

MusicTech Reviews



Steinberg **CUBASE 4** FOR PC & MAC

MusicTech
EXCELLENCE
★★★★★★★★

The world's favourite sequencer gets a major overhaul and a raft of new features, but what else lies within? Hollin Jones uncovers the secrets of Cubase 4...

KEY FEATURES

- Complete set of new VST3 virtual instruments and effects
- 5.1 surround sound capabilities
- SoundFrame sound manager
- Control Room integration with studio environment
- Integration of external audio and MIDI hardware
- 32-bit floating point audio engine
- Professional notation and score-printing capabilities

CUBASE 4

Manufacturer **Steinberg**

Price **£650**

Upgrade from SX3 **£130**

Upgrade from SX1/SX2 **£150**

Contact **Arbiter 020 8207 7880**

Web **www.steinberg.net**

Minimum system requirements

Mac G4 1GHz/Core Solo 1.5GHz, Mac OSX

10.4, 512MB RAM, Steinberg Key

PC 1.4GHz processor, Windows XP, 512MB RAM, Steinberg Key

The arrival of a new version of Cubase is always something of a momentous occasion, not least because of the veil of secrecy that always surrounds such a major software release. Cubase is now becoming something of an elder statesman in the sequencer world – which is not to say it is long in the tooth, but rather that it has a rich and distinguished history in music technology.

The change from VST to the SX series marked a complete rewrite of the venerable software, and now the name has changed again – simply to Cubase 4. A mid-level Cubase Studio 4 replaces the SL series.

Universal appeal

Conscious perhaps of the increasing processor requirements of recent versions of Cubase, Steinberg has made CPU efficiency a priority in Cubase 4, and as such the minimum system requirements are very similar to those of SX3. Mac OSX 10.4 or Windows XP and 512MB of RAM are required, but as always a more powerful system will give you the best performance. Authorisation is still via the familiar USB dongle.

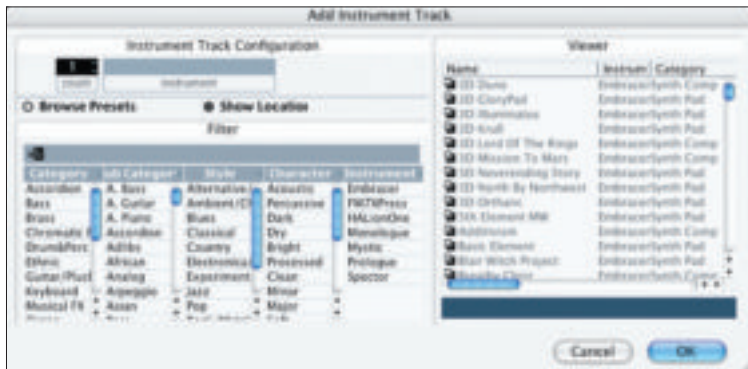
The most fundamental change to Cubase 4 for Mac users is one unrelated to features or tools. The program is now a Universal Binary, running natively on both PowerPC and Intel-based Macs. Given that Apple's entire lineup is now powered by dual-core Intel chips, this is great news for

the many Cubase users who have been struggling to use the software under Rosetta in any meaningful way, and performance on Intel Macs is astonishingly quick. There are some functional differences between the two Mac versions, but nothing major. This isn't of great interest to the Windows world, of course, but it's encouraging to see Steinberg continue to support its committed Mac user base.

In with the new

The changes in Cubase 4 start at a fundamental level, with a redesigned user interface. Colours are now stronger, selected items are much more clearly identified and mixer tracks are easily grouped and hidden. In an extension of the set-up features previously available for some UI elements, it's now possible to add, remove and re-order controls for the channel strip and the Track Inspector.

Track handling is also much improved, notably in the area of VST instruments. The first major innovation is Instrument Tracks – essentially a



Instrument Tracks enable you to insert VST instruments and choose presets.

quick way of adding a VST to a project. An Instrument Track is a combined MIDI input and audio output track which makes loading a VSTi much quicker. It isn't placed in the VSTi rack and you don't have to create a MIDI track for it – just a couple of clicks and you're ready to record. Instrument Tracks currently support only stereo output, so for multi-channel VSTi's you can still load into the rack. If you do, Cubase now creates a MIDI track for you and connects the two, removing two steps from the process. When you select a MIDI track, the Track Inspector also provides access to the audio channel related to the VSTi plus all its sends and inserts. This

As part of the VST3 standard, plug-ins can now dynamically adapt their number of busses depending on the channel they're connected to. For example, a stereo plug-in can now easily be used in a surround channel or vice versa. The VST3 standard also caters for audio input into plug-ins, and although there's no sidechaining feature available as yet, it's promised in a future update. A new, related feature is that in the mixer or channel strip, effects can now be dragged, dropped and duplicated between slots and also between channels. Long requested by users, this is far quicker and more intuitive than the old way of working.

