Mackie DL1608 iPad Mixer £959

Alex 'Ears' remotely swipes his way through this small, yet powerful, digital audio engine

WHAT IS IT?

Digital audio mixer engine for iPad, with built-in FX and dynamic processing

CONTACT

Who: Mackie Web: www.mackie.com

HIGHLIGHTS

- 1 Simple intuitive control interface
- 2 Fully packed feature set 3 Solid, clutter-free build

t's nearly 25 years since Mackie raised their flag when they introduced the CR1604, setting a precedent for their range of

well-built, value-for-money audio hardware. While many of their offerings may lack some of the features old pros are used to, they're more than good enough for the majority of semi-pro users, and very popular with bands that mix themselves.

The DL1608 brings some slick new technology to the market, adding remote control to an increased set of features. In the box you'll find a slightly boring looking black plastic box, with a row of connectors and gain pots. It feels nicely solid in construction, although

the adaptor tray necessary to accommodate different versions of iPad, makes it feel a little 'plasticy'.

You'll find an iPad-sized quick-start guide in the docking slot, reminding you that this isn't a standalone mixer, however, this reliance on the iPad as a control surface gives the DL a distinct advantage over many low budget mixers – the control surface is a user changeable part so a spare is now possible! Sliding the required iPad into the dock obviously makes it look more interesting and there's a chunky lock to prevent theft.

It was disappointing to see a global phantom power switch. A good compromise would have been to switch

in banks of four. It's also a shame that the input gains are physical pots with no digital recall, giving no remote control or proper use of scene presets for multiple bands. I'll still be using my digital camera to 'note' pot settings between bands, on a digital desk [sigh. In fairness, though, both of these details keep production costs down, and shouldn't be a problem in most real-world situations.

Power out

The DL1608 comes with an external power brick, which might be annoying to some, but reduces the noise floor. I was surprised to see a lack of integrated soundcard or digital in/out and CA phono input and output. Playback and recording can be achieved when the iPad is docked directly to the DL1608. The manual is pretty clear, but full of weird humour (although not quite as weird as the promo video!).

The Master Fader software can be downloaded free from the iTunes App Store (which is handy if you want to get a feel for it before purchasing). After following the setup guide, when I tried to connect a warning prompt said the DL's firmware needed updating.

The preamps seem fairly good sounding, although a little noisy at





extreme gain ranges. The EQs work, but it sounds like it's not affecting the audio as much as the gains may indicate. Not a problem for most, but those who are more used to the top end mixers might notice this.

The compressors sounded a little crunchy for my liking. They give a hard/ soft knee switch, but I'm a man who likes to use RMS sensing on my comps, so I was disappointed not to see this option. The FX sounded okay, but a bit limited, and there were no FX sends from returns, so no reverb on delay returns, which I often use, and no delay feedback effects, which is fairly often done on Reggae shows. Overall, I found the sound of the DL a little uninspiring, but the functionality it offers means you can get the job done pretty well.

I loved the ability to add an image to the track name. It can be a struggle to remember the names of the 12 singers

A Touch of Control

The interface obviously makes good use of the iPad touch controls.

Tapping is used for the buttons such as mute and drag for faders, while flick navigates which nine faders you can see at a time. Swiping up/down/left/right in the Swipe Zone navigates between different channel features, such as EQ or compression, and pinch is

used for the EQ filter width, or 'q'. It's a touch interface, so some might miss the tactile feedback of a fader – I found myself looking down more often to check what I was doing. There's quite a good visual form of tactile feedback, which Mackie call 'Grow and Glow'. When you touch and drag a colour-coded fader, it grows in size and gains a

glowing halo, which is a useful way to let you know that you're actually adjusting something. If you set up your iPad properly you can adjust up to three faders at once. I was frustrated that there was no way of grouping faders such as DCAs, or any group mutes. I'm sure it wouldn't cost much DSP resource but it might clutter the interface.

letting musicians loose on their mix and there's no way to lock out Master Fader features so you could find musicians playing with your EQs.

As with any digital mixer, it's a really good idea to keep saving to scenes. The

fast and well, as long as they only want two of the three. The same is true for manufacturers, but their three goals are price, audio quality and functions/build.

Historically, Mackie have erred on the side of keeping costs down, while

producing reasonably good audio quality and functionality with a pretty chunky build, and there are as many low budget users that love them as

there are high budget users that don't. The DL could be the product that readdresses that balance, attracting professional users who love its functionality, as well as the small and medium-budget users who would traditionally have been drawn to its reasonable price. FM

No need to run out a multicore, I can mix a show from a comfortable chair at the back of the pub

you've only just met, who keep moving around, making it tricky to track who is on which channel. The images are not affected or changed by scene recalling, but can be attached to track presets.

Wire free

For small gigs, having wireless control is a godsend: no need to run out a multicore, I can mix a show from a comfortable chair at the back of the pub. If my iPad battery dies, or the software locks up – which it did once during testing – the audio engine will continue exactly as it was until I charge back up or force quit and restart.

It's worth having two iPads, because if you want to record then you have to have the iPad docked, which means you'll lose remote control. Bands will also love being passed the iPad to adjust their own monitor mixes, although not all engineers will enjoy

good lessons are hard lessons, but they don't have to be your lessons – learn from other people's mistakes.

Having compressor/limiters on the outputs is great for protecting your speakers, although it's a shame there's no delay compensation on outputs, or indeed inputs for that matter.

As yet there's no way to digitally buss two DLs together as one. Mackie suggest making a 24-channel console, by taking the analogue outs of one DL and routing into eight inputs of the second. This would work, but adds extra D-A/A-D conversion and latency (which could have been compensated by an input delay trim). It would be nice to see digital bussing of two DLs using the 100Mb networking port, especially if the software then saw the two consoles as one big system.

When I'm quoting for a job, I like to remind clients I can do anything cheap,

FutureMusic VERDICT BUILD VALUE EASE OF USE VERSATILITY RESULTS

It might be small, but the big features could attract a new generation of Mackie lovers.

SPECS

System Requirements: Apple iPad iOS 5+, Mackie Master Fader app (free), wireless router (optional)

Audio clock: 24-bit, 48kHz (fixed) **Analogue inputs:** 16x balanced Onyx preamps (12 XLR, 4 XLR/jack combo) Analogue outputs: 8x balanced (2 XLR, 4 jack) iPad dock connector with built-in charger Digital I/O: When physically docked with iPad EQ: Four-band parametric + HPF on inputs, 31 band graphic on outputs **Dynamics:** Compressor and gate on inputs, compressor/

Built-in effect sends: 2x, 1x reverb (eight types), 1x delay (eight types) System latency: 1.5ms Frequency response: +0, -1dB, 20Hz-20kHz

limiter on outputs

-1dB, 20Hz-20kHz THD (mic input to main output, 1kHz, -1dBFS): <0.005%

Dimensions: 391 x 291 x 95mm Weight: 3.1kg

ALTERNATIVES



Line6 Stagescape

£1,890

Powerful standalone audio system, ideal for musicians who mix themselves.

www.line6.com



PreSonus SL1602

£1,289

It might have one less EQ band and only 12 mic pres, but it does have FireWire and MIDI I/O over the DL and a slightly cleaner, crisper sound.

www.presonus.com



Behringer X32

£2,726

Epic sound quality and routing possibilities.
Also has iPad remote with just a router connected (no PC needed).

www.behringer.com