



DL1608

QUICK START GUIDE

Five Simple Steps

Hello friends and welcome to the future of mixing. This document is just what it says it is: a Quick Start Guide for the DL1608. No introduction, no filler, no fluff. Just the very basics to get you started quickly.

In the following pages, you will be taught how to make connections and set levels. You will learn your way around the Master Fader app. And in the end, you will be known around the neighborhood as the cool kid. Yes, you.

Upon completion, if you're still hungry for more, the DL1608 Reference Guide contains major in-depth coverage of everything listed within these pages.

Let's get started in five simple steps...

1. Get the Apple iPad (and Wi-Fi Router).
2. Download the Master Fader App.
3. Connect the iPad to the DL1608.
4. Make the Audio Connections.
5. Fire Up the DL1608 and Launch the Master Fader App.

1. Get the iPad (and Wi-Fi Router):

Are you using an original iPad, an iPad 2, or an iPad (3rd generation)? The DL1608 works with all three! But first...

...where did I leave that darn thing? Is it in the bedroom? The bathroom? Did I leave it at work? Wait, the dogs are using it...that's right!



Once Charlie, Sammy, Rocky and Rhodie have finished checking out the closest place to get their favorite doggie treats, it's time for you to get going.

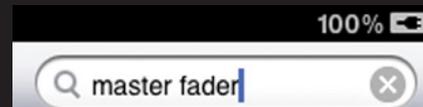
Ruh, good doggie!

One of the exciting features of the DL1608-iPad marriage is the ability to mix wirelessly. Although not required for wired operation, be sure that your Wi-Fi router is nearby, as we will be discussing wireless connectivity shortly.

2. Download the Master Fader App:

The Master Fader app controls the DL1608 and may be downloaded via iTunes on Mac or PC or right from the iPad. You've downloaded apps on an iPad before and it's the same method to download this one, as well. Here's how...

With a good internet connection via Wi-Fi, 3G, or LTE, turn on the iPad and tap the App Store icon. Type "Master Fader" in the search box located near the top-right of the screen.



Tap the gray FREE button. This then turns into a green INSTALL APP button. Do not be afraid...install!



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As if by magic, the Master Fader icon appears on the iPad Home screen after it has finished downloading.



Even if your iPad has the Master Fader app already installed, it's a good idea to go to the App Store now to check for updates. Press the Update button near the bottom right and follow the instructions. You will want the latest and greatest version for the absolute best in functionality and versatility.

3. Connect the iPad to the DL1608:

The iPad 2 and the iPad (3rd generation) easily slide onto the DL1608 right to left, face up, Home button on the left; keep sliding until it mates with the iPad dock connector.



Are you using a first generation iPad? Simply remove the four screws in the DL1608 tray insert, take out the tray insert and put the screws back into the tray. Now you may slide the iPad onto the DL1608 as described above.



Save the tray insert!! Should you ever upgrade to an iPad 2 or iPad (3rd generation), the tray will be necessary!

Also included with the mixer is the DL1608 PadLock™. This is used to lock the iPad into place on the mixer. Place the PadLock on the right hand side of the DL1608 and hand-tighten each of the two security screws using the supplied wrench.

Need a little more information on any of the above? Detailed descriptions (with pictures even!) exists in the DL1608 Reference Guide.

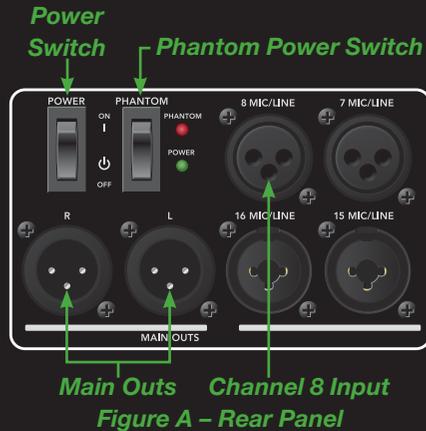
Five Simple Steps

4. Make the Audio Connections:

Now it's time to make some audio connections. First, make sure the Power switch and Phantom Power switch are both OFF [down], [Figure A]. Also, be sure all Gain knobs and the Phones knob are fully counter-clockwise to start, [Figure B].

You will need (at the very least) the following items to get the most out of this Quick Start Guide:

- 1) microphone, 2) speakers,
- 3) headphones, 4) cables.



1) Plug the microphone into the channel 8 input [Figure A]; that's right, we're getting all crazy now, skipping channels 1 – 7...who knows what we'll do next?!

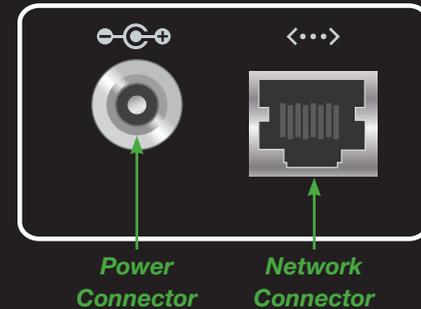
2) Connect the Main Outs [Figure A] of the DL1608 to the line-level inputs of powered speakers or to the line-level inputs of an amplifier (with speakers already attached).

3) Plug your favorite pair of headphones into the 1/4" Phones output jack [Figure B].

Channel 8 Signal / Clip LED



A 12V DC power supply [aka The Power Block] and a line cord are included with the mixer. A locking barrel connector resides at the end of the cord attached to The Power Block. Attach it to the DL1608 Power Connector [Figure C] and rotate the outer ring clockwise to lock. Now plug the female end of the line cord into The Power Block and the male end into a live grounded AC outlet. The mixer may accept any AC voltage ranging from 100 VAC to 240 VAC.



For now, disregard the Network Connector, Aux Sends and anything else not mentioned in these first few pages. We will dive into all of these features later. Our first goal is to ensure that the mixer and app are communicating with each other, followed by driving signal through the mixer.

Five Simple Steps

5. Fire Up the DL1608 and Launch the Master Fader App: Step five is the reward for following the four previous steps. It's time to turn on the mixer, but whispering "sweet nothings" to it won't help. Instead, you will need to press the top edge of the Power switch to fire it up [Figure A]. The Power LED will illuminate green when engaged.

Now launch the Master Fader app to get it started. Go ahead and tap that app!

At this point, you will likely be prompted to update the firmware. Do so by following the on-screen instructions before continuing.



After updating, the Mixer View [Figure D] will be shown and at this point you will want to verify connectivity. This is easy to do, as there are only two possibilities: connected or offline.



Figure D – Mixer View: Connected

Figure E below shows an iPad that is currently offline. In other words, not connected to the DL1608.



Figure E – Mixer View: Offline

So if your app looks like Figure D, you are cool as a cucumber, ready to rock...or jazz...or country...or whatever else it is that you do at times like these.

In the unusual instance that "OFFLINE" is displayed, please follow the directions again, step-by-step, and also check out the Troubleshooting section in the DL1608 Reference Guide.

If "OFFLINE" still remains, please contact our splendid Technical Support heroes. See page 30 for contact information.

Setting the Levels

Setting the Level on Channel 8

Dudes and dudettes, the mixer hardware and Master Fader app are now one and we are ready to start working with the DL1608. Let's get signal running through the mixer from channel 8.

Is a condenser mic (or any other mic that requires phantom power) connected to the channel 8 input? If so, engage the Phantom Power switch [Figure A] by pressing up on it. If not, leave it be. This switch lies conveniently next to the Power switch. The Phantom Power LED will illuminate red when the switch is engaged.