In addition to the effects, Cubase 4 introduces four new VST instruments (Windows and PowerPC versions also

CUBASE 4 IS A COMPREHENSIVE AND CONSIDERED UPDATE PACKED WITH MAJOR NEW FEATURES.

is a huge timesaver and results in you spending more time concentrating on the Project window.

Taking effect

While we're on the subject of plug-ins, Cubase 4 boasts a completely new set of effects and instruments based on the VST3 protocol. Steinberg's standard plug-ins had fallen somewhat behind the times, so now there are 30 new ones, plus some 20 re-worked from existing plug-ins. Most audio and instrument plug-ins are native to Intel Macs as well.

The new VST3 effects have taken something of a quantum leap in terms of appearance, sporting a clean, unified look reminiscent of Logic's plug-ins. Among the highlights are multi-band EQs and vintage compressors, a voice doubler, amp simulator, a dedicated limiter and many more. To save CPU power, Cubase 4 has a new Silence Detection feature whereby plug-ins start to process audio only when there's a signal present, which is great news for those who do a lot of audio processing.

retain the instruments from Cubase SX3; Intel Mac versions have only the new instruments). First up is HALion One, developed from the HALion 3 architecture. It's sample-based and comes with more than 600 instruments, some onboard effects and is designed for use in Instrument Tracks, having only one MIDI in and a stereo out. It's self-contained and you can't add sample content to it, but as a general-purpose sound module it's excellent, with a good palette of sounds to get you up and running.

Next up is Prologue, a virtual analogue synth with hybrid analogue and digital waveforms. Sharing the unified look of the new plug-ins, it has comprehensive and well-labelled controls on the front panel and encourages tweaking to create new pads, leads and textures. Mystic, the third new plug-in, is based on three parallel comb filters and uses physical modelling technology to create its own unique synth sounds.

Finally, Spector features up to six oscillators per voice and two variable spectrum filters with morph control.

Measuring Up

Cubase has quite a lot of competition these days, although the new features in version 4 change the ground rules somewhat. The most obvious challenger is Logic Pro 7 (£699), which offers a similar set of tools alongside some unique ones of its own. It is, of course, Mac-only and it's arguably less intuitive to use than Cubase. Pro Tools remains popular with higher-end studios, but the DSP systems tend to be costly and the M-Powered and LE systems, while more affordable, do tie you to specific hardware products. Sonar 6 Producer (£399) is cheaper, but Windows-only. Ableton Live 6 (£369) is cross-platform and quite intuitive to use, but it lacks the higher-end studio features found in Cubase 4.

Like the other synths, it's highly customisable. One small but much-requested new feature is that in the VSTi rack, a button now enables you to show and hide the outputs of an instrument. Previously, a multi-channel VSTi would load all of its channels into the mixer, which took up too much space. In many cases you need only a stereo out, so this is now all that's displayed by default.

The new plug-ins do add a lot to Cubase 4 – particularly HALion One and the expanded audio effects. Given that Steinberg invented the VST format they are a little overdue, and it would be nice to have a new dedicated drum sampler included, but Steinberg has traditionally added additional features to Cubase in incremental upgrades, so we'll have to wait and see...

Meet the management

Increasingly, the average Cubase setup will reference a lot of samples and presets. Managing these, especially presets, has always been rather cumbersome, following the standard process of saving .fxp files to a folder. To address this problem, Cubase 4 introduces a totally new way of managing media called SoundFrame. This is a set of features that provides a single interface for managing any sound, file or preset from anywhere within Cubase. At the heart of it is the new MediaBay, an advanced file browser now common to many parts of Cubase 4.

The Control Room mixer enables you to set up separate, assignable sends.



METHOD SPOT

One of the more advanced features of Cubase 4 is the Control Room. With a suitably equipped audio interface (or aggregated interfaces under OSX 10.4) it's now possible to set up a number of specialised busses for routing audio to live performers directly from Cubase. You can send specific mixes to different monitor setups, send the click independently to different people and even use talkback with automatic ducking. There are also inputs for external sources such as CD and DAT players, all accessible from the Control Room mixer. These are the kinds of things that an engineer in a mid- or higher-level studio would need on a day-to-day basis.



