects window. You will then be presented with a SoundRecorder window.



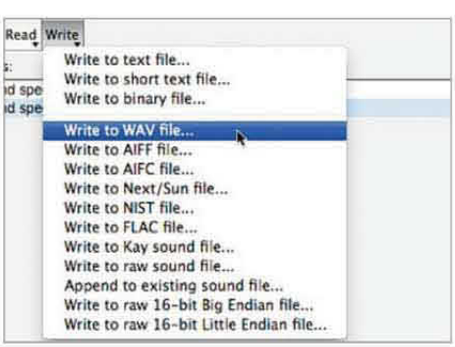
3 > You might want to give your sound a name; we called ours simply 'speech'. You can choose the input source, sample rate and number of channels. There is a VU meter to clue you in to the amplitude. Hit **Record** and wait for it to start recording. Now, say something into the microphone. Try to articulate your words clearly.



4 > Once you have a phrase you like, stop recording (alternatively, load the **Speech.wav** file from the coverdisc by selecting **Read From File** in the **Read** menu). The sound will appear in the Objects list in the Praat Objects window. Select it. Click **Play** to audition your sound.



5 > Let's change the gender of our voice recording. This is done with pitchshifting and formant manipulation. Making sure the file is selected, click on the **Convert** menu and select **Change Gender**. A pop-up will appear offering you a variety of options. We've left the defaults in place.



6 > When you're done with the gender change, you'll find you have a new file object in your Praat Objects window. Select it and click **Play**. Hey, that's an operation worthy of Dr Frank-N-Furter! Try using some of the filters on offer – each change will result in a new object.

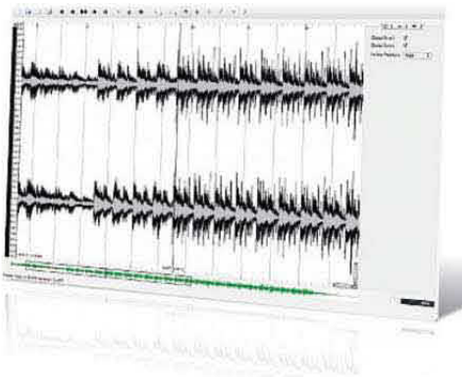
Centre for Digital Music
Sonic Visualiser

PC MAC LINUX

What is it	Audio file analyser
Format	Standalone
Web	sonicvisualiser.org/index.html
Test system	**PC** 2.4GHz Intel Core 2 Duo, 4GB RAM **Mac** OS X 10.5.8, M-Audio Fast Track Pro

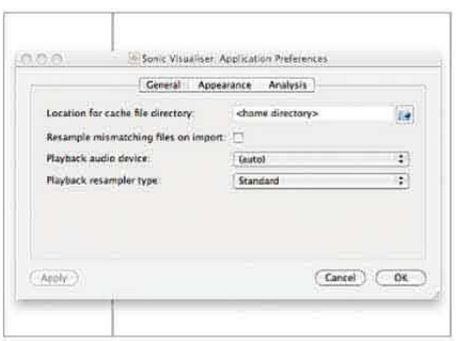
Do you really need another audio analysis program? Perhaps, when the program is as slick and feature-rich as this one from the Centre for Digital Music, Queen Mary University of London. Yes, it's yet another product of the academic world, but unlike some scholarly software, this one feels in every way like a refined commercial product. The interface looks good, it does what it does well, and it throws in some nifty features that are missing from similar programs. Like what, you ask? How about the ability to drop in audible markers that can be annotated? Or the ability to time-align multiple takes with fluctuating tempos? Sonic Visualiser can even import and display note data from MIDI files. Like we said: pretty slick.

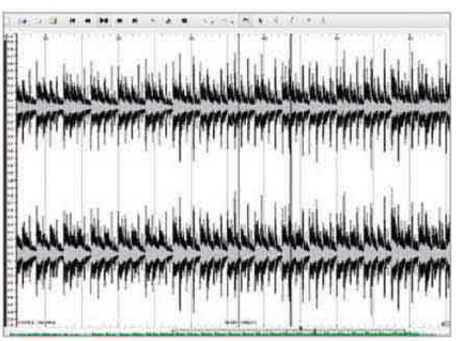
This one is cross-platform. There's even an installer package for Ubuntu (though you can compile your own from source code as well). Some of the features available rely on third-party plug-ins or those from Queen Mary. Analysis plugs are Vamp format and can be downloaded from the Sonic Visualiser site. Being released under the GNU GPL, you won't find direct VST support, but LADSPA and DSSI plugs are a go. Linux users will already likely have plenty on hand, but OS X and Windows users can get LADSPA plugs, too from various online sources.

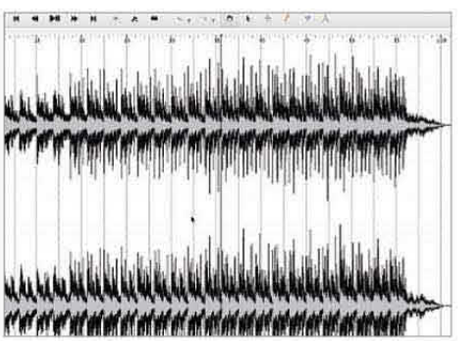


You probably think you don't need another analysis program, but Sonic Visualizer might be too slick to miss

> Step by step Annotation in Sonic Visualiser



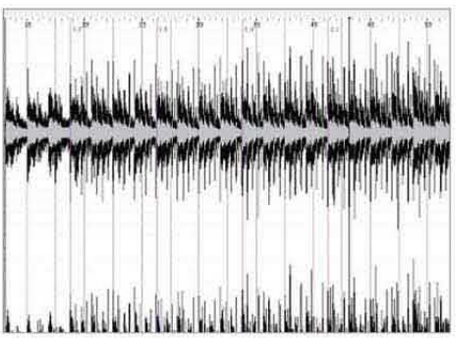


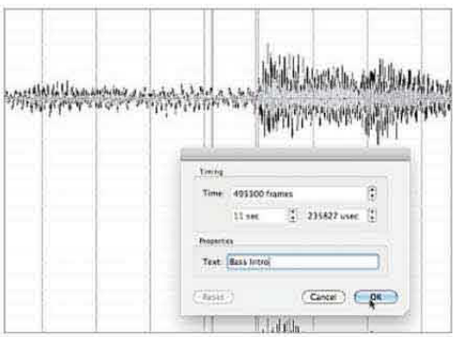


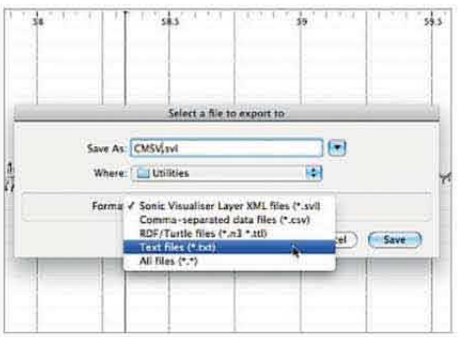
1 > Annotation is one of the coolest features in Sonic Visualiser. It allows you to drop audible markers into a file. This can be quite useful for, say, working out a song's structure by notating each chord change or labelling the individual beats that make up a loop. Open Sonic Visualiser, making sure your audio playback preferences are set up as you like 'em.

2 > Go to the **File** menu and select **Import Audio File**. We've provided a short instrumental file called **Marketplace.wav**. Find it in **Tutorial files/Utilities** on your coverdisc and bring it into the program. Click **Play** in the transport (or tap the **Spacebar**) to listen to the file. Play the track a few times to familiarise yourself with the arrangement.

3 > Our track starts with a gong sound and a short intro before moving onto a piece that builds, adding elements with each few measures. We're going to add annotations for each new bit that comes in. First, though, take note of how navigation works in Sonic Visualiser. The song position cursor is dead-centre. You can move about the song by clicking and dragging.







4 > We can add the annotation markers on the fly or drop them in by zeroing in on the desired position. Let's start with the former. If you haven't already, return to zero. Annotation markers are added by tapping the semi-colon (;) key. Play the track, tapping in a marker at the beginning of each new section.

5 > We wound up with five markers, numbered 1.1, 1.2, 1.3, 1.4 and 2.1. Play the track again. As you can hear, there is an audible click every time a marker is passed. Stop the playback and double-click on the marker labelled 1.1 to edit it. You can now change the marker's position and name.

6 > You can save your annotations via the **Export Annotation Layer** command in the **File** menu. Sonic Visualiser treats Annotations as a separate layer that can be edited, copied and pasted into new files, and you can export them as different formats. Here, we're exporting ours as a text file (**CMSV.txt**).

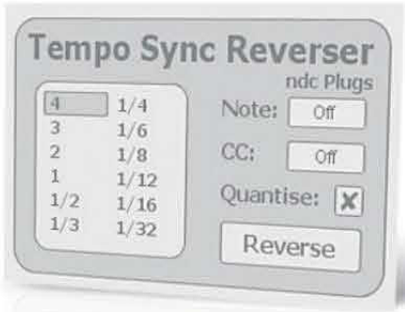
ndc Plugs
Tempo Sync Reverser

PC MAC

What is it: Real-time audio reverser
Format: VST
Web: www.niallmoody.com/ndcplugs/tsreverser.htm
Test system: **PC** Intel 2.54GHz Core 2 Duo, Windows XP, M-Audio Fast Track Pro

Make no mistake: we love a bit of weirdness, and that's exactly what you'll get from ndc Plugs' Tempo Sync Reverser. Though it instantiates as a VST effect, it really isn't. There's no dry/wet control and almost no real-time controls onboard. That doesn't matter, though, because what it does, it does brilliantly. And what exactly does it do? Simple. It listens to incoming audio and then flips a bit of it around, playing it backwards, and it does it without skipping a beat.

Aimed at live performance, it has only a smattering of controls across its GUI. You can select one of a dozen note lengths that determine how long the reversed portion of the audio will be. A Reverse button is the sole real-time parameter and, as you might imagine, kick-starts the process. You can elect to have the reversed bit start immediately, or on the start of the next assigned beat division. Tempo Sync Reverser is nothing short of a blast to play with, and is ideal for live use or even real-time remixing.



Switch things up in your live performances with ndc Plugs' real-time Tempo Sync Reverser

ndc Plugs
Stretch & Squash 1.01

PC

What is it: Audio manipulation tool
Format: VST
Web: www.niallmoody.com/ndcplugs/sands.htm
Test system: **PC** 2.54GHz Core 2 Duo, Windows XP, M-Audio Fast Track Pro

This is another bit of bizarre behaviour from the mind of Niall Moody. He modestly claims that there probably aren't too many uses for such a plug-in, but we think it serves a good purpose – and that purpose is to mess around with your audio in the time domain. Again, this one instantiates as an effect, but it is not like the sorts of effects you might drop into a typical mixer channel. Nor is it terribly 'utilitarian' for anyone but the most experimentally minded. Nevertheless, we like what we hear!

This time around, Moody has provided us with a plug-in that applies a sine wave as a modulator to the playback rate of any incoming audio. In order to work its magic, Stretch & Squash relies on a buffer, which means that there will always be a bit of a delay between the incoming and outgoing audio. Such an application also means that the sound can be reversed, if you so desire, and there is a direction button for that purpose. You can also control the coarse and fine frequency of the sine wave and adjust the depth of the effect on the audio.