Next, start talking, singing, crooning, chanting, humming, warbling, yodeling, whistling and / or growling into the mic at a real-world level. While doing this, turn the channel 8 Gain knob [Figure F] clockwise until the meters on the channel 8 fader bounce between the green and yellow [Figure G].



Figure F:
Channel 8 Gain Knob

Note: Audio geeks may refer to this area as -15 dBFS. Go ahead and impress your friends with this knowledge. This one's a freebie, but the next one will cost you.

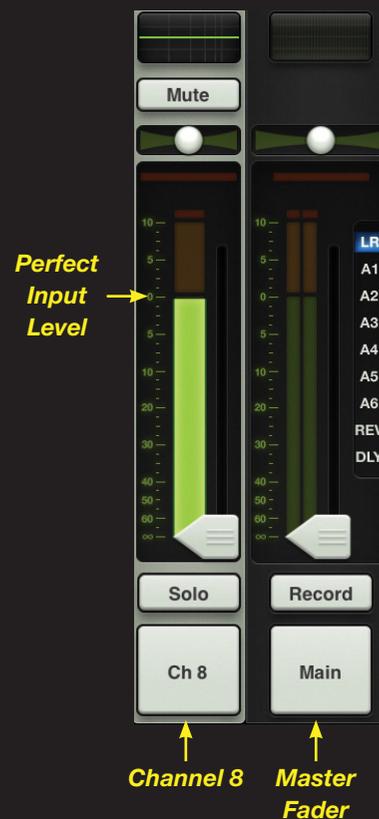


Figure G – Mixer View:
Channel 8 and Master Fader

DL1608 Hardware : Connections



DL1608 Hardware: Inputs

You already hooked up a mic to the channel 8 input and got signal out of the speakers and headphones. This means that there are an additional 15 inputs at your disposal!

All 16 channels may accept a mic or line-level signal on an XLR connector, while channels 13 – 16 may also accept a 1/4" line-level signal.

The steps for setting the levels on the remaining channels is exactly the same as it was for channel 8 (as described in the previous two pages, 6 – 7).

DL1608 Hardware: Aux Sends

Also on the rear panel of the DL1608 are six Aux Sends. Here you may run up to six separate monitor mixes by connecting these balanced 1/4" jacks to the line-level inputs of powered speakers or to line-level inputs of an amplifier (with speakers already attached).

Headphone amplifiers and/or external effects devices may also be connected to the Aux Sends.

We will discuss setting aux levels later in the Quick Start Guide.

DL1608 Hardware: Network

The real power of the DL1608 becomes clear when it is controlled wirelessly. All that's necessary is to connect it to a Wi-Fi access point. It is possible to utilize an existing network, but with a dedicated Wi-Fi router, you have complete control of the router, resulting in the best possible performance.

Nearly any Wi-Fi router found at a reputable store will work. There are four things to look for:

- (1) Ethernet connection. Make sure the Wi-Fi router connects via Ethernet, NOT USB!
- (2) DHCP. The router needs to be able to assign an IP address to the DL1608. In most cases, the router will handle this task. However, there

DL1608 Hardware : Wireless Setup

are some routers that can't complete this simple assignment and should not be used. Routers with a single Ethernet port often will not work well with the DL1608 for this reason.

(3) 802.11n. We prefer and strongly suggest going with an 802.11n as your Wi-Fi mode. However, 802.11g also works.

(4) Name. We are not in the business of suggesting what Wi-Fi router to go with, but choosing one with an instantly recognizable, quality, trustworthy brand name doesn't hurt. OK let's go!

Step 1: Turn the DL1608 off.

Step 2: Plug in the Wi-Fi router and the other end into an electrical outlet. Most of the default router settings will work with the DL1608, but you might need to configure the wireless router first. Please refer to the router's manual for detailed information.

Step 3: Connect an Ethernet cable between the DL1608 and router. Make sure you are using a LAN port on the router, not a WAN port!

Step 4: Turn on the Wi-Fi router first and wait for it to completely boot up. Good? Now turn on the DL1608.

Step 5: In the iPad's Wi-Fi settings page, select the name of the wireless network you created. This might be the default name of the router. You might also have to enter the router's default password at this time. Make sure the correct network is selected.



Step 6: Slide the iPad into the dock of the DL1608, if it isn't already.

Step 7: Launch the Master Fader app.

Step 8: Click the Gear icon to display the Tools menu. From here, select Devices.



Step 9: There should be three devices listed: Work Offline/Demo, Wired and Wireless. At this point the Wired DL1608 should be selected. Now leave the Tools menu and reconfirm that the DL1608 may be controlled from Master Fader over the wired connection.

Step 10: Go back to the Tools > Devices menu. Now undock the iPad from the DL1608 and select the Wireless DL1608 from the devices list.



At this point you should now be able to control the DL1608 mixer wirelessly. Also, "CONNECTED" should now be displayed below the Tools icon.



If "DISCONNECTED" is shown, or the DL1608 is not shown in the wireless devices list, please follow the directions again, step by step, and also check out the Reference Guide for more detailed instructions. If all else fails, contact our splendid technical support heroes. See page 30 for contact information.

That wasn't so bad now, was it? Hardware complete, commence with software. Turn the page to learn more about the Master Fader app...

Overview

Introduction

The Master Fader app has powerful features, but it is easy to learn...and the more you use it, the more intuitive it becomes.

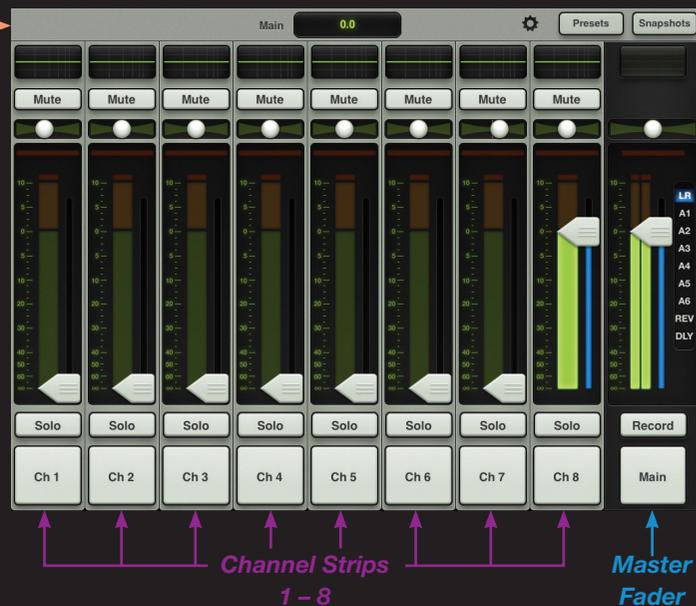
As you work your way through each of these sections, we urge you to **NOT** just read this Quick Start Guide and look at the images, but instead, take each piece of newfound knowledge and put it to use...**PLAY** with it! Move faders, engage buttons, change images and personalize names, etc. This is software and cannot be broken.

We'll start with the features of the *Mixer View* as this is where you will spend much of the time. The key mixing controls of every input and output for the DL1608 exist here.

You will also spend quite a bit of time in the *Channel View*. The *Channel View* is where plug-in processing is adjusted on individual channel inputs and outputs, including EQ, dynamics and FX. More on this later.

