DL1608

TOP 20 FAQ

1. **What does the DL1608 Mixer Do? What does the iPad do?**
   It's simple. The mixer itself does all the heavy lifting. Onyx mic pres amplify the signal. High-end AD converters convert this to digital. The powerful DSP chip processes and mixes this through the low latency mix engine. What's missing? Control. And that's where the iPad comes in. It is the control surface, controlling the DSP and mixer parameters but no audio processing occurs in the iPad at all. All the magic happens in the mixer itself which is powerful and able to produce undeniably professional sound quality.

2. **Is the DL1608 compatible with all versions of the iPad? Even the new one?**
   Yes, yes and… yes. The DL1608 is compatible with all generations of the iPad right out of the box. Our patent pending tray design is built to accommodate changing form factors via tray inserts and a modular design. The included tray insert fits the new iPad and iPad 2 like a glove and the original iPad fits into the mixer without the tray insert. We're in the best possible position to solve this issue when Apple comes out with the next generation.

   The software is also fully compatible with all versions of the iPad. The iPad 1 which has a slower processor and less RAM will have less snappy meters and will be slightly less responsive to dragging and other commands. In addition, because the newly announced iOS6 is not compatible with the iPad 1, there may be some features we choose to add in a future release which will not work on the first generation iPad. So if you are looking to purchase a used iPad, get the iPad 2 to ensure a full featured experience into the future.

3. **How does the wireless setup work?**
   Wireless setup is easy. Simply connect a Wi-Fi router to the Ethernet connection on the back of the DL1608. The iPad will connect wirelessly to this network. Almost any off-the-shelf router will work, but we recommend the AirPort Extreme, as it allows easy setup from the iPad and can be configured in detail using the free AirPort Utility app. We plan to list other officially approved and tested access points on the DL1608 website soon.

4. **What apps can be used for playback or recording?**
   iPad applications can playback stereo audio to the DL1608 over the dock connector via a dedicated channel labeled "iPad" in the Mackie Master Fader control application. The main L/R signal is also sent from the mixer hardware for recording. While you can use the built-in Music app for playback and the Master Fader app itself for recording, many users would like to use 3rd party applications for these purposes. This works great but the application must support background audio playback/recording in order for the user to switch back to the Master Fader app for mixing. Many great apps already support this and we will provide a continuous update of tested and approved apps.

5. **Is the DL1608 rack-mountable?**
   Yes. There is an optional DL1608 Rackmount Kit accessory available through Mackie dealers. A Phillips screwdriver is all that is required for installation and the finished hardware takes up nine spaces in a standard 19" rack. Plus, leaving extra room for cabling, a racked up DL1608 fits perfectly into most of the flip-top racks on the market.

6. **Can the iPad be removed from the tray while audio is passing and the unit is powered on?**
   Yes. The audio processing is done entirely on the DL1608 mixer hardware; the iPad only does control. If the iPad is removed it will switch over to wireless control automatically but audio will continue to pass during the transition which only takes a second or two. If wireless is not configured, the mixer still will continue to pass audio until another iPad comes online to control it. When power cycled, the DL1608 returns to its previous state. Note that iPad playback and recording can only happen when the iPad is docked and both will gracefully end when the iPad is removed from the tray.

7. **Can all six aux sends be pre or post fader?**
   Yes indeed! All six auxiliary sends are configurable for pre/post fader operation. This is done on a per aux send basis from the Mackie Master Fader control app.

8. **What AD/DA converters are in the DL1608? What sample rate and bit depth are used?**
   The DL1608 uses 24-bit Cirrus Logic® AD/DA converters with 114dB dynamic range (A-weighted) operating at 48 kHz. These are the same converters as the Onyx Blackbird and Onyx-i series.

9. **Does the DL1608 allow offline editing?**
   Yes. You can create snapshots, shows and presets offline with the free Mackie Master Fader iPad app. Presets are only stored on the iPad and can be recalled to a channel when desired. Snapshots and Shows (groups of snapshots) are loaded onto the mixer hardware which synchronizes them to all connected iPads. These are then recalled from the hardware from any connected iPad.