Stretch & Squash certainly isn't flawless (we encountered some audible artefacts with some material on some hosts), but it's great fun to play with – although it might not be suitable for users who are prone to motion sickness!



Try some temporal trickery with Stretch & Squash, a playback manipulation utility from ndc Plugs

ndc Plugs
MIDI-Controlled ADSR

PC

What is it: Simple MIDI-controlled envelope generator
Format: VST
Web: www.niallmoody.com/ndcplugs/midiadsr.htm
Test system: **PC** 2.54GHz Core 2 Duo, Windows XP, M-Audio Fast Track Pro

We just can't get enough of that Niall Moody and his ndc Plugs, and who can blame us? The fellow insists on deluging musicians with a vast array of fabulous freebies that are functionally quite different from most of the other products out there, and MIDI-Controlled ADSR is a case in point. Like Stretch & Squash (above), this little doodad instantiates as an effects plug-in, but once again, it isn't precisely that.

Think of MIDI-Controlled ADSR as a volume control utility. It wraps itself around the incoming audio signal and allows you to control its volume via MIDI. It is fashioned after the familiar four-stage envelope generator commonly found on vintage-style synthesisers. You get an Attack segment, which governs the time it takes to rise from silence to full volume once the incoming MIDI trigger is received. There is a Decay segment that controls how long it takes to go from that level to the steady state of the Sustain setting, and then there is the Release time, which is how long it takes to fade out once the MIDI note is released. You can adjust these values via numerical entry and adjust the scale of the envelope with a slider.

MIDI-Controlled ADSR a fine way to impart a rhythmic pattern to static sounds and can be used to reshape drums or other instruments.



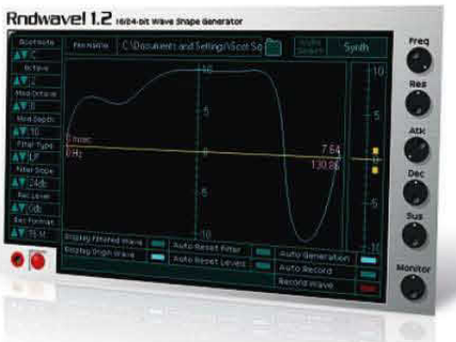
MIDI-Controlled ADSR enables you to adjust the volume of your audio signal via MIDI

Sonic Assault Rndwave! 1.2 PC

What is it: Random waveform creation tool
Format: VST
Web: homepage.ntlworld.com/jez.price
Test system: **PC** 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

There are loads of sample-based and wavetable synthesisers out there, and sound designers often need quick and easy access to a lot of simple, synthesised waves to lob into these instruments. The usual sine, square, triangle and saw waves are fine up to a point, but sometimes more complex waves are desired. Rndwave! lets you generate lots of 'em in a hurry.

You get automatic wave generation and recording, a mono preview mode (with a handy 12dB filter in tow), adjustable record levels and 16-/24-bit WAV support. You determine the desired pitch (over a five-octave range), and you can switch monitoring modes over MIDI. We had a great time listening to it pump out a stream of waveforms while we stabbed at the record button each time we heard something we liked. It dutifully deposited the resultant WAV files onto our drive, ready to roll into a suitable wavetable synth. You can, of course, take a lot more control than that, and if you do you'll be rewarded with a vast collection of terrific tweakable timbres.



Sonic Assault's Rndwave! is a waveform creation tool that blurs the line between instrument, effect, and utility

Sonic Assault Tap! PC

What is it: Tap-tempo utility
Format: VST
Web: homepage.ntlworld.com/jez.price
Test system: **PC** Intel 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

Sometimes, no matter how hard you try, the tempo of a performance evades detection. This is particularly true with live performers or those who incorporate vintage sequencers or drum machines into their work. Tempo detection can likewise be a bothersome task when you're bringing old tape-based material into the desktop environment.

There are, needless to say, a number of solutions on offer, and you have probably already come across some of them. Sonic Assault's Tap! has long been one of our favourites. It's a no-nonsense plug-in that offers a spare handful of controls, the most important of which is the Tap button sitting dead-centre. If you've ever used a hardware delay box, you might have encountered 'tap tempo' functions, wherein you tap out a few beats of the rhythm at the desired tempo and the device calculates the BPM and dutifully assigns the proper delay times. Well, Tap! works a bit like that – you can tap out a beat, and it will calculate and display the BPM. There is also a built-in metronome so that you can hear the tempo of your entry and compare it to that of the host. If you've ever tried to ascertain the tempo of a recording and match your sequencer's tempo to it, you'll already know what a handy feature this can be!



Get a fix on those wayward tempos with Tap!, Sonic Assault's terrific tempo detection tool

Expert Sleepers Latency Fixer PC MAC

What is it: Latency compensation adjustment tool
Format: VST, AU
Web: www.expert-sleepers.co.uk/latencyfixer.html
System requirements: **PC** Windows XP SP2, VST 2.4 host **Mac** OS X 10.5.8, Intel CPU, AU or VST 2.4 host

Let's talk about latency. It's the bugbear of desktop recording, and it's one of which some users aren't even aware. Latency is the time it takes for a signal to move around inside and outside of your computer. Nothing happens at the speed of thought; even the simplest, fastest processes take time, and that time equals a delay in the signal. That delay, if left unchecked, can play havoc with the tempo of your tracks, resulting in phase issues or even tracks that are woefully out of sync.

Fortunately, if you have a modern host, it will compensate for any delay introduced by the plug-ins being used, and for any delay produced by your audio interface. In order to do this, it simply calculates the latency of the longest delayed track and shifts the playback of the other tracks to match. There's only one problem: your host depends on the plug-ins to accurately report their latencies, and often won't adjust for any outboard processing at all.

That's where Latency Fixer comes in. It doesn't actually have any latency of its own, but will report a user-defined latency to the host, causing the host's delay compensation to kick in. You can adjust samples and/or seconds to make up for any delay. It's up to you to figure out how long the delay is, though!



Ever get that syncing feeling your tracks are out of step? Expert Sleeper have the cure for your latency issues

Russell Stoneback
Light Guitar MAC

What is it Emulation of the Light Guitar
Format AU
Website www.lightguitar.org/Light_Guitar_Software.html
System requirements **Mac** OS X 10.5, 1GHz G4 or Intel Processor

We love an anomaly, and here we have exactly that. Light Guitar isn't exactly an instrument – well, it is, but not the sort we're used to. You see, Light Guitar instantiates as an effect, as it is based upon mathematical modelling and requires an impulse signal to set things in motion. You can use an external instrument, such as an actual guitar, or a plug-in of any sort.

Designed by a physicist, the real-life Light Guitar upon which the software is based uses light to make music. Shaped like an acoustic guitar, it measures the electromagnetic waves (also known as light waves) that resonate in its metal body and converts them to sound.

The software recreates the behaviour of the Light Guitar by drawing upon physical measurements of the actual instrument. There is a lot to play with, and the results can be wildly unpredictable. Just as we like it, then. The Frequency Multiplier changes the body size, and there are resonators that mimic the excitation of both the inside and outside of the body.

While we're not going to suggest that the Light Guitar will become a go-to instrument in your rig, it is great fun to mess about with, and the concept alone is imaginative enough to earn it a place in our selection.

CCT
VDumper PC

What is it Plug-in host that produces SF2 files
Format Standalone
Website www.vdumper.com
Test system **PC** 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

It's a great idea: VST instruments are loaded into a host, effects are applied and the results are resampled at various intervals and then exported as WAV files or bundled into SoundFont packages. Ask any sample provider, and they'll tell you the same thing: sampling is tedious work, especially when multisamples are required for a faithful representation of the original sound. VDumper takes the grunt out of the work, with a clear interface that is easy to use.

Instruments and effects are loaded into a rack up top. You tell VDumper which keys it should sample, and at what velocity levels. The length and release time of the sound can be dialed in, and if the plug-ins sync to the host's tempo, you can also adjust the host BPM. There's an automatic looping function that will insert loop points into the samples, and VDumper will even truncate the unused bits after the loop end.



VDumper can create complete multisampled instruments from your plug-ins

RetroWare
midiO 1.3 MAC

mysite.verizon.net/retroware
This is as basic and as necessary as it gets: midiO provides a MIDI output for hosts that are not designed to work with outboard MIDI gear. Sure, most hosts allow for MIDI input, but a few (GarageBand, for one) only allow MIDI to be shuttled to internal software instruments and effects. RetroWare have provided a clean, dependable solution, recommended for Mac OS X 10.4 and up.

ndc Plugs
Brush Strokes PC

www.niallmoody.com/ndcplugs/brushstrokes.htm
Who wouldn't want to paint with sound? The idea with this curious application is to tweak the internally synthesised sound by painting strokes across a canvas with your mouse as notes are triggered from a keyboard or sequencer. The broader the stroke, the louder the sound gets. Granted, it's a bit of a one-trick pony, but it's a pretty enjoyable trick!

Christian-W. Budde
Dither Noiseshaper PC

www.savioursofsoul.de/Christian/vst-plugins/effect-plugins/
It doesn't get more utilitarian than this dithering plug-in. Dithering is a process by which a bit of noise is added to a file during bit-rate reduction in order to maintain the file's sonic integrity. Dither Noiseshaper provides a host with a dithering function that offers four different dither types.

Christian-W. Budde
Phase Rotator PC

www.savioursofsoul.de/Christian/vst-plugins/effect-plugins/
A lot of the utilities in our collection are decidedly over-the-top, meant to mangle signals beyond recognition, but not Phase Rotator. This is a gentle little application, subtly delaying certain frequencies in order to help tame wayward peaks caused by transient smearing.

> Step by step: Producing SoundFonts with VDumper







1 > VDumper is pretty straightforward to use, so let's whip up a quick SF2 file to prove it. Start VDumper and use the Config settings to make sure your audio and MIDI interfaces are cooperating. Now, hit the **Add plugin** button in the main screen and find a synth. We're using TAL-Vintager.

2 > Add an effect (we choose Kjaerhus' Classic Chorus) and select a synth preset (ours is Vintager's **Acid Bass**). Set VDumper's duration to **1,000ms**, and the **Release** to **500ms**. Switch the Autolooper and truncation function off. Click the keys on the keyboard to audition the sound. Right-clicking selects them for sampling.

3 > Select some keys. If the Velocity layers section is empty, you'll need to add at least one velocity layer. Tell VDumper to dump the sound as a WAV or SF2 file – we choose the latter (**CMSF2.sf2** on the cover disc). We also elect to normalize the sound. Once exported, you can play the SF2 file in any suitable SoundFont player.