Navigation Bar →

Mixer View



We'll start in the *Mixer View* discussing Channel Strips and the Master Fader. Then we'll have even more fun in *Channel View* territory and finish off this tutorial with the Navigation Bar that lies horizontally across the top.

Nine channels (including the Master Fader) and the Navigation Bar will always be displayed on the *Mixer View*. In fact, the Master Fader and Navigation Bar will remain regardless of the selected view, channel, effect, etc.

Overview



But just how did we get from the image displayed on the previous page to the image displayed on this page? And what about channels 9, 10 and 11? This is where your iPad skills come into play!

To view a different set of channels, simply touch anywhere on the black background [we call this “The Swipe Zone”] of a channel and drag or flick the *Mixer View* left or right. The view scrolls, giving you immediate access to whatever channels you desire.

Dragging and flicking are both seamless transitions. Flicking just happens to occur at a faster rate. You will be doing this gesture quite a bit. Some items may be dragged or flicked up and down, too.

In this case, – “But just how did we get from the image displayed on the previous page to the image displayed on this page?” – drag or flick the view left to view the image displayed on this page or drag or flick the view right to view the image displayed on the previous page.

Got it? Let’s look at how the Channel Strips work...

Take a look at the *Mixer View* image on the previous page and the *Mixer View* image on this page. What differences do you notice?

They look similar (and are similar to a degree)... However, the image on the previous page displays Channel Strips 1 – 8, while the image on this page displays Channel Strips 12 – 16, Reverb, Delay and the iPad channel.

Channel Strips

Channel Strips: Introduction

While dragging the *Mixer View* left and right, you may have noticed that each channel strip looks almost exactly the same. Well, it's because they are! We will go over the features of one channel strip top to bottom. The same idea works for the remaining channel faders.

Since we already dialed in signal on channel 8, let's utilize each function on that channel as they are discussed; this gives you an audible, as well as a visual, representation of each function.

Channel Strips: EQ

The EQ curve displays the current EQ processing applied to each channel. Tapping a channel's EQ curve will change the outlook from the Mixer View to that channel's Channel View. EQs that are engaged will illuminate.

You will learn how to adjust the EQ soon, but if you're feeling saucy, go try it out now! When you are ready to return to the Mixer View, just tap the Mixer button located in the top-left corner of the app.

Channel Strips: Mute

Mute buttons do just what they do. They mute – turn off – the signal on the channel(s). Mute buttons illuminate red when engaged. Go ahead and mute and un-mute channel 8 to hear and see the difference.

Channel Strips: Pan

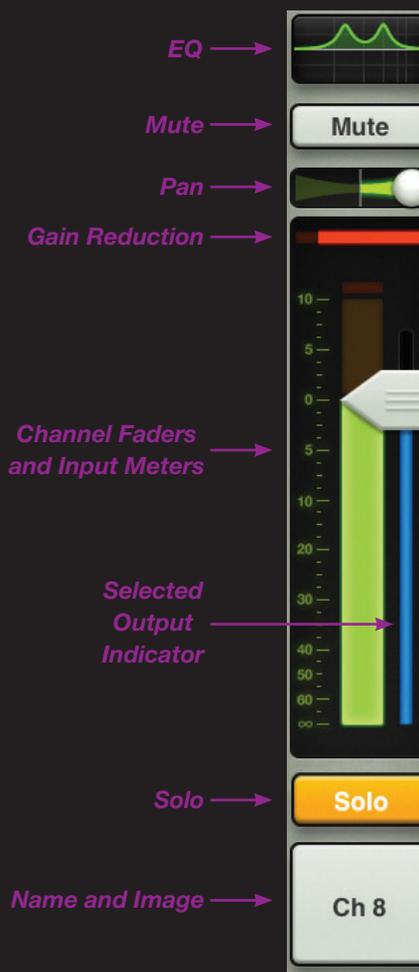
Just below the Mute buttons are the horizontal Pan sliders. These controls allow you to adjust how much of the channel signal is sent to the left versus the right outputs. Touch and drag the channel 8 Pan slider left and right to make adjustments. Tapping a channel's Pan ball twice will center it.

Note that the pan function is only available when the selected output is LR. More on the selected output later.

Channel Strips: Gain Reduction

The Gain Reduction Meter displays the input channel gain reduction from the Gate and Compressor. The single meter shows the sum of the total reduction applied by the Gate and Compressor.

You will learn how to adjust the Gates and Compressors soon.



Channel Strips

Channel Faders and Input Meters

The channel fader adjusts the level of each channel going to the selected output, including the LR Main Mix, Auxes, Reverb and Delay. We will discuss the ins and outs of the selected output later. Adjustments are made by touching and dragging channels up and down. You may have noticed that a touched fader increases in size and its border becomes highlighted, giving you clear indication that a fader is being adjusted. This is called “Grow & Glow” and gives you confidence that the fader is under your control.

Next to each channel fader lies an input meter. These display the input signal level to the channel before all channel processing. Changes made to the EQ, mute and fader do not affect these meters. As mentioned earlier, this meter should remain green with the occasional bump into the yellow zone.

Turn down the Gain knob if the input meter remains consistently yellow. If the input is too high [overloading], a clip indicator at the top of the meter will illuminate red. If clipping occurs, reduce the gain.

Finally, the thin illuminated strip underneath the fader cap indicates which output type is currently selected; the color varies and is dependent on the selected output [LR, Auxes or FX]. This topic will be discussed further on page 16 of the Master Fader section.

Channel Strips: Solo

Solo offers the opportunity to audition channel(s) before they are added to the mix. Whenever a channel’s Solo button is engaged, only the soloed channel(s) may be heard in the headphones.

These Solo buttons are PFL which stands for Pre-Fader Listen. Therefore, the level of the channel fader does not affect the level heard in the headphones.

Solo is also post-EQ, so if a soloed channel’s EQ is engaged, the EQ settings will be heard. But, solo is unaffected by the position of the Mute button.

If no channels are soloed, you will hear the LR signal through the headphones.

The Solo button illuminates yellow when engaged.

Channel Strips: Name and Image

Each channel strip name and image is user-editable. Simply tap the button at the bottom of the channel and a popover allows editing a name or selecting an image. Utilize the keyboard to personalize the name or choose a new image from the popover [Figure J].

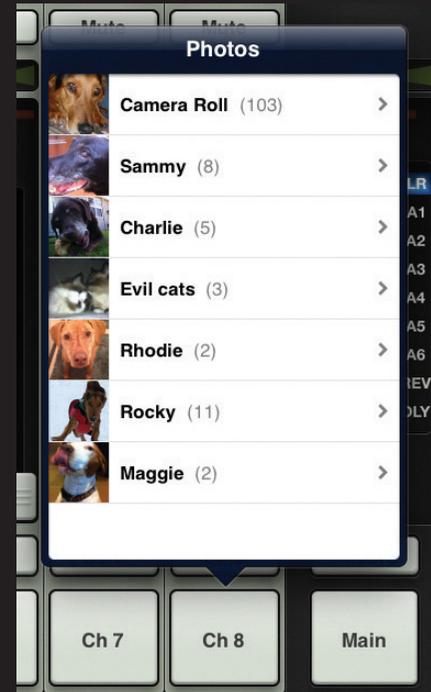


Figure J – Names and Images

Channel Strips

Channel Strips: FX and iPad

Drag the *Mixer View* left until Channel Strips 12 – 16, Reverb, Delay, iPad and the Master Fader are in view. The two FX channels [Reverb and Delay] and one iPad channel look similar to Channel Strips 1 – 16, but function a little differently. Let's find out how...