10. **How are software updates going to work?**
    Updates start at the iOS App Store where the user downloads and installs an update to the Mackie Master Fader app (the application that controls the DL1608). This is just like any other iPad app. The next time they launch the app and connect to a mixer, the app will indicate the mixer is running old firmware, and with a single button press, the app will update the mixer. Note that if a mixer with newer firmware is connected to an older version of the app, it will also indicate this to the user and allow the user to update the Master Fader app from the App store with a single press.

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11. Are the outputs line level? Balanced?
All outputs on the mixer are line level balanced outputs. The aux sends are impedance balanced on 1/4 inch TRS. The main LR outputs are on balanced XLR.

12. What is the power supply?
The DL1608 uses an external lump-in-line universal switching power supply. It connects to the console via a locking barrel connector. To change from one region to another, you must simply supply the correct IEC cable.

13. Do the XLR inputs have 48V phantom power?
Yes. All 16 XLR inputs have +48V phantom power via the global phantom power switch located on the rear panel.

14. How do I zero out/reset an EQ/Comp/Channel quickly?
Every processor has a "Default" factory preset. Simply recall this just as you would any other preset to reset the processor to its default state. There are "Default" presets for each individual processor type as well as for input channels and output channels allowing you to reset the complete channel. Finally, there is also a "Default" snapshot allowing you zero the entire console quickly and easily.

15. When using an iPad with 3G or LTE, do I need to disable the 3G or LTE for operation?
No. The 3G and LTE iPads use high performance cellular transmission for their data transfer. These networks both cause no interference with audio signals or electronics in the DL1608 and other audio gear. However, if you are using your 3G iPad in an area with poor 3G or LTE coverage, the iPad may fall back to a lower speed older network called GSM. GSM communication uses data bursts to communicate with the network and these bursts can cause interference with audio called TDMA noise. This sounds like low level digital beeps in your audio. This will be present to some degree in virtually all audio equipment if the source of the TDMA interference is close enough and the severity will depend on the mechanical and electrical design of both the source and audio gear itself. We have designed the DL1608 to reject this noise quite well. But there are still some situations where the interference can still occur based on the current conditions. The solution if you do hear this noise in your audio, is indeed to turn off the cellular data functionality in your iPad for the show. Again, in most large metropolitan areas the iPad will get good 3G or LTE signals and this problem should not occur.

16. What is the Wi-Fi Range? What router should I get?
Wi-Fi range depends on the router hardware and the environment. Obviously, each router is different and some will be better than others. We recommend sticking with a brand name you trust. If possible, purchase an 802.11n router that works over 5 GHz, though 802.11g works. In addition to choosing a good router, the Wi-Fi signal can be obstructed and its strength reduced if there are many walls or other obstructions it must pass through.

A room full of people each with a variety of wireless devices in their pockets can also negatively affect your performance. This table gives good coverage estimates: (http://en.wikipedia.org/wiki/IEEE_802.11#Protocols). Wi-Fi repeaters can be added to extend the wireless range for large venues, and many routers, such as the Airport extreme have this feature built in allowing you to simply use multiple routers to extend your coverage.

17. Is there a bag or cover available?
Yes. The nylon bag features a firm EVA cover to protect the iPad in transport along with a fully padded interior and a section for the external power supply plus a shoulder strap and handle for carrying. The nylon cover protects your mixer from dust and debris when not in use and features a rear section that flips open to allow cable connection.

18. Can I link two DL1608s?
While the DL1608 was not specifically designed for true linking, creative audio engineers will figure out that you can in fact create a 24-channel mixer with two DL1608s, a few balanced audio cables and some ingenuity. First, the audio outputs from each mixer must be combined. This is done by passing the eight analog outputs of one mixer into the last eight inputs of the second. Combine these output signals from the first mixer with the corresponding signals of the second by configuring the channel routing on the second mixer appropriately. Once you have the audio connected, you need to control both mixers. Each mixer can have its own iPad controlling it via the dock connector. And while a single iPad can't control both mixers at once, one or more iPad devices can control each mixer wirelessly one at a time by changing the Device setting in Master Fader back and forth. Note that even with multiple mixers in use at once, only 10 iPad devices in total can be used with the system.

19. Can I use a DL1608 while driving my car?
No.

20. I need more! Feed me information!
To learn more about any of these questions and answers, check out the DL1608 Podcast and the DL1608 Quick Start Guide and Reference Manual.

MACKIE.