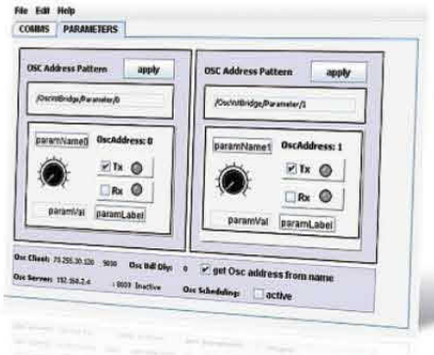
Jason Hector
OscVstBridge

PC

What is it: Allows communication between OSC and VST and other MIDI devices
Format: VST
Web: oscvstbridge.sourceforge.net
Test system: **PC** 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

OSC, or Open Sound Control, is a burgeoning protocol designed to facilitate communication over a network. Some folks see it as the successor to MIDI, though we suspect MIDI has been around too long and is too firmly ensconced in the industry to fade away any time soon. Nevertheless, OSC provides a fast means of data transfer that doesn't suffer some of MIDI's inherent limitations, and there are quite a few developers and manufacturers choosing to enact OSC support. It's particularly popular with designers of alternate controllers such as the Continuum Fingerboard, and is favoured by developers of iPhone and iPad tools such as TouchOSC and Hex OSC.

Of course, this support doesn't matter a whit if you can't do anything with the protocol. Wouldn't it be nice to be able to control your favourite VST plug-ins over a wireless network? You can do just that with OscVstBridge, a handy little plug-in designed to facilitate communication between your MIDI-enabled VSTs and the world of OSC. It's a little daunting at first, but once you've got everything set up, it provides a reasonable solution. And once you've controlled a MIDI device with your phone, you'll never look back!



OSC is the next big thing for controlling your gear. Bridge the gap to VST with this handy freebie from Jason Hector

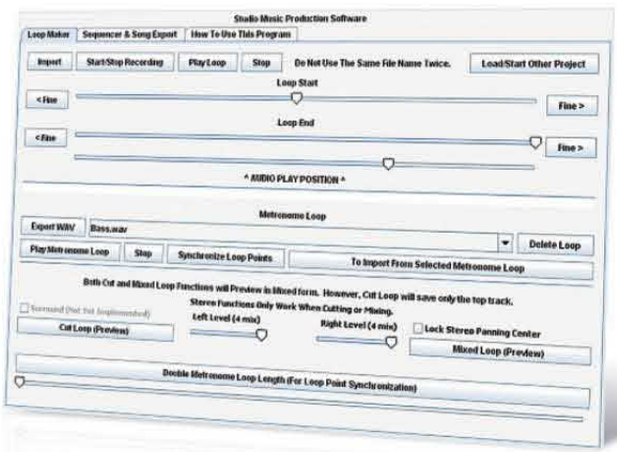
i2programmer
Loop Maker

PC

What is it: Loop creation tool
Format: Windows, Java standalone
Web: loopmaker.sourceforge.net
Test system: **PC** 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

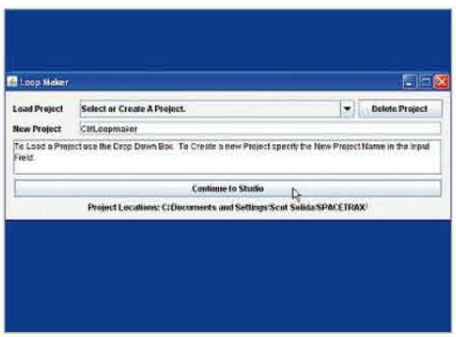
Loop-based producers have a lot of power at their disposal. There's no shortage of applications available designed to play, edit and manipulate looped samples. Programs like FL Studio, ACID and Ableton Live provide a wealth of flexible, often complicated, tools with just that in mind. Sometimes, however, it can be inspirational to strip down all of the features and functions and take a less complex approach. That's the idea behind Loop Maker, an open-source, cross-platform program with a single purpose: to help you create interesting loops. It isn't very pretty, as you can see from the accompanying screen shots, but the interface is almost self-explanatory, and a quick glance at the beyond-brief manual will get you up and running in no time.

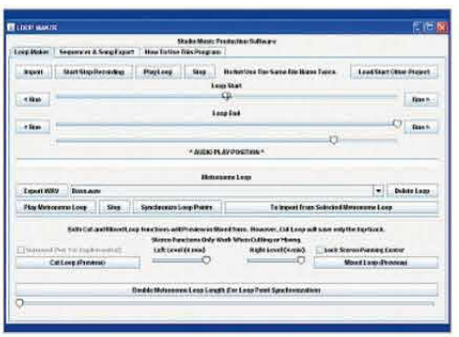
Loop Maker allows you to import multiple sample files, adjust their loop start and end times on the fly, layer them and then record and export the results. You can then sling them into the simple sequencer and string them together into a longer arrangement. This last feature is rudimentary at best, but it provides an interesting method of arrangement, somewhat akin to musique concrète. For us, the most fun to be had was in altering the length of the initial loop on the fly. Sometimes simplicity is just what the doctor ordered!

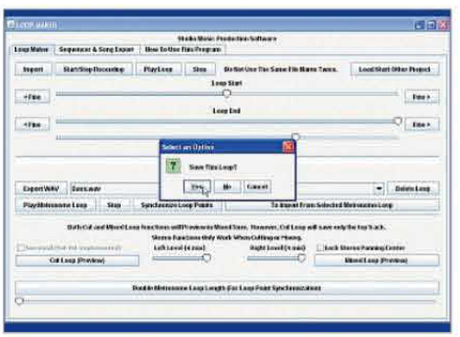


Loop Maker does what it says on the tin, providing you with easy, interesting loops at the click of a mouse

> Step by step: Manipulating your loops







1 > Loop Maker lends itself to a more detailed exploration, but let's start with some basic sample manipulation. When Loop Maker starts, it'll ask you if you want to load an existing session or start a new one. Choose the latter and name it. Now hit the **Continue to Studio** button.

2 > Let's load up a looped sample. We've provided one for you (**Tutorial files/Utilities/B ass.wav**), but feel free to use one of your own. Click **Play Loop** to hear it. Note the **Loop Start** and **Loop End** sliders. Set the **Loop Start** slider to somewhere around the halfway position, until you hear a smooth loop that makes rhythmic sense.

3 > You'll notice that the original loop is loaded into the metronome section. Mix the old and new versions together and hear what they sound like using the **Mixed Loop Preview** button. You can save the results and export the new loop, which will be available in the metronome dropdown menu and the sequencer.

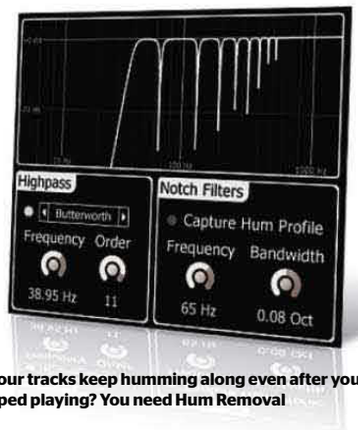
Christian-W. Budde

Hum Removal

PC

What is it Removes hum from a signal
Format VST
Web www.saviourofsoul.de/Christian/vst-plugins/effect-plugins/
Test system **PC** Intel 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

Where there is amplification, there is the hum. Usually the product of some wayward earthing, the insidious ground hum is all but inescapable if you record anything but zeroes and ones. Hum Removal enables you to take a brief sample of the offending buzz, after which the plug-in works its magic to make it disappear. The display lets you know what's going on, and the Capture function tells you precisely where the offending frequency lies. There is, naturally, a filter in tow to tame the trespassing tone. It might take a bit of work to get things right, but once you do it may mean never again having to ditch an otherwise perfect recording because of a bit of hummery.



Do your tracks keep humming along even after you've stopped playing? You need Hum Removal

Eloeliger/Gnschmidt

Smasher 1.1.6

PC

www.smasher.sourceforge.net/

Smasher is billed as a 'loop slicer' but it is far more than that. Yes, it will slice up your beats, and you can import MP3, WAV, FLAC and AIFF files to that end. However, Smasher also provides numerous means by which your loops can be transformed into something entirely new. You can apply filter, modulation, flanger, reverberation, gate, EQ, delay and three kinds of sample degradation. What's more, you can apply these effects per slice. Oh, and you can reverse, re-trigger and throw a simulated tape-stop onto each segment as well. This outre application of effects takes place in a familiar grid-based sequencing environment. Inspirational, and a riotous good time.

Christian-W. Budde

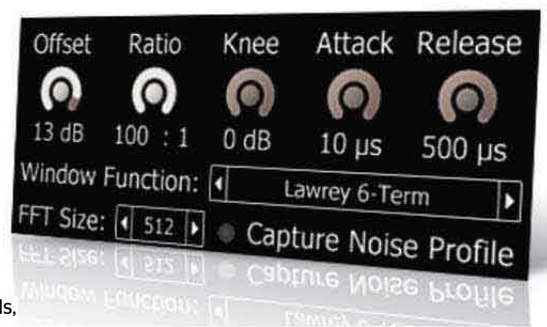
Noise Reduction

PC

What is it Noise management tool
Format VST
Web www.saviourofsoul.de/Christian/vst-plugins/effect-plugins/
Test system **PC** 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

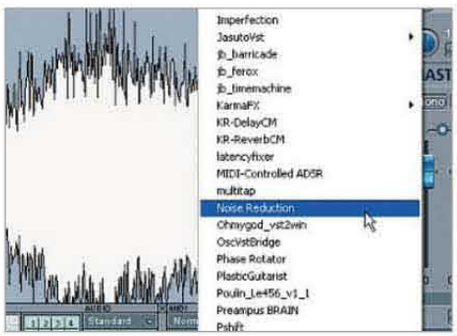
For decades, engineers remained plagued by a singular dilemma: noise. Tape noise, systems noise, ambient noise – all of these pesky gremlins and more were the constant nemeses of the diligent engineer. Taming noise is even more crucial today, as modern, high-quality digital converters and the pristine recording quality offered by the desktop computer reveal every last byte of sonic infidelity. If there's noise in a signal, you're going to hear it loud and clear.

Fortunately, that very same technology makes it possible to analyse a bit of noise (referred to as a 'noise profile') and then effectively remove it from an audio file. Such intelligent noise reduction processes have all but replaced old-fashioned dynamic noise reduction units. When they first appeared, NR applications were costly tools, available only to the professional. This is no longer the case, and the plug-in at hand is a fine example, combining both noise analysis/removal and dynamics-based processes. It's not entirely automatic, and you'll have to experiment to find the settings that work best for each individual file, but with a bit of effort, you can effectively tame the noise in nearly any track. With its FFT-based functions, the nomenclature and parameter choices might seem confusing at first, but once you get your head round it you'll find it an extremely useful tool.



Neutralise those nasty noises with Christian Budde's handy intelligent noise removal utility

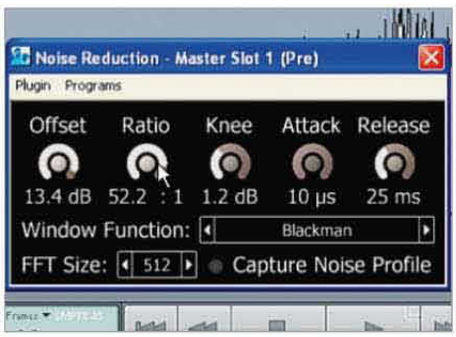
> Step by step: Clean up your tracks



1 > We've loaded up a noisy recording of a hardware analogue synthesiser (**Tutorial files/Utilities/NoisySeq.aif** on the DVD). As you can hear, there is some noise throughout. Let's load the Noise Reduction plug-in on a track insert.