Channel Strips: Reverb / Delay

There are three ways in which the Reverb and Delay channel strips differ from the other channel strips.

First, the Pan slider becomes a Balance slider, acting as a stereo balance. It allows you to adjust how much of the left or right output signals are heard. Touch and drag the slider left or right to make adjustments.

Also, there are no dynamics on FX channels, so Gain Reduction Meters are not shown.

Finally, since these are stereo returns, the meters are in stereo, not mono.

You will learn how to adjust the FX soon.



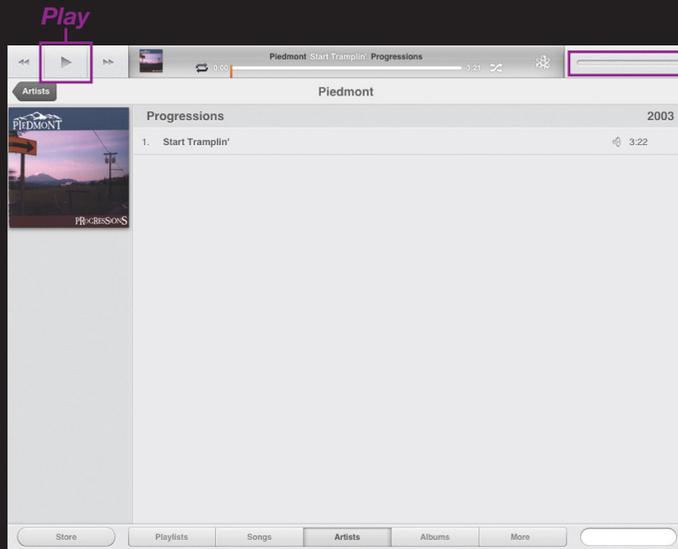
Channel Strips: iPad / Playback

This is the channel where you control the level and EQ from the iPad music library or any other audio app on the iPad that supports background audio playback.

Keep the iPad attached to the mixer here, as playback only works when attached to the DL1608, not in Wi-Fi mode.

Now start playback in the audio app of your choice, then switch to the Master Fader app to control that source in the mix.

Channel Strips



Space previously known as the Music app volume slider

Figure K – Music app

For example, switch to the Music app on the iPad [Figure K]. Notice that the volume slider image is not available. This is because the volume is now changed with the Master Fader app.

Tap the Play button to begin playback. Now switch back to the Master Fader app by pressing the Home button on the iPad and relaunching the Master Fader app. Everything will be just as you left it. This is where you control the volume and EQ.

Heed our advice and raise the iPad channel fader slowly [Figure L]. Most mastered music coming off the iPad is loud.

As the fader rises, so should the music in your speakers and headphones.

Like the FX channel strips, the iPad channel also has stereo meters.

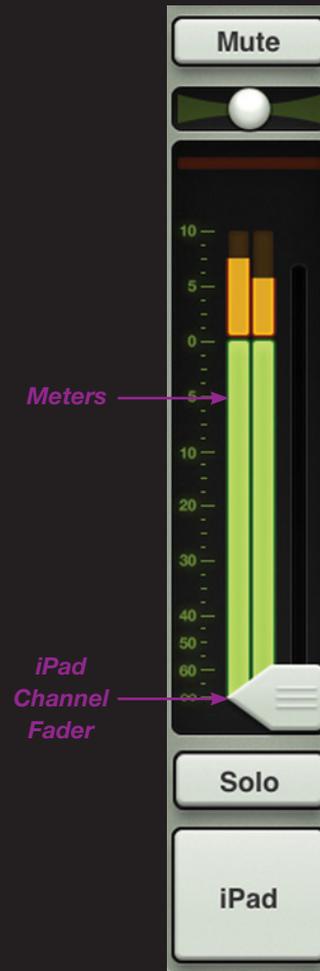


Figure L – iPad Channel

Master Fader

Master Fader: Introduction

The master fader is arguably the most important tool of the mixer. So much so, in fact, that the master fader is always displayed no matter what view is shown.

Take a look at the master fader displayed to the right and the one on the next page. They look similar, but there are a few differences.

The Output Selector has the most important role, so we'll start there. After that, we will head back to the top of the master fader and work our way down.

Master Fader: Output Selector

The *Mixer View* shows a fader for each channel. Initially, this fader controls the level to the LR output. But how do you control the level going to the Aux Sends? Or how about the Aux Master level? Simple. Use the Output Selector to switch between outputs.

There are nine possible outputs to select: LR, A1 – A6, Reverb and Delay.

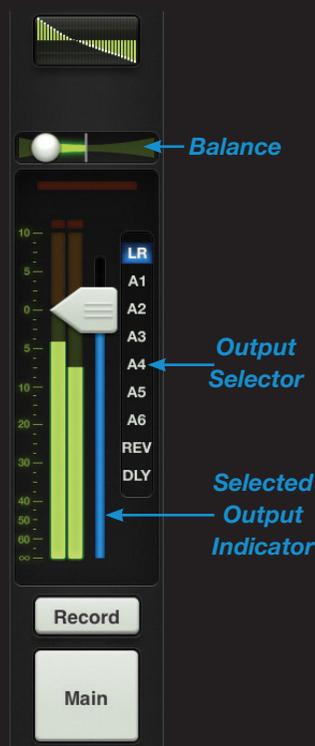


Figure M
Master Fader:
LR

As seen in Figure M, the currently selected output [LR] is illuminated. Changing the selected output is easy. Simply touch the Output Selector and it will immediately “Grow & Glow”. Move your finger to the desired output and release.

Once a different output has been selected, the channel faders will change to show the level going to the newly selected output. Similarly, the master fader will change to show the controls of the newly selected output.

Here the *Mixer View* acts like a window where you may view and change one output's mix at a time. No matter which output is currently selected, the others are still there, as they were.

Do you notice the thin illuminated strip underneath the master fader cap? This also helps indicate which output type is currently selected; the color varies and is dependent on the selected output. This is the same indicator that is also on display underneath the fader cap of each input fader.

Master Fader

Master Fader: Graphic EQ

The master fader EQ displays the current Graphic EQ settings.

When the Graphic EQ is engaged, it will illuminate. See Figure M for a Graphic EQ that is on and Figure N for one that is not. Tapping the master fader's Graphic EQ will change the view from the *Mixer View* to the *Channel View* for the currently selected output. The Graphic EQ is available with all selected outputs, except Reverb and Delay. You will learn how to adjust the Graphic EQ soon.

Master Fader: Mute

The master fader mute works exactly like a channel mute, except it mutes the output. Use it as a break switch to mute monitors when the band takes a break, for example. The Mute button is available when any output is selected, except LR. It illuminates red when engaged.



Figure N
Master Fader:
Auxes & FX

Master Fader: Balance & Pre/Post

When LR is the selected output, the Balance slider controls how much of the output signal is sent to the left versus the right outputs [Figure M]. Touch and drag the slider left or right to make adjustments. Tapping the master fader's Balance ball twice will center it.

When an Aux Send is the selected output, the Balance control is replaced with a Pre / Post toggle button [Figure N]. Here, the Aux Send may be configured as pre-fader [left] or post-fader [right]. Simply tap which setting you prefer.

