

Totally

WIRED

Why should I want one?

The Mackie Onyx 1620 is well geared up for live mixing and recording. In fact, you could easily perform a Front of House mix for a gig and make a digital multitrack recording at the same time.

The 16 input channels of the desk come as standard with balanced direct outputs that can be connected to a 16-track recorder.

Although the Onyx is an analogue mixer, there is an optional FireWire card that gives 16 direct outputs and a separate L-R main mix, all of which are digital. This makes it a natural front end for a computer-based workstation and, again, the 16 I/O configuration is much better suited to live recording and traditional 'track laying' than the small interface boxes you can buy for your computer.

Mackie Onyx 1620
SRP: £769
FireWire card
SRP: £439
Tel: 01268 571212
www.mackie.com

The first Mackie mixer I came across was one of the company's 8-Bus designs. These desks were part of the revolution that allowed artists for the first time to make professional recordings, using gear that they could afford to own. It was bad news for mid-range studios but great news for musicians, many of whom used their advance money from the label to buy the equipment that would see them through their first few albums.

As the model designation implies, the recently released Mackie Onyx 1620 offers 16 input channels and stereo out. I was interested in the design when I first saw it because it has a number of especially useful features for recording although you could also use it live. Certainly it seems robust enough to take on the road. About the only parts of the casing that are not steel are the outer parts of the two end-cheeks, which feel like high-density rubber and look suitably industrial with hex-bolts running through them.

I also like the way that the front panel curves round to form the back panel, meaning that all the sockets and controls are bolted onto a single steel sheet. This is perforated on the curve, which looks great and also means that heat from the internal power supply has somewhere safe to go. The only thing that confused me was the inclusion of two mains leads – one the US type and the other for mainland Europe. It's no big deal. If you're anything like me, you probably have loads of mains leads kicking around and I'm sure that Mackie will be putting UK leads into the next batch anyway.

The manual that comes with this mixer is written in the usual Mackie style. If you really can't wait

to get started, page 5 starts READ THIS PAGE and it really does contain all you need to know to avoid doing anything disastrous. That said, I would recommend any new owner to read the whole manual because it is very useful and there are a number of functions on an Onyx that are more versatile than you might realise at first.

The Ins and Outs

Starting with the obvious stuff, nearly all the inputs and a number of the outputs for this desk are on the top, where you can see them. Whether they are better off here or tucked round the back is always a judgement call. If they're right under your nose, the mixer is much easier to repatch but all those cables do look a little untidy. If they're round the back, you have a cleaner working surface but more hassle if you want to change the way things are connected. Given that this desk seems to be mainly aimed at self-op recording and PA setups, I'd say Mackie has made the right decision.

There are eight mic/line channels, with mics on balanced XLRs and line inputs on jacks. So far, so standard but take a closer look. The first two line inputs are what the Americans call 'Hi Z'. That means they are high impedance, so you can plug a guitar straight in. Now that is handy.

Round the back, you'll see that there is an insert point for each channel. These are often used for adding an external processor that is required on one channel only, such as a compressor/limiter for instance.

You could also use the inserts as direct outputs to feed a multitrack recorder but Mackie has provided you with another way of doing this.

were recording. The soundcard on my bother's PC only has four I/O, so we premixed a pair of overhead mics and the tom mics through the Mackie's main L-R outputs. Then we sent the snare mic and bass drum each to a separate track via an aux mix in each case.

Strictly speaking, this was a bit wasteful of aux mixes but we had four to choose from and only needed one more to send a headphone feed with the backing tracks to the drummer. The fact that the Onyx has a talkback mic made it much easier to communicate.

Note however that if we had had an Onyx with the optional FireWire card, we would have been able to record all the drums onto separate tracks, which would have left more options come the mixdown. It was only afterwards that I discovered that the good folks next door were actually going away the weekend after. **PM**



Specs, test and tech, is Simon Croft impressed? Read on to find out.