It is now possible to drag and drop audio effects from one channel or slot to another.

MediaBay is reminiscent of GarageBand's Loop Browser in that it groups presets by category, style, instrument and so on. If you're looking for a double bass, for example, filter by bass and acoustic bass categories and you'll find one. As in Reason 3.0, it's independent of instrument, so you can browse without knowing what instrument you actually need, which is a big step forwards in terms of workflow. The SoundFrame Browser also enables you to manage folders, files and presets to help you keep track of your material. A new Loop Browser provides the ability to preview

recording, Track Presets are incredibly useful. If you always record drums with a certain EQ and effects setup, for example, you can instantly drop them into a new project and start recording.

Studio-ready

And if all this isn't enough, Cubase 4 has yet more tricks up its sleeve. For the more theory-minded, version 4 brings a major redesign of the Score Editor. It has been slimmed down and gained a contextual inspector section for symbol palettes, plus two new scoring fonts.

A major upgrade to the mixer side of Cubase is the new Control Room features. From the VST Connections tab you can now add busses for

professional studio and scoring features, plus major workflow enhancements. It's good to see that Steinberg has concentrated on implementing some fundamental changes as well as the arguably more cosmetic things such as new synths. There are so many areas of improvement that there really is something here for everyone, and the chances are that at least one of the new features will be something that's essential to you. For many Mac users this will take the form of Intel compatibility, and practically everyone will benefit from SoundFrame and the new audio effects. Happily, the introduction of all this hasn't compromised Cubase's ease of use, and it's still extremely intuitive and friendly to operate.

Bases covered

There are a couple of things that are desirable, but sadly missing – notably, batch audio export and a dockable interface to reduce the number of windows that you can end up dealing with. But those are offset by the many changes that have been introduced – changes that users have been asking for. The performance of Cubase 4 on the Windows, G5 and MacBook systems we tested it on was very good and the power-saving features result in faster operation and better CPU efficiency (its responsiveness on Mac and PC laptop systems was especially impressive). Upgrades from SX1, 2 or 3 are significantly cheaper than a new copy, and with the wealth of upgrades introduced it's hard to think of any reason not to take advantage of the offer. **MTM**

IT'S NOW POSSIBLE TO ACHIEVE THE KIND OF ADVANCED ROUTING YOU WOULD FIND IN HIGHER-END STUDIOS.

loops at project tempo, and SoundFrame enables you to drag and drop items directly into a project.

Another very useful new aspect of SoundFrame is its Track Presets, which store every aspect of track and channel settings for audio, MIDI and Instrument tracks such as MIDI connections, plug-ins, EQ and so on. These can be tagged and accessed using MediaBay then dropped straight into a project. There are some presets provided to get you started, and for

comprehensive control room features such as talkback, external inputs for CD, DAT and the like, four user-definable monitor setups and four separate monitor mixes. There are also some really useful features such as the ability to send the click independently to any or all of the busses, apply the main mix to any of the studio mixes, and manage the whole thing using the new Control Room Overview window. Provided your audio hardware has enough ins and outs to cope with all this connectivity, it's now possible to achieve the kind of advanced routing you would normally find in higher-end studios. The whole Control Room system is also beautifully implemented and well thought-out.

Food 4 thought

There's a huge amount that's new in Cubase 4, running from ground-level features like SoundFrame to greatly revised and updated plug-ins, more

Related Technology

The new VST3 standard developed by Steinberg in conjunction with Cubase 4 offers developers the opportunity to create plug-ins that are more efficient, more powerful and far more flexible. It also opens up new possibilities such as audio inputs into plug-ins and the dynamic allocation of busses to adapt to surround channels. When the VST3 SDK is released to developers next year, we should see even more advanced plug-ins appearing on the market.

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SUMMARY

WHY BUY

- Greatly improved workflow
- Media management with SoundFrame is a big step forward
- Universal Binary for all Macs
- Quick and CPU-efficient
- New plug-ins bring Cubase up to speed with the competition
- Control Room feature will appeal to bigger studios
- Backwards compatible with VST2
- Track Presets a time-saver
- Clearer and more customisable UI
- Excellent overall feature set
- Easy to use

WALK ON BY

- No batch audio export
- No sidechaining capabilities as yet

VERDICT

A comprehensive and considered update packed with major new features, all of which serve to make this undoubtedly the best and most powerful version of Cubase to date.