There is no Balance control or Pre / Post button for Reverb or Delay, so this spot will be blank when Reverb or Delay is the selected output.

Master Fader: Gain Reduction

Like channel faders, the output Gain Reduction Meter shows the amount of gain reduction applied to the output by the Compressor / Limiter. Output channels do not contain gates.

You will learn how to adjust the Output Compressor / Limiter soon.

Master Fader

Master Fader and Output Meter

As discussed, the master fader adjusts the output level of the LR, Aux Masters 1 – 6 and the Reverb and Delay Master Sends, depending on which output is selected. While one fader controls the output level of each output, each output is independent of the others. Once the selected output has been chosen, touch and drag the master fader up and down to make adjustments.

The output meter displays the output signal level. The output meter is presented in mono or stereo depending on the selected output. It is stereo for LR while the Auxes and FX Sends are presented in mono.

Speaking of FX, if Reverb or Delay is selected, the fader controls the master send into the corresponding FX processor.

This meter should remain green with the occasional bump into the yellow zone. The output meters are post-fader, so if there is too much yellow (or any red clipping), lower the master fader until it's gone and check the input channels, as well.



Figure M
Master Fader:
LR

Master Fader: Record and Solo

If the selected output is LR, a Record button resides below the master fader as seen to the left in Figure M. This allows you to easily record the LR output on the iPad.

Similar to playback, recording also only works when the iPad is attached to the mixer, not in Wi-Fi mode.

Pressing Record will begin recording immediately. The Recording button illuminates red when engaged.

Pressing this button a second time asks you to confirm your wish to stop the recording, then asks you to name this masterpiece. If you'd prefer to think this recording never took place – it happens, we know – it may be discarded at this point.

The stereo recording is automatically saved as a .wav file within the application. In addition to the name, this .wav file also includes the date and time the recording started. Use iTunes to retrieve recordings off of the iPad.

Master Fader

No worries if the selected output is changed during recording. Recording will continue on as if nothing happened until recording is stopped manually.

Now check out the Record button on Figure N. It's gone! Well, maybe not gone per se, but just replaced with a Solo button. If the selected output is any Aux, Reverb, or Delay, the Record button will be replaced with a Solo button.

Soloing offers the opportunity to audition the selected output and make any necessary level adjustments to the inputs. The output solo is AFL, so the fader level will affect the signal you hear in the headphones.

The Solo button illuminates yellow when engaged.



Figure N
Master Fader:
Auxes & FX

Master Fader: Name and Image

The master fader's name and image is similar to that of a channel strip's name and image.

Like the channel faders, the master fader's name and image is also user-editable. Simply tap the button at the bottom of the master fader and a popover allows editing a name or selecting an image. Utilize the keyboard to personalize the name or choose a new image from the popover [Figure O].

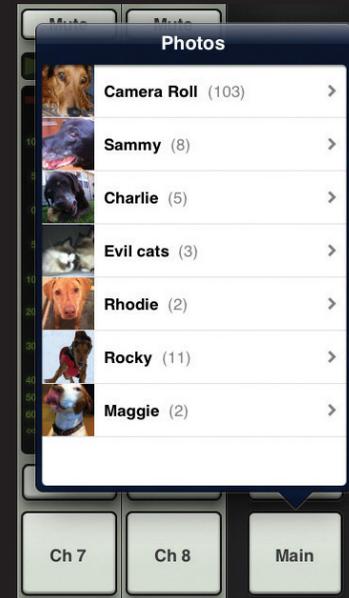


Figure O – Names and Images

EQ

Channel View: Introduction

Now the real fun begins! We have a good grasp on the *Mixer View*, including the Channel Strips, Master Fader and Navigation Bar, so let's spice up the mix now with some processing.

All channel processing is accessed in the *Channel View*. There are multiple views including EQ, Gate and Compression and FX for inputs and Graphic EQ and Compressor / Limiter for the outputs. EQ is the first processor in the *Channel View*, so we'll begin there.

To get to the *Channel View* tap the channel's EQ curve from the *Mixer View*. Since we have signal on channel 8, tap that channel's EQ curve.

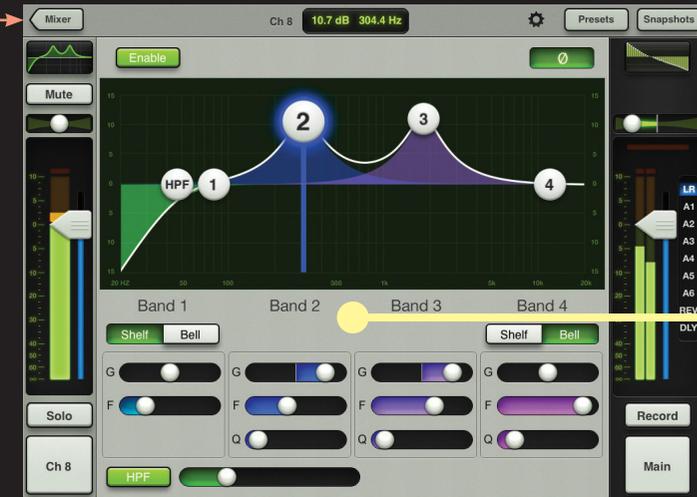
Note: If at any time you need to return to the *Mixer View*, just tap the Mixer button located in the top-left corner of the app. It's that easy!

EQ: Introduction

The 16 input channels, Reverb, Delay and iPad channels all have 4-band EQ, including low shelving, low-mid peaking, high-mid peaking and high shelving. The mic inputs also have a high-pass filter [HPF].

Navigation Bar →

EQ View



Channel Strip

EQ Controls

Master Fader

The Swipe Zone

Before discussing the components that make up the *EQ View*, let's first take a look at it and get our bearings.

Laid out vertically on the far left of the screen is the Channel Strip of the current channel.

As mentioned earlier, no matter what view is displayed, the Master Fader would remain vertically on the far right and the Navigation Bar would lie horizontally across the top. As such, they are both there.

Finally, boxed in between the Channel Strip, the Master Fader and the Navigation Bar is the current channel's EQ controls...or as we like to call it, "the playground!"

We have our bearings, so let's get to work! Like we did with the *Mixer View*, we'll look at the *EQ View* starting at the top-left and work our way counter-clockwise.

EQ

EQ: EQ Enable

Tap this button to turn the current channel's EQ on and off.

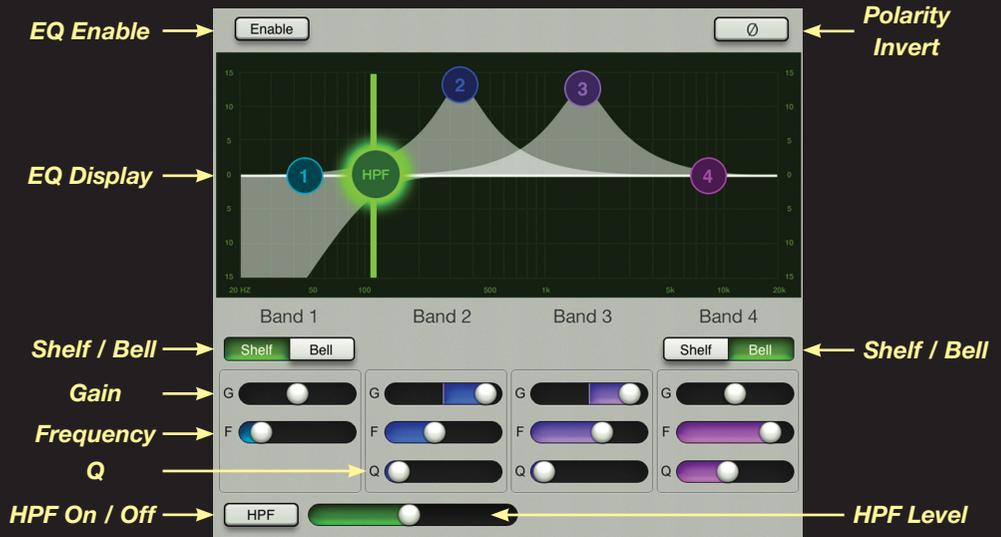
When on, the EQ controls affect the signal and the button illuminates green. When off, the EQ controls have no effect on the signal, nor will the button illuminate. However, the EQ controls may still be adjusted. Notice the difference between the EQ Display on the previous page [EQ On] versus the EQ Display on this page [EQ Off].

