



UREI 1601S

TWO CHANNEL MIXER

THE FABLED UREI NAME OF OLD HAS BEEN REBORN. HERE IT LENDS ITSELF TO TWO THOROUGHLY MODERN DIGITAL SCRATCH MIXERS.

PRICE: 1601 £475 / 1601S £575 INFORMATION: WWW.UREIDJ.COM CONTACT: 01707 665000

words David Eserin

IT'S only been a short while since Soundcraft bought the classic Urei brand and re-released the historically significant 1620 rotary DJ mixer to much acclaim. For their next move another two Urei products have been unveiled, but this time rather than return to former glories, they've come up with something innovative and new. Of the two mixers, we're looking at the 1601S, which features a built-in sampler with BPM recognition, automatic loop timing and sample pitching (the other model, the 1601, lacks this sampler and therefore costs £100 less, but is otherwise identical). Both mixers are digital and benefit from some unique new treats such as a back-lit headphone socket, internal volume limiting, complete EQ

kill, crossfader and line level curve control, and loads of connections including effects loop, mic, balanced booth/master and more. There's also a pretty tasty Exciter too.

DIGITAL AGE

The 1601S is fundamentally a digital mixer. The only analogue components are the inputs (including the gains) and outputs, plus the microphone section, which is routed directly to the master output.

The important factor for good sound is the quality of components but also the quality of the sample rate used. The 1601S is well up to scratch in this department, with a quality far beyond that of both CDs and DAT. It is more in line with SACD and DVD-A formats, boasting 96kHz, 24-bit.

There are some clear advantages of mixing with DSP (Digital Sound Processing). There is no degradation in sound or crosstalk between channels (-85dB), plus there's scope to customise the mixer and offer features that would normally push its price sky high.

Some of our favourites include a razor-sharp cut on the EQ of -85dB - almost twice that necessary to give a perceived kill. The headphone output has filtering and audio limiters, plus limiting on the master along with a dedicated Exciter effect. There's also a welcome lack of interference from dirty controls because all the components are relaying their position information to the central

DSP, which controls the sound. This is the digital answer to voltage controlled amplitude (VCA) on analogue mixers.

The 1601S also features technology that will filter out any distortion caused by dirty components so only after the faders start to suffer from serious wear and tear will the end action of these controls be affected.

This is great news considering the abuse scratch mixers can be confronted with, and is made even better by the additional fact that the faders used are amongst some of the smoothest and most solid we've tried.

Last but not least is the digital sampler, which features two 32-second sample banks with reverse, 1-shot and loop play.

LAYOUT

The 1601S is a two-channel mixer with three-band EQ. The fader area is completely clean on the 1601 version, but the 1601S has the sampler section right next to the left channel volume fader and might cause some problems for serious competition battle scratch DJs.

We also think the slightly shrunken fader knobs are a bit small, but Soundcraft have hinted that an accessory set of larger knobs may be in the pipeline. Otherwise, the mixer is relatively logically laid out, if a little differently to the norm. The EQ is situated right at the edges of the mixer so gives more room for cutting on the phono/line switches, which incidentally are customisable. They can be rotated by 360-degrees in 15-degree steps.

The only other control that might slightly get in the way of battle moves on both mixers is the cue-monitor mix-fader, just above and to the right of the second channel volume fader.

The Mic channel is tucked away up in the left corner and features a Neutrik connector with both jack and XLR connectors. However, the jack in this instance is not for a mic but is designed for mono instruments, such as keyboards and so on.

This input, along with a pair of RCA connectors on the back, are all mono and provide an additional input when the mic is turned off. There's also two-band EQ with ± 15 dB for some reasonable tone shaping.

EQ & EXCITER

Thanks to the DSP, the 1601S is able to cut each band by a drastic -85dB, while allowing for a more moderate +6dB increase. The small boost is only really going to appeal to club installers as it means DJs are less likely to be able to harm the rig. But DJs who like to cut and boost can use the very tasty processor called the Exciter, which makes up for the small EQ boost. The Exciter is a filter that can add resonance (mix) to the chosen frequency. This is great for adding a bit more, erm, excitement to scratch sounds. But it can also be used to build energy in a track by combining bass drops on the EQ with filter sweeping on the Exciter, and it sounds absolutely lush.

The only complaint here is that it left us begging for more controls over the filter type, even just a low and high pass. But

INFO

T-SPEC 1601 & 1601S

>> Two-channels >> Three-band EQ: -85dB/+6dB
 >> Mic/line input with two-band EQ: ± 15 dB >> Mic insert point plus dual jack/XLR input >> Gold-plated connections >> Input fader slope control and reverse facility >> High quality 45mm user-replaceable crossfader >> Crossfader curve control and reverse >> Effects send/return with pre/post/master routing >> Balanced XLR and unbalanced RCA master and booth >> Mono/stereo switching >> 80Hz HPF for removing turntable rumble >> Ten-segment input/output metering >> Exciter section with frequency and mix controls >> 25mm replaceable cue crossfader >> Headphone EQ/filtering, master/cue switching, limiting >> Headphone jack and mini-jack >> Anodic printed top panel (won't wear off) >> Easy removed top panel

T-SPEC 1601S SAMPLER

>> Two sample banks >> 24bit/96kHz sample rate >> Playback assignable to both channels >> Record from cue >> 1-shot, loop and reverse playback modes >> Maximum 32 beat loops, 32-seconds >> 25mm faders to control level and trigger playback >> Replaceable sampler controls >> BPM lock indicator and backlit sample buttons >> Footswitch control per sample bank



Urei: Exciter & FX Loop

Urei 1601S two-bank sampler



loop playing until released - much like a cue button on a CD player. The 25mm volume sliders for each bank also work as triggers in 1-shot mode when they are pushed up from the off position, but unlike the trigger pads, the loop will keep playing. This is great for working out when you want the loop to start, say on an off beat for example.