2 > The plug-in needs to examine the noise without any other signal, so we loop a bit of the start of our track, just before the music kicks in. Now we can tell the plug-in to capture the noise profile while the loop plays. It uses that information to strip the offending junk from the rest of the track.



3 > You can fine-tune the noise reduction using the available dynamics controls. We've cranked up the **Ratio** and **Offset** for more extreme reduction. Be careful, though. You don't want to compromise the sonic integrity of the material.

ndc Plugs
Spongerific Audio Toaster

PC

What is it Bizarre tone generator
Format Windows VST
Web www.niallmoody.com/ndcplugs/spat.htm
Test system **PC** 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

That Niall Moody is one humble guy. Here again, he presents us with a plug-in for which he suggests there is little practical use. Well, we happen to like the impractical. We are sometimes even inspired by it, especially if we're trying to get our glitch on. And what a gloriously glitchy gadget is Spongerific Audio Toaster! It's not strictly an effect (though it requires an incoming signal), but neither is it an instrument in the strictest sense (though it does produce a sound). It lies somewhere in between, but is nowhere near being anything remotely like musical. Nonetheless, we were able to coax all sorts of bleeping, burping rhythms from it.

SpAT (as the developer calls it) starts with a familiar dynamics parameter: the threshold. When a signal achieves the defined threshold, a sine wave is, well, spat out the other side. Also familiar from dynamics processing are Attack and Decay sliders, though in this case they function to shape the envelope of the generated sine wave. The only other controls on offer are Mix and Level, the former mixing the ratio of the incoming signal to that of the outgoing one.



SpAT spits out sputtering, stuttering, bleeping tones based on the dynamics of the incoming signal

Sonic Assault
Capture! 2.0

PC

What is it Automatic WAV recorder
Format VST
Web homepage.ntlworld.com/jez.price
Test system **PC** 2.4GHz Core 2 Duo, Windows XP SP2, M-Audio Fast Track Pro

Sonic Assault's Capture! is a tool for automatically lifting samples out of an incoming audio stream. You may already have seen another auto-sampling application, VDumper, elsewhere in our utilities section (see p83). While that application focuses on creating multisampled SoundFonts, Capture! sets its sights on auto-sampling loops, complete passages and other two-track signals. It looks a little like Rndwave! (see p82), and for good reason: it's made by the same developer and employs a few of the same sorts of functions.

Here's how it works: You have a bit of audio from a track in your sequencer, or an instrument. Capture! is instantiated as an effect in the channel containing your audio or instrument. A few parameters are adjusted to delineate the desired conditions, after which you can play your sound and the plug-in will dutifully capture the signal for a predetermined length of time. You can trigger recording from a variety of sources, including the host, incoming audio or MIDI. Once captured, you can normalise the file, play it back and make minor adjustments.

Capture! is a little fiddly and it took us a while to get it set up to our tastes, but once we did, it operated smoothly and efficiently. This app presents an effective method for collecting loops on the fly, and we'll show you how it's done in our step-by-step tutorial below.



Mining for samples can be a drag, but Capture! makes grabbing them from an incoming audio signal a snap

> Step by step: Capture! the moment







1 > Let's try doing a bit of auto-sampling with Capture! We start by firing up our host (energyXT2, in this case) and whipping up a quick drum beat with the CM-505. Use whatever host and instrument you like. Next, open an instance of Capture! on a channel insert in the host's mixer.

2 > Now, let's set Capture! up for recording. First we need to determine the **Form** or bit-depth we'd like to use. We select **24bit**. Also, we need to decide upon the desired trigger mode. We select **Host** for this. Next we have to create a file. Select an empty **Sample Files** slot and click **Load**. Choose a directory and name the file.

3 > Now you have only to click the **Record** button in the Record section and wait for Capture! to do its thing. When you've finished recording, your WAV file will be stashed in the location you chose in the previous step, ready to rock! Ours is on the coverdisc (**Tutorial files/Utilities/Capture1.wav**).



This selection of drum machines, drum synths and drum samplers will give you everything you need to hone your beats and rhythms to perfection

AudioSpillage
MiniSpillage

MAC

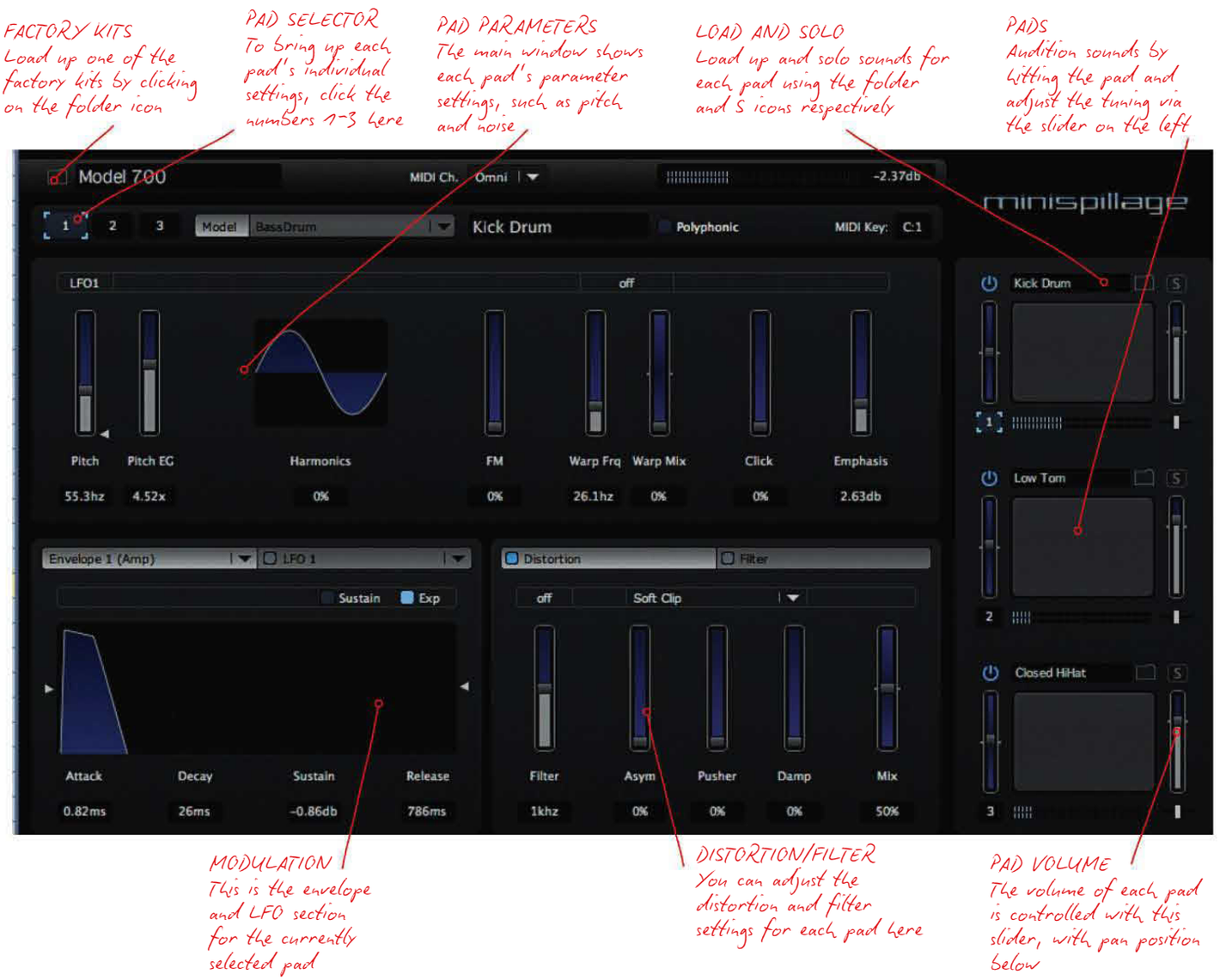
What is it	Drum synthesis module
Web	www.audiospillage.com
Format	AU
System requirements	**Mac** OS X 10.4, AU host

We kick off this section with a true wonder of the freeware world. MiniSpillage, a drum synth from AudioSpillage, is a cut-down version of the company's commercial plug-in, DrumSpillage (£99), yet it still features a high-resolution 64-bit audio engine, real-time control over its parameters and a selection of drum synthesis algorithms to use and abuse. In fact, the beauty of this plug-in lies in its flexibility and ease of use. While MiniSpillage contains just three drum pads per kit, laid out (more often than not) as a kick, snare and hi-hat, the sheer range of sounds that can be coaxed from the instrument is nothing short of staggering.

The three pads appear on the right-hand side of the interface, along with their individual pitch (+/-100%) and volume controls. Clicking in the centre of the pads enables you to audition sounds and jam out ideas, but the real action takes place in the larger window to the left of the pads, where independent controls for each type of sound are accessed. So, kick drums, for example, tend to feature parameters for the pitch, envelope and amount of additional harmonics, plus other sliders for things like the click amount, which enables you to emphasise the attack portion of the signal.

Down in the lower half of the GUI there are individual amp, pitch and filter envelopes that provide a decent level of control over each sound, as well as two LFOs per pad to create dynamic pitch and filter movements. To the right of these are the distortion (soft clip and decimate modes are available in MiniSpillage) and filter (low- and high-pass) sections.

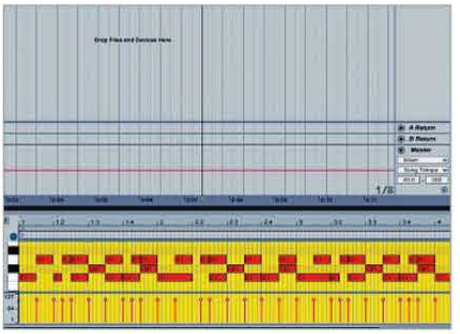
If you're still wondering if MiniSpillage is for you, follow our guide opposite to discover just how versatile and inspiring an instrument it can be, as we show you how to create an electronic percussion loop from scratch.



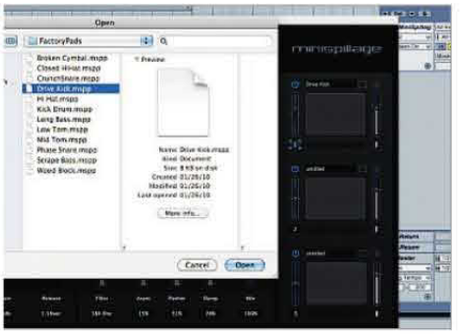
> Step by step
Making an electronic percussion loop with MiniSpillage



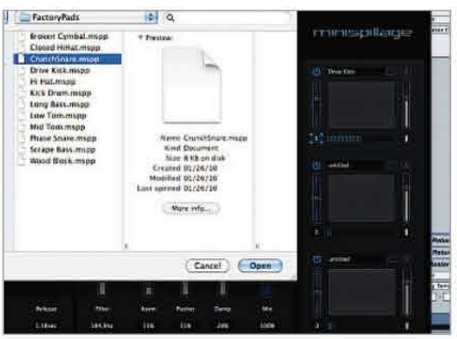
1 > Start off by loading an instance of MiniSpillage onto a free MIDI track in your sequencer of choice. Here we're using Ableton Live. On the right-hand side are the pads, which you can use to audition sounds. Give each of the default sounds a try-out by clicking the centre of each pad. The volume can be adjusted using the slider on the right of each one.