EQ Display: Gain, Frequency & Q

The EQ is easily adjusted by moving the four numbered balls (representing each band) until the desired sound has been achieved.

Move a ball up and down to change the gain and move it left and right to change the frequency. Pinch a ball to adjust its Q [bandwidth]. Double-tap a ball to reset its gain to zero.

Notice that whatever ball is touched, it "Grows & Glows". Additionally, a line runs vertically through the middle for easy viewing of its frequency.



Each band is represented by a different color corresponding to the individual band controls located at the bottom of the *EQ View*. The settings may also be changed here by dragging these sliders left and right.

EQ: Shelf / Bell

A Shelf / Bell option is available for the Low Band EQ [Band 1] and High Band EQ [Band 4]. Simply tap which setting you would prefer for each band.

EQ: HPF On / Off and Level

Tap this button once to engage the high pass filter and illuminate the button.

When disengaged, the HPF has no effect on the signal, nor will the button illuminate.

The slider to the right is utilized to increase or decrease the frequency. You may also slide the HPF ball right and left to achieve the same result.

EQ: Polarity Invert

When the Polarity Invert button is engaged, the polarity of the signal is inverted. It will also illuminate.

Gate and Compression

Gate/Compression: Introduction

We've learned how to manipulate sounds in the *EQ View*, so now it's time to learn how to shape the sound with Gates and Compressors.

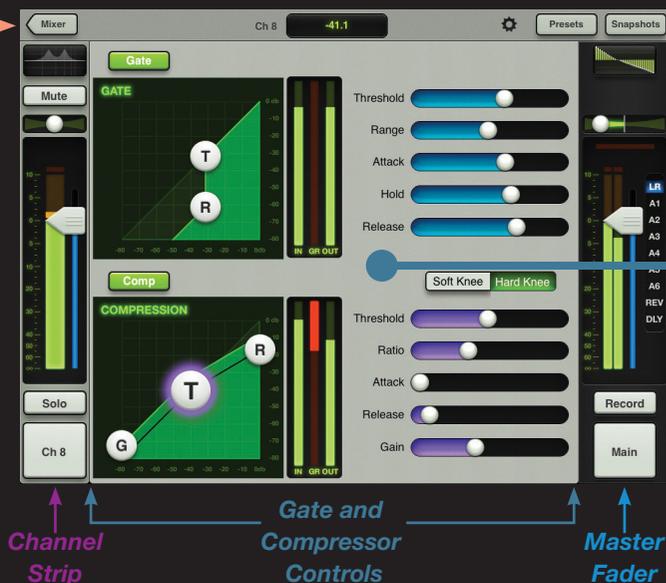
The 16 input channels all have Gates and Compressors readily available, with the ability to tweak and manipulate multiple settings on each.

To get here, simply swipe the entire view up from any gray area of the *EQ View*. The next view is that of the Gate and Compressor. From here, you may swipe down to get back to the *EQ View* or up again to get to the *FX View*. Additionally, you may swipe left and right in any gray area to stay in the *Gate and Compression View*, but instead change to the previous or next channel.

Note: "The Swipe Zone" is called out in each *Channel View*. If you believe these indicate great places to swipe, you would be correct!

Navigation Bar →

Gate and
Compression
View



The
Swipe
Zone

The layout of the *Gate and Compression View* is similar to that of the *EQ View* in that the Channel Strip, Master Fader and Navigation Bar are present, with the Gate and Compressor controls in the middle.

The Gate and Compressor are presented together as one view with the Gate on top and the Compressor below. It is easy to set parameters of both for each channel at one time.

We will first discuss the features of the Gate followed by the Compressor.

Gate and Compression

Gate On / Off

Tap this button to turn the current channel's Gate on and off.

When on, the Gate controls affect the signal and the button illuminates green. When off, the Gate controls have no effect on the signal, nor will the button illuminate. However, the Gate controls may still be adjusted. Notice the difference between the Gate Display on this page [Gate On] versus the Gate Display on the next page [Gate Off].

Gate Display and Controls

The Gate Display has two draggable balls, one for the Threshold [T] and one for the Range [R].

The Threshold ball may be dragged up and down diagonally on a 45° axis. The Range ball will always be on the same vertical strip as the threshold and it may only move up and down.

On the far right are the Gate Controls. The threshold and range may be changed here, as well.

Gate On / Off →

Gate Display →

Compressor On / Off →

Compressor Display →

Gate / Compressor Meters ↑

Gate Controls ←

Soft Knee / Hard Knee ←

Compressor Controls ←

Comp On / Off

The Compressor On / Off functions exactly like the Gate On / Off button, as described previously.

Three additional gate controls also available for tweaking are attack, hold and release. These time-based controls may be changed by dragging the sliders left and right. The time is shortest to the left, resulting in a faster response. As the slider is dragged right, the time lengthens, resulting in a slower response.

Gate and Compression

Compressor Display and Controls

The Compressor Display is quite similar to that of the Gate. The draggable ball controls for the compressor include the Gain [G], Threshold [T], Ratio [R].

The Gain ball adjusts the output gain. It lies on the far left of the display and may only be dragged up and down.

The Threshold ball may be dragged up and down on a 45° axis. The Ratio ball is anchored to the far right of the display and may only be dragged up and down. It will always be above the threshold.

On the far right are the compressor controls. The gain, threshold and ratio may be changed here, as well.

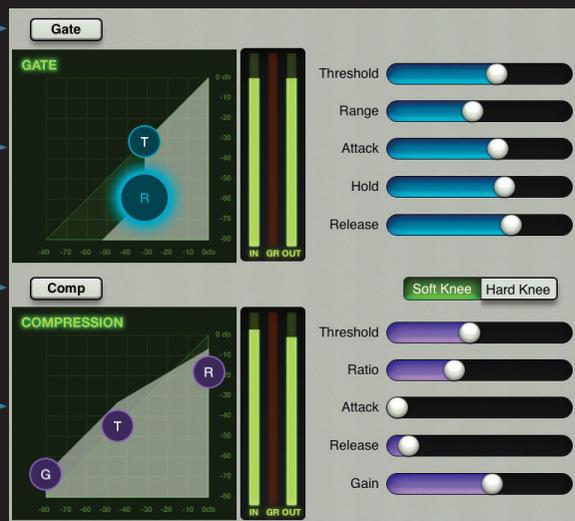
Two additional compressor controls also available for tweaking are attack and release. These time-based controls may be changed by dragging the sliders left and right. The time is shortest to the left, resulting in a faster response. As the slider is dragged right, the time lengthens, resulting in a slower response.

