Mackie Onyx 1640i

Mackie calls its flagship Onyx a '...DAW-loving, premium analogue mixing, FireWire-laden mother of all compact mixers.' But is it the mother lode? ROB JAMES digs deep and closely scrutinises.

For workaday applications in a wide variety of fields, from small-scale live music and recording to education and HOWs (Houses Of Worship), 16 inputs is something of a sweet spot. Just sufficient for most people's purposes, while remaining portable or slotting into a conventional 19-inch rack for fixed applications.

The Mackie Onyx range needs no introduction, having established a considerable reputation thanks to high-quality mic preamps and well-thought-out Perkins EQ that brings a 'British' flavour to the sound.
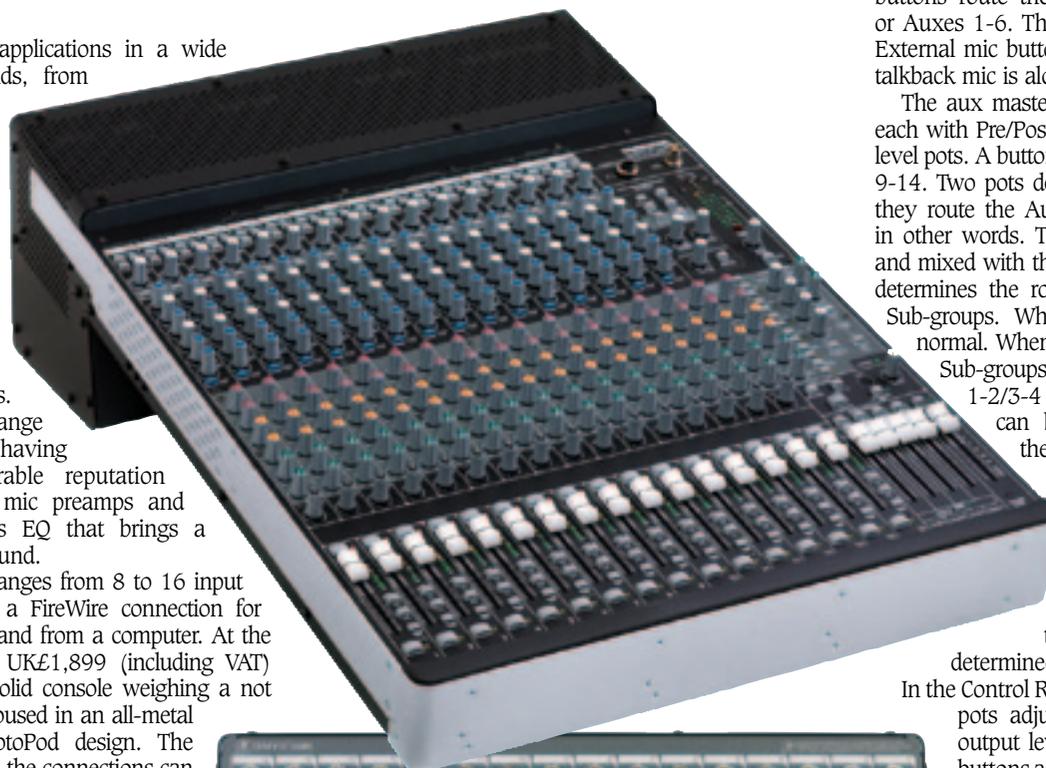
The compact i series ranges from 8 to 16 input channels and integrates a FireWire connection for recording and mixing to and from a computer. At the top of the range is the UK£1,899 (including VAT) Onyx 1640i. This is a solid console weighing a not inconsiderable 15.9kg, housed in an all-metal case using Mackie's RotoPod design. The bulky rear section with all the connections can be located in one of three different positions: default is with the I-O connections at the rear; alternatively, the pod can be swivelled up so that the connections are horizontal for easy access; the final option is with the pod mounted underneath the control surface, making the overall depth far less — again, with the connections at the rear.

The package includes a licence for Mackie's Tracktion 3 basic bundle. Mackie states that the Onyx 1640i is qualified for use with all major DAWS, including, specifically, Pro Tools M-Powered 8; Apple Logic; Cakewalk SONAR; Steinberg Cubase; Ableton Live; and Apple Final Cut Pro. Pro Tools M-Powered is something of a coup since this is the only non M-Audio device available to date for Pro Tools M-Powered.

Inter-knob spacing is tight, but the EQ is indeed very sweet. It isn't especially powerful, but it is quite difficult to make something sound truly horrible. There are detents at the unity position on the EQ gain pots, but, strangely, not on the channel gain pots.