2 > Each of the default pads is untitled, but as you can hear, we've got a kick, an electronic-sounding woodblock and a hi-hat in slots 1 to 3 respectively. We can change these at any point, but for now, let's program a beat as a MIDI pattern in our sequencer, using notes C1, C♯1 and D1 for each sound (MiniSpillage automatically maps to these notes).



3 > Feel free to program whatever style of beat takes your fancy, then set your sequencer to loop mode and play back what you've got. Now let's change the sounds to suit the beat. Complete kits are loaded in the top left of the interface, or you can click the folder icon next to each pad and select **Load Pad** to change the individual sounds. We're changing the first pad to **Drive Kick**.



4 > That's more like it. We really need to get more of a snare sound in there, though, so hit the folder icon next to the second pad, and this time, choose **CrunchSnare**. Note that you cannot load your own samples in MiniSpillage, but as you'll soon see, the basic sounds offered here can be molded in countless ways. We like the hi-hat sound on the third pad, so we're leaving that as it is.



5 > Solo the kick by clicking on the **S** symbol next to its pad, and let's start manipulating the sounds further. Clicking on the numbers **1** to **3** near the top left of the GUI brings up the corresponding pad's individual settings. Here, we've got pad 1 shown. We first increase the **Harmonics** to **80%** and the **Click** to **40%** to give our kick a little more top-end bite.



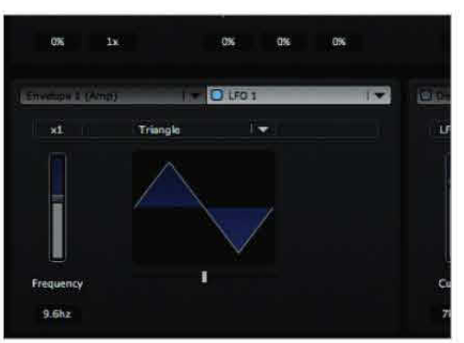
6 > In the lower left-hand panel, raise the **Release** to around 7 seconds to extend the length of our kick, 808-style. Note that you can tune your kick to a particular track using the tuning slider to the left of its pad, or by adjusting the **Pitch** and **Pitch EG** in the main window. For a little more dirt, increase the **Pusher** slider to **70%** in the Distortion panel.



7 > Be sure to un-**S**olo each drum as you make adjustments, to hear everything in context. Now for the snare. Hit the number **2** near the top of the GUI to bring up its settings. Increase the **Noise** to **35%** for a bit more of a gritty tail. Next, raise the **Presence** to around **4dB**, then increase the **Sustain** to **-2.11dB** and the **Release** to **2.13s**, again for more tail.



8 > Hit the number **3** near the top of the GUI to bring up the hi-hat's settings. Let's shave out some of the mid-range by clicking on the button in the Filter panel bar (which will turn blue when engaged), and choosing a **High Pass** filter from the menu near the top of the panel. Our hi-hat has disappeared now, so we drop the **Cutoff** to **7kHz** to bring it back into play.



9 > For more variation, let's adjust the pitch of our hi-hat with LFO 1. Raising the white arrow next to the **Pitch** slider increases the amount that LFO 1 (already selected in the menu above) affects the pitch. We raise it about three-quarters of the way up to move the pitch of our hi-hat up and down. This creates a shaker-like effect, as you can hear (**Tutorial files/ Drums/MiniSpillage Beat.wav**).

Sonoma Wire Works
DrumCore Free

PC MAC

What is it Virtual drummer software
Web www.drumcore.com
Format VST/AU/RTAS
System requirements **PC** 1GHz Intel P4 CPU or AMD equivalent, 2GB RAM, 1.25GB HD space, Windows XP/Vista, VST/RTAS host **Mac** 1GHz PPC/Intel CPU, 2GB RAM, 1.25GB HD space, OS X 10.4, AU/VST/RTAS host

By far the weightiest freeware offering in this issue, Sonoma Wire Works' DrumCore Free contains around 1.2GB of excellent percussion samples and loops to get your teeth into. Essentially a cut-down version of the company's DrumCore 3 ($249), DrumCore Free contains two complete drum kits (Rock/Pop and Hip-hop) and a smattering of Latin percussion sounds, as well as an array of audio loops and MIDI files.

DrumCore Free operates in exactly the same way as the full commercial software, the only restriction being that you cannot expand the sound and groove palette with Sonoma's DrummerPacks or your own sounds. You can still really go to town with DrumCore Free's many fine features, though – these include 48 drum pads per kit (each with mute, solo, volume, pan and pitch controls), a Queue function for seamlessly playing different loops one after another, and various randomising features for adding variation to your grooves. What's more, you can export loops in WAV, AIFF, REX2 and MIDI formats. This is all in addition to a massive range of pre-programmed patterns and grooves in a variety of styles. So, without further ado, let's explore DrumCore Free in more detail...



If you can't afford a session drummer, Sonoma's DrumCore Free could well be your next-best option

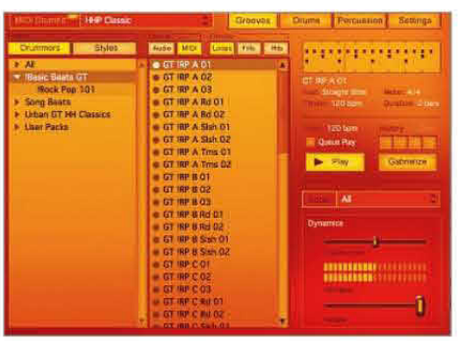
> Step by step
Getting your groove on with DrumCore Free



1 > We begin by loading up DrumCore Free on a spare MIDI channel in our DAW. Note that the plug-in may be located in a **Submersible Music** folder, unless you specified an alternative folder name during the installation process. Submersible is the company that first created DrumCore, before it was bought out by Sonoma.



2 > Hit the **Play** button in the centre right of the GUI and you'll hear a Gary Thompson beat playing on a Ludwig Sparkle kit, as it states in the top left-hand corner. To hear some variations on this pattern, click down the available audio loops in the centre column.



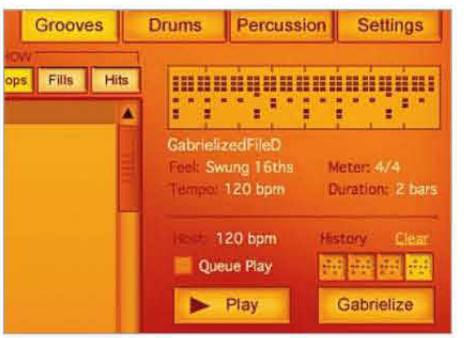
3 > We want something that sounds more electronic, so we click on the **MIDI Drumkit** dropdown at the top of the interface and choose **Urban GT»Classic HHP**. To get a groove on the go, we choose the **MIDI** mode and play the first pattern in the list, **GT !RP A01**.



4 > It's not the most exciting pattern, so let's go for something more suited to the kit. Choose **Urban GT HH Classics** in the column on the left and play the first pattern, **911**. That's more like it. To add more dynamic variation, move the **LiveDrummer** slider all the way to right, as we've done above.



5 > DrumCore Free allows you to drag any audio loop or MIDI pattern straight into your DAW, so let's drag the pattern (the box with all the dots representing drum hits) onto our MIDI track and duplicate it three times from within the DAW itself. To hear the results, hit **Play** in your DAW.



6 > Lastly, let's use the **Gabrielize** button to create a variation. This randomises the pattern and saves up to four variations in the History. Hit **Gabrielize** as many times as required, until you have a good groove, then drag it to the end of the sequence in your DAW (**Tutorial files/Drums/Hip-Hop Pattern.wav**).

MeldaProduction MDrummer S

PC MAC

What is it	Sample-based virtual drummer
Web	www.meldaproduction.com
Format	VST/AU/RTAS or standalone (PC only)
System requirements	**PC** Intel/AMD CPU, Windows XP/Vista/7 (32-/64-bit), VST host **Mac** Intel CPU, OS X 10.5, 32-bit AU/VST host

As we mentioned earlier, the 12 plug-ins contained in the MeldaProduction effects bundle (p14) all originated from the company's excellent MDrummer software. Well, the MeldaProduction goodness on offer doesn't stop there, as we're also featuring MDrummer S (the 'S' stands for 'small'). It's a scaled-down version of the commercial offering, yet it still contains a great master effects section, with compression, transient shaping, reverb, EQ and more.

There's a great sample library included, too, containing a wide variety of electronic and acoustic sounds, plus a collection of pre-programmed patterns, all of which have been split up into the intro, main beat, verses, chorus, breaks and outro.

After picking your chosen style and kit, you can click the Globals tab at the top of the GUI to sequence the parts as you please on a timeline that is synced to your host. Alternatively, you can conveniently drag and drop the various parts straight into your DAW of choice for tweaking and sequencing there. You can also tell MDrummer S to play fills, add cymbals when transitioning between sections and even 'jam' along to incoming MIDI signals. Follow our walkthrough below to see how it all works...



The 'S' may stand for small, but MDrummer S will have you producing massive beats in no time

> Step by step: Sequencing beats in MDrummer S



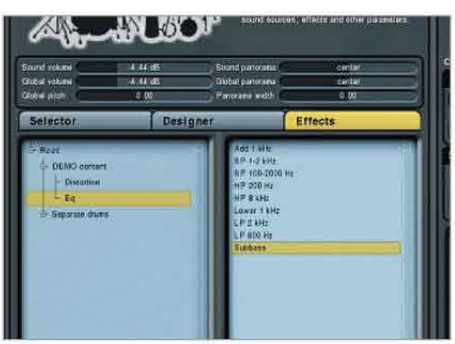
1 > MDrummer S comes pre-loaded with a raft of sounds, patterns and sequences that you can fire up in a jiffy to make that blank DAW screen at the start of a session just a little bit less daunting. Load it up in your sequencer of choice – we're using Ableton Live here – and let's try a few things out to get you started.



2 > On the right-hand side you'll see the Rhythms panel, and the Playback panel within it. Hit **Play** to start the default beat. You can then switch to patterns intended for different parts of a song by clicking the names to the side, such as **Break**, **L**(ong) **Break** and **Outro**. This generates alternative patterns to add variation as your track progresses.



3 > Pressing the **Verse** and **Chorus** buttons will vary the volume and provide some alternative patterns to the mix. To change the rhythm to another style completely, use the dropdown styles list at the bottom. We've gone for **Dance»Techno»House 01** here. We need some different sounds for this, however, so let's get those sorted.



4 > Head to the left-hand side of the GUI and choose the **Techno 03** kit from the **Dance** category. That's more like it. To give our kick more of a techno stomp, hit the **Effects** tab and choose **Eq»Subbass**. There are plenty of other effects presets to explore here, but let's quickly move on to sequencing our beat...



5 > Click the **Globals** tab at the top of the GUI and you'll see a template sequence, with the intro and outro in yellow, the main beat in green and the breaks in blue. These can be shifted around at will by clicking and dragging each block left and right. You can also change the Type (or song section), Level and Bar count of each block here.



