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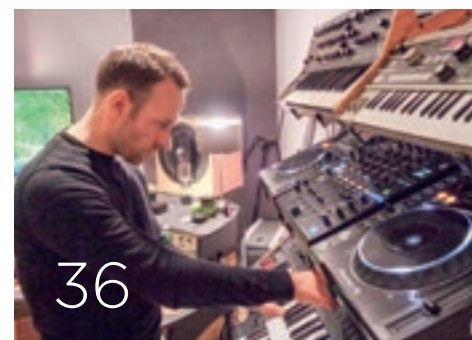
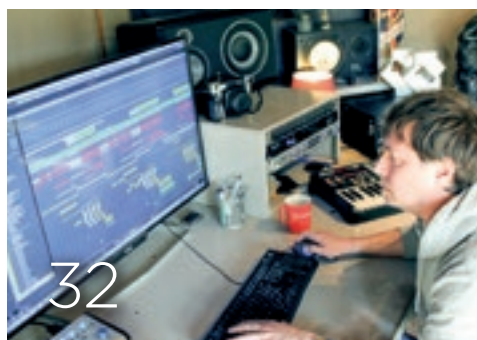
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Vacuvox U23m

The U23m can trace its roots back to the 1950s and beyond.
GEORGE SHILLING jumps into his time machine

The first audio compressor was the Telefunken U3, used at the 1936 Olympics, and in the 1940s came the U13. Then, Rohde & Schwarz developed the third generation U23 in 1953. In 1959, Rein Narma built the first prototype compressor for Les Paul using a similar design, and then licensed it to Fairchild who named it the 660. About 15 years ago, alerted by a dealer to these units as being arguably superior sounding to the legendary Fairchild models, Berry Goedemans started Vacuvox in The Netherlands to restore and modify original U23s, selling them on to the likes of producers Michael Brauer, Terry Britten, Paul Weller and Jeremy Stacey. Goedemans' aim was to restore and modify the original U23s. Having updated about 40 of these, supplies became scarce so he developed his own brand of U23. Much of the magic of the U23 is the nature of the 'unobtanium' transformers, but Goedemans managed to have these re-manufactured.

There are two versions, the U23, and this U23m mastering version which includes 21-step attenuators and switches instead of continuous pots, an extra Ratio position, and a selectable Output transformer level (normal or +6dB using a rear panel toggle switch).

I was sent a pair of U23m units, and such is the weight of these when packed in a crate that there is no way I could lift the box on my own — and I work out daily! Components of the very highest quality are used throughout including seven selected and matched NOS vacuum tubes and four audio



/ Re-manufactured vintage Rohde & Schwarz transformers

transformers in a beautifully constructed 3RU case, with chunky vintage-style knobs gracing the front. On the back there are XLR connectors for audio connections, the aforementioned toggle switch, a 5-pin DIN (with locking collar) for Link cable, along with trim-pots for Sidechain and Link calibration.

Power is flipped on with a big toggle switch on the front; the big orange indicator light is the only illumination, as the Simpson VU has no backlight.

Scooping it out

Running mixes through the U23m can sound surprisingly neutral, but always big and musical. As well as an Input level knob (20dB in 1dB steps) there is also a 10dB pad, and most interestingly a three position Gain switch (H, M, L). Juggling these and the Threshold knob varies the sonic character. With Gain set to L, lowering the Threshold knob to achieve compression, the sound is fairly transparent. But setting Gain to M, Threshold to 10 (high) and using the Input knob to set compression, the sound is noticeably fatter. And in H there is a noticeably scooped Loudness curve — which sounds fabulous.

Ratio is selectable at 2:1 (mastering version only), 3:1, 4:1, 5:1, 7:1 and 12:1. Subsequently produced mastering units will drop the 12:1 ratio and instead add 1.5:1 at the other end of the knob. I welcome this, as a subtler compression would certainly be useful occasionally, although some fun was had with the 12:1 setting for crazy inside-out-sounding drum limiting!

Setting Attack to its fastest (1mS) setting just about shaves off the front of transient hits; increasing it soon gives you back the thwack, and it goes up to 50mS. Release has a range from 0.2 to

1.2S but there is an element of LA-2A-style auto-release too, with prolonged gain reduction slowing the release slightly. I'm a fan of fast release; the fastest setting sounds fabulous and adds wonderful excitement to percussive sources. It works especially well for containing and enriching vocals too.

Smoothing with the De-esser

The De-esser knob is the only continuous pot; this changes the control circuit from a flat response at zero to add greater sensitivity to high frequencies as it is turned up. It isn't brutal like an Orban or dbx, even at full tilt on the highest Ratio and the fastest Attack and Release settings — things are slightly gentler here — but it has a useful effect of smoothing higher frequency content and can be a very pleasant adjustment in sweetening the tone of harsh signals.

The Filter toggle introduces a 6dB per octave reduction below 100Hz into the side chain — a great bonus when compressing program mixes with prominent or dynamic bass drums and bass parts to avoid undesirable effects — this stopped apparent dipping of vocals during a simple but bold bass riff in one of my mixes.

There is a rotary switch for Link/Bypass. As well as Mono/Link settings and a normal bypass (BPm) which defeats the gain reduction, there is a BPa (average) setting which doesn't actually bypass gain reduction but instead fixes five seconds attack and release settings for gently averaging the signal — useful both for set-and-forget level control, and comparing steady signal at similar volume to compressed signal.

The U23m added a gorgeous open tone across everything I tried it on, tightening the bass end beautifully and adding punchy — or creamy — vari-mu magic without darkening things. The controls allow for many flavours and add immense flexibility. Goedemans has done a remarkable job enhancing the U23, and it's quite miraculous that such an old underlying design provides one of the best ever compressors. **f**

resolution/VERDICT

PROS Arguably the best-ever sounding compression; more flexibility than a Fairchild, solidly built.

CONS No hard-wire bypass, expensive (€6,900, Mastering version €7,500 ex VAT).

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