Gate On / Off

Gate Display

Compressor On / Off

Compressor Display



Gate Controls

Soft Knee / Hard Knee

Compressor Controls

Gate / Compressor Meters

Soft / Hard Knee Compression

A Soft Knee / Hard Knee option is available for each channel compressor. Simply tap which setting you would prefer for each channel.

Gate/Compressor Meters

Between the Gate and Compressor Display and their corresponding controls lies a set of vertical meters. These three meters indicate their individual Input [IN], Gain Reduction [GR] and Output [OUT].

Use these meters to get the desired amount of gain reduction from the Gate and Compressor.

FX

FX: Introduction

The *FX View* looks and works similarly to that of the EQ and Compressor and Gate views.

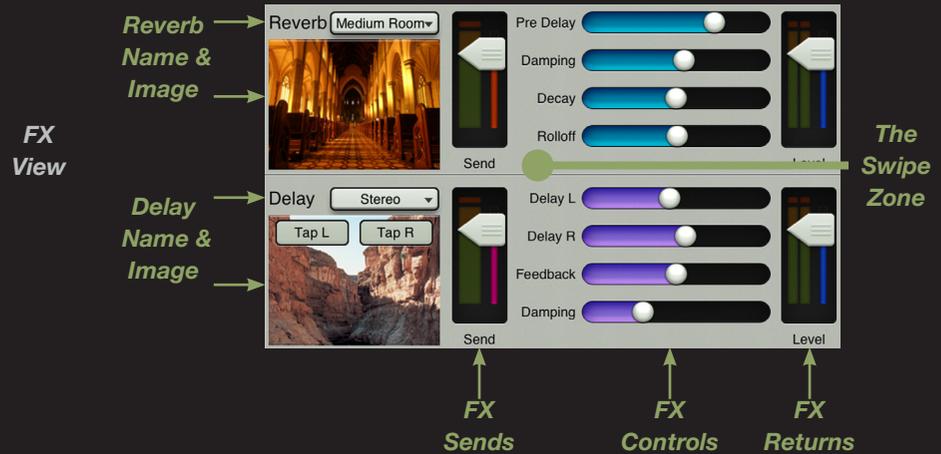
To get to the *FX View*, simply swipe the entire view up (again, from any gray area) from the *Gate and Compression View*. From here, you may swipe down to get back to the *Gate and Compression View*. Additionally, you may swipe left and right in a gray area to stay in the *FX View*, but instead change the channel.

The Reverb and Delay are presented together as one view with the Reverb on top and the Delay below.

As seen in the image to the right, the Reverb and Delay sections have similar layouts, so we will go through their features left to right.

FX: Name & Image

On the far left is the Reverb and Delay name and image displaying what type of effect is currently in use. This may be changed by tapping the name of the currently assigned effect and choosing a new one from the popover.



FX: Sends

Directly to the right of each image is a vertical send level slider, one for each effect. This controls the level being sent to the effect from the current channel.

FX: Controls

To the right of each send level are various FX controls which may be slid horizontally, increasing in value to the right. The FX controls are not affected on a per-channel basis, but rather globally.

FX: Returns

And residing on the far right side of the *FX View* are the vertical return channel level sliders and meters. Again, one for each effect. These control the return level from the effect to the selected output. You have seen these before as they are the same faders displayed in the *Mixer View*. A pair exists [one for Reverb, one for Delay] for each selected output.

Graphic EQ

Graphic EQ: Introduction

Now let's talk about the output Graphic EQ and Compressor / Limiter. The *Channel View* is utilized to adjust these, as well.

Getting here is easy. Simply tap the Graphic EQ curve at the top of the master fader channel from the *Mixer View* or from any input *Channel View*.

The *Graphic EQ View* looks and works similarly to that of a typical 31-band graphic EQ.

Graphic EQ: On / Off

Tap this button to turn the Graphic EQ on and off.

When on, the EQ controls affect the signal and the button illuminates green. When off, the EQ controls have no affect on the signal, nor will the button illuminate. However, the EQ controls may still be adjusted.

Graphic EQ: 31-Band EQ

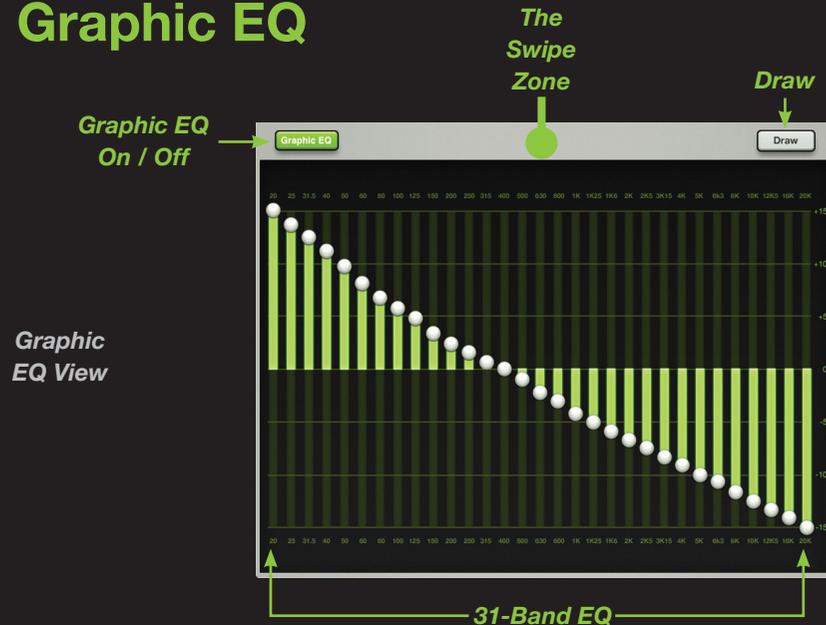
The 31-band EQ is a great tool for really dialing in the sound you're looking for or use it to squelch feedback from monitors. There are 31 vertical sliders ranging from 20 Hz – 20 kHz. Drag these sliders up and down until the desired sound has been achieved. Tapping a band's Graphic EQ ball twice will zero it.

Graphic EQ: Draw

If the Draw button is engaged, you may draw an EQ curve over the display (regardless of where the slider balls reside) and the sliders will snap to the corresponding position. Go ahead and try it; make a smiley face. We did the same thing!

If the Draw button is disengaged, the sliders may only be adjusted one at a time.

The Draw button illuminates green when engaged.



Output Compression / Limiting

Output Compression: Introduction

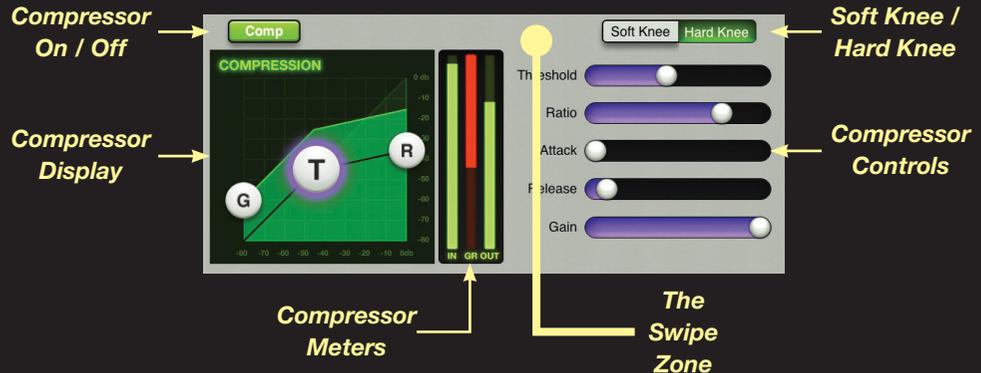
Here we are...the final stop of the *Channel View* playground. The output Compressor / Limiter looks and functions similar to that of the channel compressors we discussed just a few short pages back. The only difference is that the output compressor affects and alters the sound of everything passing through the selected output.