6 > Last but not least, hit the **Mixer** tab, followed by the right-hand icon on the Master Effects bar at the bottom of the GUI. This brings up an awesome selection of effects to play with. We apply the built-in MCompressor, using a high **Ratio** setting to really beef up the sound, with **Maximize signal strength to OdB** engaged.

Teragon Audio KickMaker

PC MAC

What is it	Bass drum instrument
Web	www.teragon.org
Format	VST/AU
System requirements	**PC** Windows XP/Vista/7, VST host **Mac** PPC/Intel CPU, OS X 10.4, AU/VST host

If you're struggling to find the perfect kick sample to underpin your latest tune, why not create your own from scratch? That's exactly what KickMaker from Teragon Audio is designed to do, so once you get your head round it (starting with our walkthrough below), you'll never have any excuses for a flabby-sounding bass drum again.

KickMaker comprises four independent oscillators, each with its own volume fader in the bottom right of the plug-in's GUI for mixing each element, and a main ADSR volume envelope for shaping the overall sound. The oscillators all feature exactly the same control set, namely frequency and fine-tune, plus attack, decay, sustain and release, along with three smaller knobs between these that dictate the level of each stage of the envelope.

Oscillators 1 and 3 are shown in the top left and right respectively when you first load the plug-in, and there are two switches for bringing up oscillators 2 and 4 in their place. There are six adjustable slots for master effects parameters on the left-hand side of the GUI, including things like noise, compression and filtering. If you're timid about diving straight into sound design, you can dip your toe in a selection of excellent presets from the section in the lower left-hand corner.



Teragon Audio's KickMaker is a great little program that will help you tailor better bass drum sounds

> Step by step: Crafting the perfect bass drum with KickMaker



1 > To, er, kick things off, we load up the plug-in on a free MIDI channel and program a simple four-to-the-floor beat on the note F0 – this seems to be in the right region for the kick we want to create. We also put our host in loop mode, so we can tweak the sound in real time.



2 > In the bottom left-hand corner you'll find the Preset Manager. To scroll through the available presets, use the left and right arrows or click the preset name to bring up all the available kicks in handy categories. We opt for the **Default** preset this time to give us a neutral starting point.



3 > In the bottom right-hand corner you can see the levels of each oscillator and the ADSR, which acts as the master volume. Leave Osc 1 and the ADSR levels at maximum and reduce all the others to 0. Now we can clearly hear the first oscillator on its own.



4 > We want our kick to have more depth, so we head to the ADSR panel above the volume levels and increase the small **Dec** (decay) and **Sus** (sustain) knobs in the top row, as shown above. This brings out a little more of the middle part of the signal after the initial hit, giving us a fuller sound.



5 > Now, turning our attention to the first oscillator in the top left-hand corner, we rotate the **Frequency** knob to around 9 o'clock – remember that this can be used to tune the kick to the root note of your track – and again increase the **Sus** knob to bring out more of the tail end of the signal.



6 > Of course, you can blend in sounds from the other oscillators, but we're quite happy using just one here. All we need to do now is squeeze the sound to make it fatter, so we head to the Effects section and increase the **Comp Ratio** and **Comp Thresh** to **55** and **66** respectively (**Tutorial files/Drums /Phat Kick.wav**).

Majken Grizzly

PC

What is it	Drum machine with effects
Web	www.majken.se
Format	VST
System requirements	**PC** VST host

Grizzly is the brainchild of Swedish software programmer and musician Markus 'Majken' Höglund, and was originally entered into the 2006 KVR Developer Challenge. Since then, Markus has made a new multicore version which is very stable and can be run several times by just about any modern PC without breaking a sweat.

Grizzly features eight drum pads, each of which can load the royalty-free samples that are supplied with the plug-in or any other WAV files of your choosing. Each pad has volume, pan, pitch, sample position and decay controls for sculpting your sounds, alongside a multimode (low-, band- or high-pass) filter with cutoff frequency and resonance parameters.

The fun really begins with the FX section at the bottom of each pad. One effect can be added to each sound and there are a wide variety of processors available for mangling your drums, including ring modulation, delay, granularisation, flanging and bitcrushing, to name just a few. Parameters can be modulated with randomisation controls or the onboard LFOs.



Make your beats growl with this fully automatable and highly adaptable virtual drum machine from Majken

de la Mancha subatomic

PC

What is it	Kick drum synthesiser
Web	www.delamancha.co.uk
Format	VST
System requirements	**PC** Windows XP/Vista/7, VST host

A firm favourite here at **cm**, de la Mancha's Steve Brambley has produced some amazing commercial and freeware VSTs for Windows users over the years, and we simply had to include this kick drum instrument in our **cm** *Essential Selection 2010*. Subatomic looks incredibly simplistic, and indeed it is extremely easy to use, but it's capable of producing the kind of chest-rattling low-end kicks that the Roland TR-808 Rhythm Composer drum machine was rightly famed for.

Subatomic doesn't use any samples, but instead synthesises all that subby goodness with a pure sine wave generator. This is complemented by volume decay and pitch decay envelopes, which enable you to tailor the length and sound of your kick to the specific track you're working on. There's also a pitch drop parameter for dictating how quickly the generated sine tone moves from a higher, more clearly audible pitch down into the sub-frequency region.

There are six different volume/pitch decay shapes to choose from, so you can quickly and easily try each one until you find just the right kick for your tune. One handy tip for using this plug-in is to layer a trouser-flapping tone with a short kick sample to give the latter more transient attack in the mix.



As its name suggests, subatomic allows you to get into the tiniest of details when creating your kick drums

orDrumbox

PC MAC LINUX

What is it	Drum machine and sequencer
Web	www.ordrumbox.com
Format	Standalone
System requirements	**PC** 1GHz CPU, 2GB RAM, 1GB HD space, Windows XP/Vista **Mac** 1GHz CPU, 2GB RAM, 1GB HD space, OS X 10.3, JRE 1.6 **Linux** 1GHz CPU, 2GB RAM, 1GB HD space, JRE 1.6

This drum machine may not be the prettiest member of the collection we're presenting here, but it's highly functional and has plenty of options for getting the most out of your grooves, plus it's available for Linux as well as Windows and Mac OS X. It's worth noting before you begin that, although Windows users can load up this standalone application with a couple of clicks, if you're a Mac or Linux user, you must ensure that you have Java installed on your system beforehand. You can check the **ReadMe** file on the coverdisc for more information about this, and there are also some excellent help files housed in the software itself, to give you a leg-up in understanding how everything operates.

The program comes loaded with a nice selection of drum hits in WAV format, including a range of percussion sounds such as maracas and shakers, all neatly arranged into kits. There are also a number of pre-programmed patterns on the left-hand side of the main GUI to get you up and running with just a few clicks. There's even a sound generator module, with a filter, envelope controls, noise generator and LFO, making orDrumbox just that little bit deeper than your average drum machine.



orDrumbox generates its quality drum sounds using samples and its built-in synthesis engine

Mobile music

The best free downloadable apps for music producers on the move

Async
Baby Scratch

What is it Virtual turntable
Format iPhone



Sifting through the quagmire that is the App Store can be a thankless task, particularly when browsing the free section. It can be frustrating loading up app after app of poorly developed, ill-conceived nastiness, or discovering a great product only to find that it's a heavily cut-down demo version plastered with ads. If it weren't for the odd gems such as Async's Baby Scratch, we'd have given up the search a long time ago.

Baby Scratch takes the form of a tiny turntable on your iPhone. When you first start up the app, the deck will be pre-loaded with a record that's packed full of old-school hip-hop samples, sound bites and effects. Press play, the record spins and you're off, scratching away to your heart's content. Thanks to the power of multi-touch you can adjust the fader or tap on the transform switch to instantly silence the volume of the scratching. There's also a button that cycles through a few built-in loops if you fancy scratching along to a beat.

Unlike a lot of other music apps, Baby Scratch is a genuinely physical experience requiring some level of skill to make it sound any good. By practising with the fader and transform methods, you can build up your techniques and generate some genuinely impressive rhythms. And despite its small form, the skills you'll acquire will quite happily scale up to a real-life deck and mixer with only a few adjustments needed.

While not quite as functional as its bigger brother, Flare Scratch (which enables users to import their own sounds), Baby Scratch still lets you record sounds via the in-built mic or an external mic, and with its awesome graffiti-esque designs, it does manage to look a hell of a lot better than its paid-for companion. As freebies go, it doesn't get much better than this. **www.async-games.com/baby.html**

IK Multimedia
GrooveMaker FREE

What is it Random groove generator
Format iPad/iPhone



GrooveMaker has a legacy that long predates the App Store. First launched on an interactive CD-ROM in the late 90s, it was designed to allow users without a background in musical production to create great-sounding tracks in real time using combinations of pre-made loops and grooves. The iPhone and iPad versions of GrooveMaker FREE follow in this tradition and, while they are great apps in their own right, they are also shining examples of the quality available in the rest of the GrooveMaker range.

The premise is simple enough: there are four mix banks, each of which defines a 'flavour' of groove – mild, percussive, instrumental and random. Each of these flavours is pre-assigned a number of audio loops in various different categories utilising up to eight stereo tracks in total. For example, 'mild' could include a pad, a bass and a lead line, and each time you tap on 'mild', GrooveMaker picks a random loop from each of these categories, generating a brand new groove with every tap.

When you hear a combination you particularly like. you can press the snapshot button to store it for sequencing. You can also build up your own combinations by selecting specific loops from the list available. Everything, including muting, soloing and changes in tempo, can be done on the fly, so there's no break in the audio. You can also export your sequence for any number of external uses, from desktop sequencers to YouTube videos of your pets.

GrooveMaker FREE comes with two sound packs, one of which requires online registration. Between them, these two offerings contain 125 great-sounding loops in house and hip-hop styles. Overall, GrooveMaker is a great way of generating random combinations of loops that fit well together, and a toy that you'll lose many hours playing with. **www.groovemaker.com**

Sound Trends
Looptastic Gold

What is it Loops of fun for DJs
Format iPhone



Throwing loops around has never been so much fun. Drag a coloured Looptastic Gold loop onto the screen and it'll start playing; the crossfader then enables you to switch between the loops placed on the left- and right-hand sides, while the centre loops remain a constant. Your performance can even be stored for replay. Looptastic Gold comes loaded with several sound packs in various styles, and hundreds more are available for purchase from within the app itself. **www.soundtrends.com/apps/looptastic_gold**

David Fumberger
Beatwave

What is it Tenori-On-style virtual instrument
Format iPad/iPhone



Taking its inspiration from Yamaha's Tenori-On, Beatwave brings a comparable experience straight to your iPad and iPhone for the price of fresh air. Beatwave presents you with a grid divided into 16 beats. Simply tap on a square in the grid to light it up and as the tempo line passes over it, the sounds are played. Not only can you layer up sounds and chords, but you can also layer up to four grids, each with its own instrument type. For more control, Beatwave comes with a mixer, grid-morpher and global pitch slider. Rendered export and additional instrument packs are also available as in-app purchases. **collect3.com.au**

Reality Jockey
Rj Voyager

What is it Space-age interactive jukebox
Format iPad



Jukeboxes come in a wide range of different styles and flavours, but none are as unique or offer as much dynamic control as Reality Jockey's Rj Voyager.