There are two 'D' at the bottom of the back panel and these can be used to connect directly to the analogue inputs of a Tascam multitrack recorder (or indeed any recorder, providing you are prepared to invest in a custom cable). There were no FireWire cards available when I looked at the mixer but the slot for it is next to the D connectors.

The Onyx is billed as coming "with Perkins EQ". There is a bit of a trend at the moment towards signature model EQ designs. In this case, it's the work of Cal Perkins and he's opted for two sweep mids on the mic/line channels and one fixed mid on the stereo channels, in addition to low and high. My ears tell me that Cal knows a thing or two because this is a very sweet-sounding EQ.

All the channels have EQ in/out. This is useful, not just for checking whether you really have improved matters but also because you can take the EQ out of the circuit completely when it is not required.

Other welcome provisions on the mic/line channels include low-cut switches (handy for cleaning the sound up where there is no desirable low frequency element) and individually switched 48V phantom power for condenser mics.

There are four aux mixes. Although the colour coding suggests that two of these are for effects, with the other two for monitor mixes, they can in fact all be switched pre or post. That's great because it means you can have more monitor mixes while you are track laying and more effects mixes when you are mixing. It's also worth noting that you can route an effects mix to monitor. It can be a nice confidence booster for vocalists to hear themselves with reverb, rather than right up close and dry.

Each channel has a Mute switch – a useful enough inclusion but one that Mackie turns to extra advantage. Underneath the switch it says 'Alt 3/4', a reference to the Alt 3/4 outputs next to the main Left Right output jacks. This sort of gives you a four-bus desk. You can actually route the Alt mix back into the main mix via a switch in the Master section but bear in mind that this 'submix' wouldn't actually have any master faders of its own.

Ups and downs

If you had asked me before I took the Mackie Onyx for a test drive whether the world desperately needed another 16 input desk, I would probably have said no. However, Mackie has got ahead of the game here by making it easy to interface a compact analogue desk with digital multitrack recorders. As such, the Onyx offers a sweet-sounding front end, a versatile monitoring system and an intuitive mix surface for a wide range of recording set-ups. **PM**



MY BRAIN HURTS! IT MUST BE... THE TECHNICAL BIT!

There are a number of ways you can record using the Mackie Onyx. The simplest is to go direct-to-stereo, using the Tape In/Out phonos. This is a good solution if your main reason for the recording is to see how a gig went after you get home. However, it's probably not going to be the perfect mix if the engineer's main priority is getting the sound right Front of House. It's also worth bearing in mind that the only stuff in the recorded mix will be what's going through the desk, so if your guitar stack is so loud you don't need miking up, all we're going to hear of you in a direct-to-stereo recording is a bit of spill through the vocal and drum mics.

A better bet for many people will be the Onyx' multitrack recording capabilities. As standard, it provides 16 direct outputs, which is a good match for a lot of digital tape recorders. These outputs are actually analogue, as is the whole desk, but they still offer very acceptable input quality to a recorder.

But what if your recording system doesn't have analogue inputs, or at least, not very many of them? This is where the optional FireWire card can help because it will send the 16 direct channel outputs, plus the main L-R mix, straight to your digital audio workstation.

With either of these methods of recording multitrack, you can of course use the Onyx's 16 channels to mix down your recordings to stereo later on. This makes the whole system not just versatile but close to foolproof because you can make all your mix decisions after the event. **PM**

ROADTEST!

My brother has a very workable way of recording pro-sounding albums for next to nothing. Firstly he blags a nice, remote building, such as a holiday home out of season. (Bungalow, Skegness, November... you get the picture.) That's where he records noisy stuff like drums and loud guitar parts onto his PC.

Then he takes the gear home and works on the quieter parts before booking some horribly unpopular studio time like the break between Christmas and New Year, and gets mixing.

The problem this time round was a lack of remote location, so Brains Here said, "Get yourself round to my house, the next door neighbours are away for the weekend and I've got a mixer to test."

Somehow, we managed to get the drummer set up in the living room with cables run round to the dining room, so that we could hear what we