

# Mackie Soundscape 32 V3.7

Building up and developing established technology that you've bought is never an easy task. Mackie acquired Soundscape and has promised to build a broadcast division around it. **ROB JAMES** reports on progress and assesses what existing users might make of it.



**I T IS ALMOST TWO YEARS** since Mackie bought the company behind Soundscape, Sydec. Since then, the product range has been rationalised to two versions of the workstation hardware, Soundscape 16 and 32, formerly the R.Ed. There is also a DSP enhancement option, the Mixpander, a new I-O unit and a Soundscape sync option. Various iBox interface options continue to be available and an ever-increasing range of third party plug-ins points to the maturity of the platform.

The 2U rack unit now sports a smart sculpted alloy fascia with a drop-down flap concealing the removable hard drive caddies. Previously optional, the analogue board is now standard.

As the names suggest, the Soundscape 16 and 32 provide 16 and 32 tracks of 48kHz 24-bit audio respectively. At high sampling rates the track count is predictably halved. Up to four units, with sample accurate synchronisation, may be controlled from one iteration of the software in a single window for a maximum of 128 tracks.

At this point I ought to declare an interest. In 1996 I specified a Soundscape SSHDR-1 for a film school because it was the only affordable solution available at the time capable of sound for picture work including autoconforming. Subsequently I had further experience at a university with a large number of Soundscape systems.

Soundscape entered the DAW market in 1993. The SSHDR-1 quickly established a reputation for reliability and utility in a number of applications. Despite this, the Soundscape software was beginning to look very dated by the end of the millennium. It lacked fixed cursor with scrolling tracks and crucially, crossfades could only be performed on separate tracks. There was no dynamic mix automation and the EQ, while popular with some users, did not stand up to close scrutiny. Surround working was, to say the least, a compromise.

There is a real dilemma for long standing DAW manufacturers. It is very much like the traveller asking for directions who is told: 'Well, if I was going there, I

## Editor

The main display is referred to as the Arrange window. Raw audio recorded into the system is termed a Take. A complete Take or part of a Take can be placed on virtual tracks in the Arrange window. These are then referred to as Parts. Tools are selected by using the mouse (or other pointing device) and then clicking on the Part you wish to affect. The mouse can be 'loaded' with four tools at a time. One each on the left and right buttons, and one each on left and right in conjunction with the Alt key. Alternatively, clicking on the 'Swiss Army Knife' icon can choose the context-sensitive editing tool. With this tool the function of the mouse buttons changes depending on the position of the mouse cursor in the Arrange window. The cursor image changes to reflect the function. With practice this becomes a very powerful method of accessing a large number of tools quickly. Tools are grouped in nine pages or Toolbars according to the type of operation and each toolbar can be customised to taste. The parts to be played are coloured according to the physical track or output to which they are assigned.

In the old Soundscape, only one Part could be played from each output at any one time and Parts were not permitted to overlap. Now, if the Overlapping Parts (for new edits) preference is set to 'allowed', overlapping parts on a single track are enabled. This of course means crossfades are now also available. Selecting the overlapping parts and clicking on the overlap with the crossfade tool produces a crossfade. Double-clicking the crossfade area of the Parts opens the Crossfade settings window with curve, link and preview options.

wouldn't start from here.'

In other words, the trick is to improve the product without losing its inherent character and core virtues or upsetting a large number of existing users. In Soundscape's case, the approach has been to retain most of the look and feel of the original, much of the nomenclature and important elements of the user interface, such as keyboard shortcuts, while thoroughly modernising and improving elsewhere.

Many recent DAWs more or less conform to a common vocabulary and use 'word processor' terms. Earlier DAWs often invented their own. Most of the original Soundscape terminology and methods of working remain intact. This is great for the existing user-base but can make the learning curve a little steeper for converts from other systems.

With the consolidated improvements included in V3.7 software Mackie has addressed most of the previous major shortcomings and added some useful extras. Fixed cursor, scrolling tracks, works well as do crossfades within tracks. The crossfade editor is

notably clean and useful. Multichannel mixer elements in 4, 6 and 8 channel formats have been added, greatly reducing screen clutter and improving clarity. New EQ algorithms have spawned new EQ elements with 1, 2, 3 or 4 bands, mono or stereo.

The M/S decoder element is well thought through and will please broadcast users. Simple but effective dynamic automation together with snapshot automation brings obvious benefits. Dynamic automation is treated in the same manner as audio Parts and Takes using automation tracks. Most audio editing tools can be used on the automation data and the graphic automation curves can be edited with a 'pen' tool.

'Tool Tips' have been added and these are a considerable aid to faster learning.

Punch in and out on the fly now allows track arming

when you are already in record with instant monitor switching on punch out. Pro Tools projects in Session file formats up to 5.0 can be imported and exported with conversion of level and fade information into automation via an 'Xpro' (External Process) optional plug-in. MP3 import and export is also an option.

There are basically three common approaches to DAW design. The first arose partly because there was no alternative at the time; these are typified by proprietary bespoke hardware, operating system and application software. At the other end of the spectrum is the PC or Mac hosted type. In their purest form these use the PC or Mac processing and storage for everything with audio I-O as the only additional hardware. In the middle lie those that use a PC to control dedicated audio hardware and sometimes dedicated storage. This method has always had much

to commend it. It is cost effective since it leverages the PC technology for control but generally far more reliable than the systems that attempt to make the PC do all the work.