Music is generated from musical 'Scenes' pre-made in the Mac-based RJC1000 software (also free). These play on perpetual loop, leaving you free to interact with all the elements of the piece by dragging nodes associated with individual sounds. Scenes comprise many modules, and modules can be anything from a synth to a sampler, each with its own parameter controllers for altering panning, volume, cutoff, sensitivity and so forth. Rj Voyager comes packaged with six built-in scenes from the likes of Booka Shade and Rebel Sonix. **more.rjdj.me/voyager**

IK Multimedia
AmpliTube FREE

What is it Portable guitar effects
Format iPad/iPhone



Forget carrying around the usual guitarist's paraphernalia – all you really need these days is AmpliTube. By plugging in your guitar via the iRig adapter (available separately), you can turn your iPad or iPhone into a truly portable effects unit. AmpliTube FREE comes with three effects pedals – a delay, a noise filter and, after registering, a distortion pedal – and they're as intuitive to use as they look. If you don't have an iRig adapter or just want to listen to the pedals in action, the built-in demos will give you an idea as to the astounding quality of the effects available. **www.ikmultimedia.com/irig/features**

Miura Acoustic
S1MidiTrgFree

What is it Wireless MIDI messaging
Format iPad



There are a multitude of reasons why you might want to wirelessly trigger sounds on your desktop DAW using your iPad – chief amongst these being simply for fun – but whatever your reason, S1MidiTrgFree has you covered. Utilising the DSMI MIDI interface receiver originally designed to complement Nintendo DS homebrew music software, you can use S1MidiTrgFree's XY pad, sliders and velocity-sensitive triggers to fire off a variety of MIDI signals and CC messages to your sequencer. This free version is limited in that the bank settings cannot be saved, but that's a minor niggle. **web.me.com/miu.aco/miu-software/Home.html**

Develoe
Soundrop

What is it Ball-bouncingly good fun
Format iPad/iPhone



If you've ever tried making music by dropping rubber balls onto an elaborate series of angled surfaces, you probably wouldn't expect to meet may people who'd done the same, if any at all. Use Soundrop, however, and you're joining the growing ranks of people making music with gravity.

Watch a ball pop out of the hole in the screen, then watch it fall – any lines you place will intercept its path and make it bounce off at an angle, generating the sound. Build up the lines until you have an all-singing, all-dancing spherical circus. An in-app purchase adds more instruments and control over elements such as bounce, air friction and gravity. **develoe.com**

OutOfTheBit
Shiny Drum



What is it A fat stack of drum kits
Format iPad/iPhone

There are a multitude of drum applications available at the App Store – many of which you can spend good money on – that aren't half as good as Shiny Drum. It's a bit of a no-frills affair, with simple grey buttons as far as the eye can see, but what you get is over 20 different drum kits to play with, suitable for styles ranging from acoustic to electronic to jazz.

With multi-touch you can play a number of different sounds at once – provided your manual dexterity is up to the job, of course – and you can even create your own kits using sounds from any of the available kits within the app. **www.outofthebit.com/games.php#shinydrum**

Peterb
Virtuoso Piano Free 2 HD



What is it Pocket piano
Format iPad

There's something of the novelty element about having a piano on your iPad or iPhone, and that's exactly what Virtuoso offers. You'll probably never be able to play a Rachmaninoff concerto using it, but it's still quite a pleasing gadget to have in your musical arsenal.

Among the many piano apps around, Virtuoso is the one we think looks the prettiest and sounds the nicest. Keys are well labelled and colour-coded so you can see what it is you're playing at a glance. And with multitouch, you can play up to five notes per chord across six octaves of a beautifully sampled piano. **www.peterbmusic.com**

Rob Fielding
Mugician



What is it Unique guitar-styled synthesis
Format iPad

Billed as "hard to play" by its developer, Mugician is a synth designed to be played by guitarists – so much so that it's been accurately described as an 11-string fretless bass guitar synth.

Mugician's unique layout allows for quick play across octaves as well as for chromatics, quarter-tones, slides and the like. It can be played by itself or alongside a soundtrack, and suits Eastern microtonal music just as much as Western 12-note rock 'n' roll. Built-in effects such as delay give Mugician a beautiful sound, making it hugely enjoyable as a musical experience. Give it a try and you may well be left wondering why it's a free app at all.

H2indie
JamPad



What is it Studio for the brave and bonkers
Format iPad

While some apps might excel at the most specific of tasks, JamPad is a genuine jack of all trades. Developed by H2indie, it's a four-in-one music box that comprises a piano, drum loops, rhythm guitar/ukulele and electric guitar.

Using JamPad is a pretty straightforward affair. Simply pick a drum loop, choose a chord for the rhythm guitar to play, and JamPad will strum away for you. Change the rhythm guitar chord in real time, play along with the piano keyboard or pick or strum the dropdown electric guitar, and you've got yourself a one-man-band. The results can be somewhat erratic at times, but once you get the hang of it, it's great fun to mess around with. **apps.h2indie.com**

Richard Lawler
Pattern Music MXXIV

What is it Hieroglyphic music making brilliance
Format iPad/iPhone



If you're looking for weird and wonderful ways of generating music, Pattern Music could be for you. Onscreen icons that resemble strange hieroglyphs represent patterns of music played by certain instruments. Each pattern is made up of a number of polyphonic notes running at a speed and time signature set by you, and there's a range of instruments to choose from. You can bring your patterns in and out in real time, placing them in stereo space and creating your musical piece as you go. **www.patternmusic.com/frontdoor/PatternMusic.html**

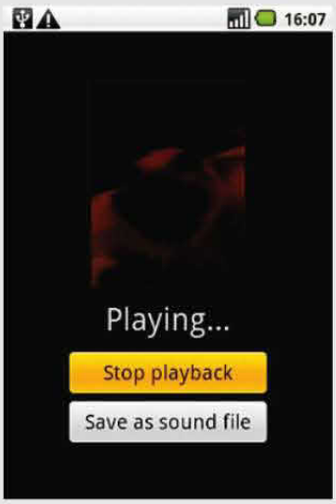
Smoco Pty Ltd
Retro Sound Studio



What is it Sound effects from yesteryear
Format iPad

Imagine it's the 1980s, and you're in charge of making the latest arcade machine. The game is looking great – you've got aliens coming in from the top in great big rows, and a spaceship at the bottom of the screen, protected by four blobs of defence fortification that get chipped away with every shot. But there's something crucial missing – the sound effects! Here's where Retro Sound Studio will come in handy. This little baby will have you blipping, blurping and bzapping in no time. Who knows – you could even integrate the sounds you make into a piece of music! **www.smoco.com/retrosoundstudio**

dtg-android
Spectral



What is it? Turns images into sound
Format Android

Ever wondered what that photograph you took in the pub on Tuesday of your friends all reaching for the last pork scratching would sound like? No, us neither. But it's nice to know that, thanks to Spectral, it's now a possibility. This app converts your pictures into a spectrogram, which in turn is converted into sound – it's a fascinating process, even if most of the noises produced do sound like something from an 80s episode of *Doctor Who*. It can also be done the other way around, so you can whistle, sing or click into the mic and Spectral will create a spectrogram based on the sound. **www.cl.cam.ac.uk/research/dtg/android/**

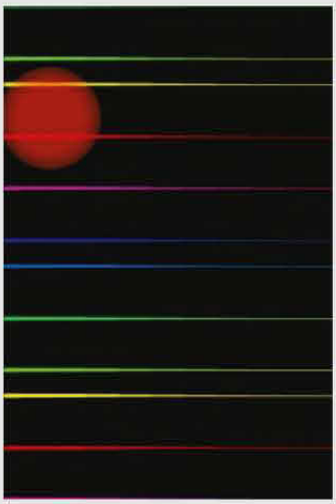
Adam Smith
Ethereal Dialpad



What is it? Intriguingly abstract synth toy
Format Android

The best apps are the ones that leave you wondering where the hours went, and there are few finer examples of this than Ethereal Dialpad – dragging your finger around your phone's display has never been so engrossing. Utilising four different play areas, from a grid to a very pretty swarm particle effect, Ethereal Dialpad plays back its rather lovely synth tones, complete with delay and flanger effects. Free plug-ins can enable multi-touch or change the app's look, and there's a paid-for add-on that uses your phone's gravity sensor to create sounds. **www.androidzoom.com/android_developer/adam-smith_dtj.html**

Peter Eastman
Etherophone



What is it? Virtual theremin
Format Android

Whether you're looking for something to annoy the dog with or harbouring a secret desire to play along to the *Midsomer Murders* theme tune of an evening, you'll love Etherophone. Predictably, sounds are played by dragging your finger across the screen, with vertical movements controlling the slide between notes. In contrast to the dulcet sounds of Ethereal Dialpad, it's all too easy to make Etherophone sound like the drawn-out death rattle of a terminally distressed R2-D2. That said, it's great fun to play with, even if the novelty is a little short-lived. **www.androidzoom.com/android_developer/peter-eastman_gvpm.html**

Samsung
Samsung Caxixi

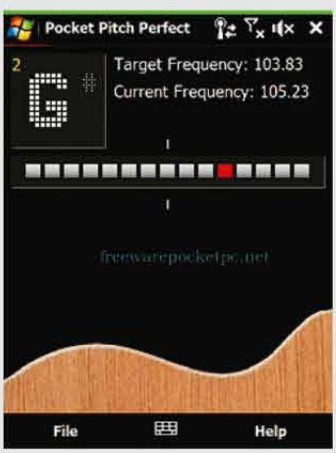


What is it? Mobile maraca
Format Windows Mobile (Samsung Omnia)

Operated by shaking your device in various directions, Samsung's homemade multi-instrument app, Caxixi, is designed to be used in the same manner as the African instrument of the same name (pronounced "ca-shi-shi"). You can assign different percussive sounds to each of five directions (forward, back, left, right and down), allowing for a decent amount of musical variety.