Recording a sample is relatively easy and can be done manually or with the help of the BPM lock feature to offer seamless loop sampling... and we mean seamless.

nevertheless, it still offers something unique and very useful for both scratch and dance DJs.

SAMPLER

The sampler section is one of the most advanced samplers built into a mixer that we've tried. It's very similar to products such as the Red Sound Cycloops, in the way that operation is almost fool-proof.

That said, it's not the kind of DJ tool you can stroll up to and use without a little guidance and, ideally, a thorough read of the manual. This is simply because it can do so much more than just record audio and play it back from sample pads. The sampler has three playback modes, but essentially works as a looping module. In loop mode the sample is looped continuously and can be muted with the trigger pads. In 1-shot mode the sample is still looped, but can be stutter-started using the trigger buttons and volume sliders. Finally, the samples can be reversed - playback is much the same as the normal loop in this mode.

There are two sampler banks with trigger buttons called rec/mute, which can be used to temporarily stutter the start of the sampled loop when in 1-shot mode. Holding it down keeps the

The sampler input is selected using the headphone cue control, so the DJ can sample a combination of the two channels and even the master for capturing performances. These can include effects send processing, Exciter manoeuvres, scratching, EQing and so on. Another really clever thing the sampler can do is record another loop to the same bank while the old one is still playing. As soon as the old loop finishes its cycle, the sampler will start to play the beginning of the new sampler even while it's still recording, which is amazing! We discovered that we could layer sounds over the top of sampled loops by recording the master channel - it captures both the old sample, any more additions, plus the beginning of itself if the new loop is longer than the previous one. It's almost like a twist in the fabric of space, where time becomes a loop. Anyway, it's definitely loads of fun and the BPM recognition is one of the best we've ever tried too. It's also possible to tap your own BPM in and the engine will use your tap as a guide, so even the most obscure beats can be locked-on. A useful trick to remember is to disengage the BPM recognition engine for breakdowns or when mixing in a new track using the cue

monitor, because this is used by the sampler. This brings us onto another very innovative aspect to the sampler, which is its ability to play the sampled loops at the same pitch as the BPM value it reads from the cue or master monitor. This is great if you are changing tempo in a set and want to use the same loops.

MORE TRICKS

If the sampler and Exciter aren't enough to play with, there's a really good effects loop to add even more effects. There are controls to send channel one, two and master, either post- or pre-fader for a total 'wet' effect. There are volume controls for both send and return, which can also be set to master or channel return. There's a handy trigger switch that can be used to paddle on the effects loop when pulled back and permanently on when pushed forward. It's quite rigid in operation so will need heavy-handed operation for fast-timed cuts.

PRECAUTIONARY MEASURES

The 1601S benefits from an internal limiter, which prevents the output from distorting on the master and the headphones. This works very well and is an absolute godsend for installers. However, in its default state it's still possible for the DJ to distort the analogue to digital input converters. This can be further prevented using internally set gain reduction in two steps: -10dB and -20dB, which makes it impossible to distort the average audio player's output using the gains.

We tried our hardest to distort the 1601S. But with the input set to just below clipping, the master at full, the effects loop going through a bypassed filter with the return gain set just below clipping, and even the Exciter set to full on the low frequencies, there was no obvious distortion. However, it was possible to hear the limiter 'ducking' the dynamics to the bass. The only fault we could find was when we applied the booth 80Hz high pass filter (designed to eliminate turntable rumble), which

strangely caused a little clipping in these extreme conditions. Not what we expected, but otherwise it performed incredibly well when given a total hiding and the rumble filter caused no problems in normal operation.

IN THE MIX

The 1601S is a superb-sounding digital mixer and boasts some very tasty little added extras thanks to the DSP processing. The sampler is incredibly innovative and can be both functional and loads of fun.

The price is surprisingly affordable considering what's on offer for both scratch and techno-style DJs. The leaner 1601 model is better suited for DJs wishing to push their scratching up to light-speed. Urei are so proud of these mixers they even omitted an off switch!

VERDICT

PROS

- >> Very advanced and innovative looping sampler
- >> Customisable controls
- >> Loads of user-replaceable parts
- >> Incredibly solid and smooth feel

CONS

- >> Would have been great to see more filter types
- >> Mic/line input would be great if in stereo
- >> Fader knobs are a little small

VALUE FOR MONEY	★★★★★
FEATURES	★★★★★
EASE OF USE	★★★★☆
SOUND QUALITY	★★★★★
STABILITY	★★★★★
OVERALL	★★★★★

Urei 1601S: where's the digital connections?