Routing is straightforward; everything in the master section is familiar and self-explanatory. By default, FireWire channel sends are pre-EQ, pre-insert; or post-EQ, post-fader. However, this can be changed by a Mackie service centre to pre-EQ, post insert; or post-EQ, post-fader. There are a total of 16 sends and 16 returns, all accessible at a button press, so 16-track record and mixdown is very simple to set up. Alternatively, the auxes, subgroups and main outputs can be routed to the DAW via FireWire channels 5-16 — again, with the press of a few buttons.

The RotoPod's top row of jacks is for unbalanced inserts on each channel strip; the next row is for line in with Hi-Z on channels 1 and 2. 16 XLRs feed the 16 Onyx mic pres. An XLR takes a dynamic mic as an alternative to the built-in talkback mic. Main outputs are on XLRs and jacks, and there is a mono jack output with rotary level control. Two unbalanced jacks provide main inserts and four phonos deal with tape in and out. Control Room monitors, the four sub-group outputs, four stereo aux returns, and six aux sends all appear on jacks. At the bottom, power is IEC with a rocker switch, and there are two 6-pin FireWire 400 sockets to connect to the computer and daisy-chain further consoles or hard disk drives. Bottom right, two 25-pin D-sub connectors output channels 1-8 and 9-16 for balanced recording. Pin-outs follow the Tascam convention. Source can be post-gain and low-cut, or post everything — except the fader, depending on the setting of the FireWire Pre/Post button.

The 16 channel input strips are identical, apart from the first two which sport Hi-Z buttons. Latching Solo buttons are at the very bottom of the strip — an eccentric choice since it makes inadvert solo a possibility, below the 60mm fader with Sub-group 1-2, 3-4, and Main assignment buttons adjacent.

Mute button and pan pot are above, followed by six aux send knobs. The EQ section has an EQ In/Out button, Low (80Hz), Low-mid and Frequency, High-mid and Frequency, and High (12kHz) band knobs. Above the FireWire pre/post send, the Gain pot ranges from -20dB to +40dB. At the top, three buttons toggle a 75Hz 18dB/octave filter, Line Input, or FireWire input, and switch 48V phantom power.

In the Master section, below the faders, a button routes the sub-group outputs to FireWire channels 5-8. Each of the four sub-groups has a master fader and LR Main routing buttons. Main has an Assign to FireWire 15-16 button above the fader. Two selector buttons route the Talkback output to Phones and/or Auxes 1-6. The Talkback key lies adjacent to the External mic button with indicator LED. The built-in talkback mic is alongside the Talkback level knob.

The aux master section has six Send Master pots each with Pre/Post and Solo buttons, and four Return level pots. A button assigns Aux Sends 1-6 to FireWire 9-14. Two pots determine EFX to Monitors levels — they route the Aux 1&2 return to Aux 5&6 Sends, in other words. The stereo effects return is summed and mixed with the Aux 5&6 sends. A further button determines the routing of Aux 3 return, Mains, or Sub-groups. When not pressed, Aux 3 return is normal. When activated, Aux 3 is routed to either Sub-groups 1-2 or 3-4, depending on the Subs 1-2/3-4 button. Similarly, the Aux 4 return can behave normally or be routed to the Control Room/Headphone Source Matrix by the CR/Phones Only button.

Solo mode switches between AFL and PFL and the Solo Level knob determines the level. Tape to Mix routes the Tape input to the Main Mix bus at the level determined by the Tape In knob.

In the Control Room and Phones source section two pots adjust Control Room and Headphone output levels. Five summing matrix selector buttons assign the Main Mix, Tape Input, Sub-group 1-2, Sub-group 3-4, and FireWire 1-2 inputs to the Control Room and headphone outputs. A further button routes the selector matrix output to the main Mix bus. If this button is engaged, together with Main Mix, the Main Mix input is muted. Above the traditional Mackie 'Rude Solo Light', the two peak meter bargraphs each consist of 12 LEDs covering the range -30dB to +20dB. At the top the headphone jack is next to the BNC snake-light socket.

This is a 'system' console. There are no built-in dynamics or effects, so these need to be added externally. The comprehensive inserts (unbalanced) and six aux buses provide a great deal of scope. There is the alternative of using the Waves MultiRack plug-in platform via FireWire.

The Mackie Onyx 1640i is an elegant fusion of a highly-developed analogue console with a built-in digital interface integrated intimately. It's much more than a simple I-O card, thanks to the routing buttons. Tracktion is a nice bonus.

Full mixdowns are very simple to set up, and the analogue goodness of the Mackie appeals to me in preference to digital summing. It's a versatile and attractive console and deserving of very close scrutiny. ■

PROS	Versatile; excellent sound; highly integrated computer interface.
CONS	60mm faders; knobs a bit close together; Solo in an odd place.

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