The PC does not have to be 'on the bleeding edge of technology' to extract sufficient performance and the audio storage system can be optimised for the task. As a useful bonus, a high specification PC will be able to run video and control Soundscape without breaking into a sweat. The catch with dedicated storage used to be moving projects between systems and archiving. Soundscape can move material to and from its proprietary Sdisk format to the PC for archiving or via standard networking to other PCs and Soundscapes. It can also import WAV files and there is now a decent search engine for files.

With the improved mixer elements and juicy third party plug-ins it isn't hard to run out of processing on the basic unit. Recognising this, Mackie offers the Mixpander card. This has nine Motorola DSPs and is definitely the way to go. At first sight it seems odd that the Mixpander is installed in the PC rather than the Soundscape 32. However, Mixpander adds more than just DSP horsepower. It is also the gateway to high speed streaming between PC applications and Soundscape. Once you appreciate some of the possibilities this opens up it all makes sense. You could run another application on the PC, an audio and MIDI sequencer or software instruments, in addition to Soundscape. Network access to the Sdisk or disks is high speed via the expansion bus cable, which runs between the unit and the card.

The practical consequence of all these changes and additions is to make Soundscape feel more professional and to increase productivity. This

## Mixer

**Soundscape's mixer is a floating window with two size options. The channel structure is user-definable. Different configurations can be created, saved and loaded and the mixer has complete recall of all parameters including the settings of any real-time plug-ins. Each channel can have a number of real time processes running at the same time. In basic form, the mixer has 16 internal buses. These can be used to distribute or group signals to be sent to internal effects processes or to a master fader.**

**Any Output or Send element can be routed to a bus and the input to a channel can also be a bus. A bus can be assigned as the input for multiple channels enabling flexible signal distribution. All the mixer elements are, in effect, plug-ins. Signals can be routed so you can record a mix of tracks back into Soundscape with effects included.**

**Each mixer element uses a percentage of the available DSP power. The allocated total is shown at the top of the mixer page. For example, without adding a Mixpander one of the original 2-band EQs uses 2%, one of the new 4-band parametrics uses 9.9%, and a mono peak meter, 0.2%. A processing intensive plug-in, such as a stereo TC reverb, takes 36.6%. Adding a Mixpander card changes the whole picture. The DSP power increase amounts to around ten times the basic unit and the bus count goes up to 32.**

incarnation is an obvious choice for users of earlier hardware and software. They lose nothing (apart from cash) and stand to gain a great deal. For the moment, Mackie is making a reasonably

generous upgrade offer. For the same reasons Soundscape should be restored to the list of DAWs to be investigated by new users or people looking for a change.

Apart from the glitzy headline features, Soundscape remains strong in the less glamorous but absolutely essential areas. These are file exchange, machine control including an RS422 9-pin option, autoconforming for sound to picture work, and proper video support. The devil is in the detail with all of these and the value of extensive experience should not be underestimated. A useful bonus is Soundscape's ability to be used with almost any PC laptop. Simply add the optional cable.

The only real problem with an upgrade like this is it makes you greedy for more. The introduction of multichannel mixing elements brings up the question of multichannel EQ, dynamics and reverb. Oh, and there is still no reverse play.

Other than that Soundscape can be viewed as a real step-up from software-only workstations and arguably as a more reliable and solid alternative to 'half-way' systems using DSP cards with the host computer's storage system.

From this showing Mackie has managed to keep the faith with the Soundscape user base while making the product far more attractive to a wider audience. ■

## The box

The smart front panel just has a mains switch, two LEDs indicating power on and Sdisk activity, and a



flap concealing the drives. On the back, XLRs connect the four analogue outputs, two inputs, and the two channels of AES-EBU input and four channels of output. All converters are 96kHz 24-bit. Three 25-pin Sub-D sockets provide 24 channels of TDIF I-O. A 37-pin sub-D connects the unit to the dedicated PCI interface card in the PC and a 68-pin mini Centronics carries the expansion bus with clock and 512-channel TDM bus. A slot will accept the optional sync board, which adds a 9-pin comms port, VITC I-O, and LTC I-O.



## Optional plug-ins

Aphex Aural Exciter Type III and Big Bottom Pro; Apogee MasterTools UV-22; Arboretum Hyperprism; Cedar DeClick and DeHiss; Dolby Surround Pro-Logic; Drawmer SDX100; Sonic Timeworks CompressorX; Soundscape Audio Toolbox, CD Writer, EDL Processor V2, OMF Import Export, Time Module; Spinaudio Spindelay; Synchro Arts VocAlign; TC Works Dynamizer and Reverb; Wave Mechanics Reverb.

### PROS

Crossfades well implemented; new EQ sounds great; solid as ever and it looks good; proper multichannel mixer strips.

### CONS

The extras add up; internal headroom limited; needs multichannel linked EQ, dynamics, etc.

### Contact

Website: [www.mackie.com](http://www.mackie.com)