Caxixi also enables you to record your efforts, send them to other users or mix them with a backing track and export them as a WAV file for use as a ringtone. You can even take part in live collaborations with groups of other Caxixi-enabled individuals. **innovator.samsungmobile.com/caxixi/**

NCH Software
Pitch Perfect Guitar Tuner



What is it? Guitar tuner
Format Windows Mobile, iPhone

Made by NCH Software, a company that's produced a wealth of high-quality audio programs over the years, Pitch Perfect Guitar Tuner is a feature-rich app that's an absolute essential for the guitarist on the go. Using the built-in mic or line-in of your device, you can simply pluck away and let Pitch Perfect guide you to an immaculately tuned guitar. As well as accurate pitch detection, Pitch Perfect enables you to tune strings to any note, allowing for non-standard and well-known alterative tunings. And as if that wasn't enough, Pitch Perfect is also available for Windows and OS X as well as being a mobile app. **www.nch.com.au/tuner/index.html**

Pere Felices Milán
Pomod



What is it? FMOD-based music player
Format Windows Mobile

Famed for its cross-platform support and powerful architecture and widely used in the games industry, FMOD is a proprietary audio library that plays a diverse range of music formats. Pomod's implementation allows users to play back all the usual suspects such as WAV, OGG and MP3, as well as a variety of tracker standards. Included is the ability to listen to FastTracker 2, Impulse Tracker and Scream Tracker, as well as classic NoiseTracker MOD files. With thousands of tunes downloadable at The Mod Archive (**www.modarchive.org**), Pomod allows Windows Mobile users with limited storage to benefit from the small memory footprint of tracker files. **www.xphere.me/pomod/**

COMPUTER MUSIC ESSENTIAL SELECTION 2010

cmDVD

PC MAC LINUX

Amp sims

8505 Lead (PC): Heavy amp sim (p64)
Amplifikation Lite (PC & Mac): Versatile amp sim with internal cabinet (p63)
California Sun (PC & Mac): Classic-sounding amp simulator (p62)
Dudeler (PC): Out-there sound shaper (p63)
Guitar Rig 4 Player (PC & Mac): Guitar amp and effects suite (p66)
Juicy77 (PC): High-gain amp sim (p62)
Le456 (PC): Dual-channel amp sim (p64)
Ruby Tube (PC): Tube preamp simulator (p64)
Tube Amp (PC & Mac): Simulated tube amp (p64)

DAWs

DarkWave Studio (PC): Modular studio/VST host (p72)
Traverso DAW (PC, Mac & Linux): Audio recording/editing/mastering (p71)
Jokosher (PC & Linux): Multitrack audio recorder (p71)
LMMS (PC & Linux): Virtual studio and VST/LADSPA host (p73)
NanoStudio (PC & Mac): Portable soft studio (p70)
Podium Free (PC): MIDI/audio recorder, sequencer and VST host (p72)
Riffworks T4 (PC & Mac): Guitar multitracker (p71)

Drums

DrumCore Free (PC & Mac): Virtual drummer (p90)
Subatomic (PC): Kick drum synth (p93)
Grizzly (PC): Drum machine with effects (p93)
KickMaker (PC & Mac): Bass drum instrument (p92)
MDrummer 3 S (PC & Mac): Sample-based virtual drummer (p91)
MiniSpillage (Mac): Drum synthesis module (p88)
orDrumbox (PC, Mac & Linux): Drum machine and sequencer (p93)

Effects

ADT (PC & Mac): Double-tracking effect (p21)
ZA8 Dual Delay (PC): Echo and ping-pong delay (p23)
AfterShock Delay (PC): Three-channel delay (p22)
Blue Cat's Stereo Chorus (PC & Mac): Stereo widening/ensemble effect (p19)
bx_cleansweep (PC & Mac): High-/low-pass filter (p22)
Computer Music Multiband Compressor (PC): Processor-friendly compressor (p19)
dblue_Glitch (PC): Sequence-based randomising (p18)
DFX Buffer Override (PC & Mac): Granular glitch/stutter effect (p16)
DFX Transverb (PC & Mac): Tape-style delay (p20)
Erectifier (PC & Mac): Doubling/phaser effect (p23)
FreeverbToo (PC): Adaptable reverb unit (p23)
g200kg KeroVee (PC): Pitch-correction tool (p22)
HybridReverb2 (PC, Mac & Linux): Convolution-based reverb (p18)
KR-Delay FS (PC & Mac): Multifunctional echo unit (p21)
Lightweight Multiband Compressor (see Computer Music Multiband Compressor, above) (p19)
Melda Free VST effects (PC & Mac): Effects bundle (p14)
Mountain Echo (PC): Tape-style delay (p19)
Niveau Filter (PC & Mac): Tilt EQ unit (p23)
Rough Rider (PC & Mac): Very hard compressor (p17)
SPL Free Ranger (PC & Mac): Simple EQ unit (p20)
ValhallaDSP (PC & Mac): Frequency-shifting analogue delay (p20)
VST TAL-Reverb II (PC & Mac): Ambience effect (p23)
VST TAL-Tube (PC & Mac): Tube saturation effect (p23)
VST TAL-Vocoder (PC & Mac): Vintage vocoder emulation (p18)

Introducing... R.I.P.

"R.I.P. is a synth enthusiast's synth, filled to the brim with proper electronic noises. It's almost like a 'best of' compilation of the finest sounds to be produced by electronic machines over the last three decades"

Turn to p37 to meet the developer and get started with our easy programming tutorial!

COMPUTER MUSIC EXCL



Samplers

FluidSynth (PC, Mac & Linux): SF2-based sampler (p55)
Octomag (PC): Multichannel wave file player (p56)
LinuxSampler (PC, Mac & Linux): Modular sampler (p57)
Manic (PC): Random sample player (p54)
MixedReaction!10 (PC): DJ-style playback tool (p55)

Synths

Alionoctis Free (PC): Atmospheric synth (p33)
Vogue Quattro (Mac): Microtonal polysynth (p38)
Analog Box (PC): Modular synthesis system (p40)
Angelina (PC): Breathy vocal synth (p26)
Arppe2600va (PC): Classic ARP 2600 emulation (p30)
Autogun (PC): Adventurous synth (p33)
Avatar ST Basic Free (PC): Atmospheric synth (p43)
Chimera (PC): Out-of-this-world synth (p36)
daHornet (PC & Mac): Virtual analogue synth (p36)
DSK Synthopia 2 (PC): Three synths in one (p36)
FMMF (PC): FM synthesiser emulator (p29)
Jasuto (PC & Mac): Powerful, fully modular synth (p41)
KX-Synth-X16 (PC): Classic EMS VCS3 emulation (p39)
MinimogueVA (PC): Classic Minimoog recreation (p28)
P8 (PC): Virtual analogue synth (p33)
PhysiX (PC): True physical modelling synth (p38)
Plastique (PC): Casio HT-700 recreation (p42)
Rainbow (PC): FM, additive and subtractive synth (p30)
Rez v2.0 (PC): Virtual analogue synth (p34)
R.I.P. (PC): Special edition pad synth (p37)
S3B (PC): Atmospheric pad synth (p35)
TAL-Elek7ro (PC & Mac): Virtual analogue synth (p32)
TAL-Vintager (PC & Mac): Simple monophonic analogue synth (p38)
Texture (PC): Virtual analogue synth (p30)

Other instruments

KiTR (PC): Sample-based rubber band guitar (p50)
Virtuoso (PC): Six-in-one ROMpler (p49)
Mini DiZi (PC): Sample-based bamboo flute (p51)
Mini ErHu (PC): Sample-based bowed instrument (p51)
Plastic Guitarist (PC): Audio-triggered ROMpler (p52)
PreparationP (PC): Sample-based prepared piano (p51)
Reaktor 5 Player (PC & Mac): Instrument and effect playback engine (p53)
Redtron_400 (PC): Mellotron emulation (p49)
Shekrs (PC): Sample-based shakers (p50)
Titan Free (PC & Mac): Synth-based ROMpler (p48)
Twin Dash Player FREE (PC): ROMpler (p52)
UVI Workstation (PC & Mac): ROMpler and sounds (p47)

Trackers

Arkos Tracker (PC): Old-school chip music tracker (p75)
SunVox (PC, Mac, Linux & mobile): Modular tracker (p74)
Buzz (PC): Modular tracker with ASIO support (p75)
OpenMPT (PC): Open-source tracker/VST host (p76)

Utilities and miscellaneous

Aria Maestosa (PC, Mac & Linux): MIDI file player and editor (p78)
VDumper (PC): SF2 file-producing plug-in host (p83)
ASIO4ALL (PC): Universal ASIO driver
AudioXplorer (Mac): Spectrum analysis tool (p78)
Brush Strokes (PC): Paint-with-sound tool (p83)
Capture! 2.0 (PC): Automatic .wav file recorder (p86)
Dither Noiseshaper (PC): Functional dithering and noise-shaping utility (p83)
Hum Removal (PC): Hum-removing tool (p85)
Latency Fixer (PC & Mac): Latency adjuster (p82)
Light Guitar (Mac): Unusual instrument emulation (p83)
Loop Maker (PC): Loop-making tool (p84)
MIDI-Controlled ADSR (PC): Envelope generator (p81)
midiO 1.3 (Mac): MIDI output plug-in (p83)
MusicKit (PC, Mac & Linux): Collection of players, music makers and processors (p78)
Noise Reduction (PC): Noise management tool (p85)
OscVstBridge (PC): MIDI communication tool (p84)
Phase Rotator (PC): Signal phase rotation tool (p83)
Praat (PC, Mac & Linux): Speech manipulation tool (p79)
Rndwave! (PC): Random waveform creation tool (p82)
Smasher (PC): Loop slicer (p85)
Sonic Visualiser (PC, Mac & Linux): Audio analyser (p80)
Spongerific Audio Toaster (PC): Tone generator (p86)
Stretch & Squash (PC): Audio manipulation tool (p81)
Tap! (PC): Tap tempo utility (p82)
Tempo Sync Reverser (PC & Mac): Audio reverser (p81)

Trial software

Cockos Reaper (Mac & PC): Fully featured DAW and plug-in host (p6)

Loopmasters

The Sample Boutique

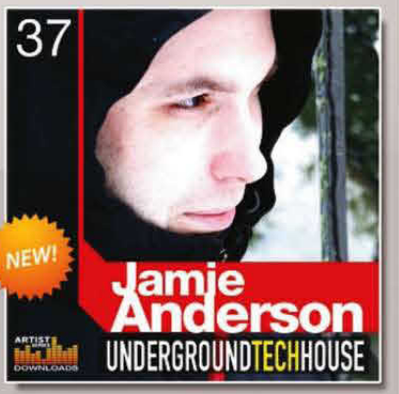
Home | Labels | Genres | Formats | News

Latest Release

UNDERGROUND TECH HOUSE
JAMIE ANDERSON

Jamie Anderson is one of Dance Music's most versatile and has established himself as a formidable talent within the scene, not only through his genre spanning productions, but also from his exceptionally high quality and universally acclaimed DJ sets.

Within this exclusive Underground Tech House sample collection producers can expect to find over 895Mb of 24Bit Samples between 123 – 128 Bpm, including over 1,200 samples, 220 Loops and 990+ Single Samples. And a HUGE 678 ready to play patches for Reason NNXt, Halion, Kontakt, EXS and SFZ compatible samplers!



Best Sellers



House Builds and Breakdowns



AtJazz Deep & Analogue



Wally Lopez



5pin Media Tribal Percussion



Progressive House & Future Tech



BHK Fidget

Featured Products



















DJ MixTools



DJ MIXTOOLS – For forward thinking DJs and live artists.

Imagine buying a track but then being able to separate that track into its key elements and having ROYALTY FREE access to remix, effect, chop and loop the parts in your own individual style to create an exciting and refreshing new mix… welcome to the world of DJ MIXTOOLS.







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 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

Looptv.net
The Producers Channel

publicrecordings.co.uk
Public Records

Featured Labels

ZENHISER
Loopmasters
GU GLOBAL UNDERGROUND
5PIN MEDIA
MUTEKKI MEDIA
FATLOUD
wave alchemy
industrial strength

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

THE ART OF SIMPLICITY



CI SERIES

STEINBERG'S RANGE OF PORTABLE MUSIC STUDIOS

For further information see www.steinberg.net

steinberg
Creativity First