To get here, simply swipe the entire view up (from the gray area) above the Graphic EQ. This brings us to the Output Compressor / Limiter.

Comp On /Off

Tap this button to turn the Output Compressor / Limiter on and off.

When on, the Compressor / Limiter controls affect the signal and the button illuminates green. When off, the Compressor / Limiter controls have no effect on the signal, nor will the button illuminate. However, the controls may still be adjusted.



Compressor Display and Controls

Like the channel compressor, the dragable balls here include the Gain [G], Threshold [T], Ratio [R].

On the far right are the compressor controls. Once again, the gain, threshold and ratio may be changed here or in the aforementioned compressor display.

Soft / Hard Knee Compression

The difference between a soft and hard knee here has nothing to do with joints. Rather, it has everything to do with compression. Simply tap which knee compression setting you would prefer, soft or hard.

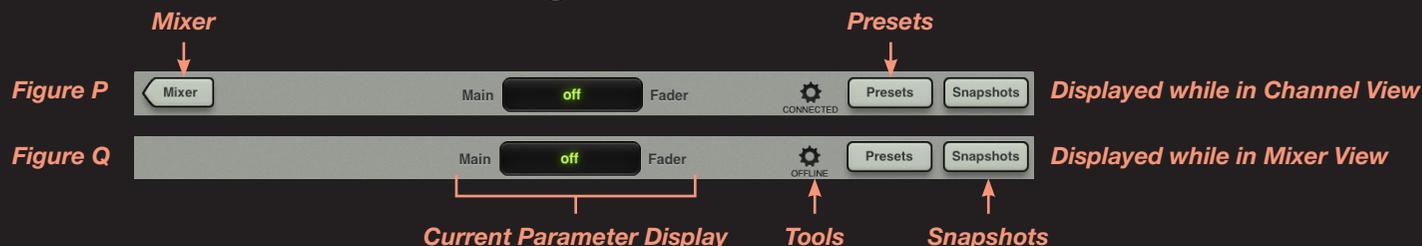
Compressor Meters

Between the Compressor Display and their corresponding settings lies a set of vertical meters. These three meters indicate their individual Input [IN], Gain Reduction [GR] and Output [OUT].

Use these meters to get the desired amount of gain reduction out of the Output Compressor / Limiter.

Am I beginning to sound like a broken record here? Never fear, for this was the last section of the Output Compressor / Limiter. Whew! Moving on...

Navigation Bar



Navigation Bar: Introduction

This is it! Time to finish off the education with the Navigation Bar.

Like the Master Fader, the Navigation Bar is also always displayed no matter what view is open. It lies horizontally across the top of each view. Images of the Navigation Bar are displayed above.

You might inquire, “Why are there two images of the Navigation Bar?” I would reply with “Good question!” As discussed previously, you will be in one of two possible views: *Mixer View* or *Channel View*. Each view displays a different Navigation Bar. Figure P will be prominently displayed when a *Channel View* is open and Figure Q is available when in the *Mixer View*.

We will quickly cover each feature of the Navigation Bar starting on the far left with Mixer and working our way right to Snapshots.

Navigation Bar: Mixer

As mentioned in the Navigation Bar introduction, the Mixer button will only be displayed when working within a *Channel View* [EQ, Gate and Compression, FX, Graphic EQ, Compressor / Limiter]. Simply tap the Mixer button to return to the *Mixer View*.

If a Mixer button is not displayed (as seen in Figure Q), then you are already in the *Mixer View*.

Current Parameter Display

The Current Parameter Display displays the channel and the value of the current parameter being adjusted. However, this is not just a point of reference. Tap the Current Parameter Display and a keyboard appears. Here you may enter the exact value you would like for that parameter.

Navigation Bar: Tools

Tools is where the Master Fader app settings reside, as well as configuration options for the DL1608. Tap the Tools button to reveal these controls.

Additionally, Tools is where you select which DL1608 device to control in a venue utilizing more than one DL1608.

Notice that Figure Q has “OFFLINE” underneath the Tools image and Figure P has “CONNECTED”. iPads not connected to the mixer (either wired or wirelessly) will display “OFFLINE” or “DISCONNECTED”.

Navigation Bar

We've already discussed "Disconnected" in the Wireless setup, but why would you ever work offline? Simply put, you could create presets, snapshots and shows while en route to a gig or show off the awesomeness of your new mixer to friends without regard to the local surroundings.

Tap Tools (again) to return you to the previous view.

Navigation Bar: Presets

Tap the Presets button to display a popover similar to what may be seen in Figure R. Here you may select from a list of factory presets for the current channel and each DSP type, as well as save and recall user presets. As seen in Figure R, the Presets button illuminates green when engaged. Tap Presets (again) to return you to the previous view.

Navigation Bar: Snapshots

Finally, residing on the far right of the Navigation Bar is the Snapshots button.

Tap Snapshots to display a popover similar to what may be seen in Figure S. This is where you load and save shows and snapshots and also configure channel safes. As seen in Figure S, the Snapshots button illuminates green when engaged. Snapshot 0 resets the DL1608 to its default state. Tap Snapshots (again) to return you to the previous view.

Notice that on all of these images that the Navigation Bar is still presented, regardless of what view or popover may dominate the iPad.

All features of the Navigation Bar are discussed at greater length in the Reference Guide.



Figure R – Presets



Figure S – Snapshots

Conclusion

Conclusion

And there you have it! As mentioned throughout, this is just a Quick Start Guide. Nearly everything you need to utilize the DL1608 mixer and Master Fader app is referenced here. Think of the Quick Start Guide as a 4-star thriller; it's pretty exciting and keeps you engaged throughout.

However...

...should you desire more, the DL1608 Reference Guide is infinitely more in-depth and is a fantastic resource for increasing your knowledge about each of the features listed within these pages.

In fact, the DL1608 Reference Guide is filled with much, much more than this Quick Start Guide: more screen shots, a Troubleshooting Guide, the technical specifications (including the block diagram and dimensions), graphs, arrows, a Table of Contents, Introduction and list of Features...heck, we even built in Checkers and Tic-Tac-Toe!

Ok, ok, the games weren't built into the DL1608 Reference Guide, but we are working on it feverishly!

While we compared the Quick Start Guide to a 4-star thriller, think of the DL1608 Reference Guide as an action-packed, high drama with bigger, better explosions and a bigger budget.

Finally, the real reason the DL1608 Reference Guide is mentioned so often: we have quotas to meet, so the more often we refer you to the DL1608 Reference Guide, the better. And we're one shy of hitting quota...

Thank you for reading this, congratulations on all of the fine pieces of high art that will emanate from your recordings and check out the DL1608 Reference Guide when you get a chance. Cheers!

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