## SOFTWARE > TABLET SOFTWARE SCREENS



#### **EDIT**

The EDIT page provides access to audio processing such as EQ, DYNAMICS, and FX. The specific audio processing tabs available depend on the selected channel type. For example, the aux outputs and Master Channel include Graphic EQ.



#### **AUX SENDS**

AUX SENDS is where the aux mixes are created. The faders determine the level of signal sent to the selected aux bus. Select an aux mix from those available at the top of the view to adjust that mix. The Aux Master will be available on the right hand end of the screen, next to the Master Channel.



# **FX SENDS**

FX Send faders determine the mix that is sent to the selected FX processor. First, select which effect you wish to adjust using the tabs, then adjust the faders to increase or decrease the amount of reverb you would like added to each input channel.

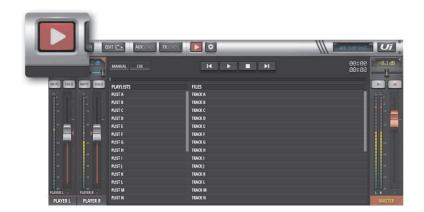
Select EDIT to edit the selected FX algorithm.



## **MOREME**

MOREME allows users to assign their own personal channel, and create a personal monitoring mix with a single large fader. MOREME channel names are highlighted in orange. To assign an input channel to the MOREME fader, long-press a channel name and select the ASSIGN ME function. Use the same process to assign an Aux bus as 'ME OUT'. In Tablet software, select MOREME in the Slideout panel, or turn the ipad to a portrait view to access the MOREME screen.

# SOFTWARE > TABLET SOFTWARE SCREENS



#### **MEDIA**

The Ui mixer has a built in media player. This can be used for backing tracks or for background music in between sets. The file playback is streamed directly from a USB stick. Press the MEDIA icon to enter the player page. Files can be played from a playlist or directly from the file list. Press and hold the PLAYER channel name to bring up the channel menu.



#### **SETTINGS**

System, network, and security settings, as well as Shows and Snapshots management. See section 10 for more details.

# **SOFTWARE > PHONE NAVIGATION**

The MIX screen is the default for the Ui software - You can navigate from there to other screens and functions in a variety of ways. To access the Menu screen, press the NAV icon in the top right corner of the screen. Press it again to return to the MIX screen.





### **NAV**

### Access the main menu screen



When in use, the NAV button changes to the 'Return' icon. Use this to return to the MIX screen.



# **SHOWS / SNAPSHOTS**

Access the Show and Snapshots load/save page.

# SOFTWARE > PHONE SOFTWARE SCREENS

From the MENU screen you can access the MIX screen (Return button, top right corner) and nine other primary screens via the large colour-coded buttons.



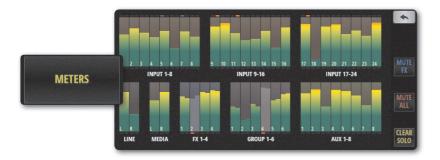
#### **PLAYER**

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#### **METERS**

VU Meters for all Mixer channels, plus status LEDs for Phantom power, Phase, Clip, Mute, and Solo. If you press on any meter bank, it will take you to the faders of those channels on the MIX page. This page also provides fast access to the CLEAR SOLOS, MUTE FX, and MUTE ALL buttons.



#### **SETTINGS**

A range of system settings and configuration options under the headings SETUP (mix preferences), GUI (interface), NETWORK (Wi-Fi hot spot and password settings), ACCESS (multi-user security), and HELP.

## SOFTWARE > PHONE SOFTWARE SCREENS



#### **AUX SENDS**

AUX SENDS is where the AUX mix is created. The AUX input channel faders determine the signal level sent to that aux bus. Select an aux mix on the right to adjust the mix from all channels.



#### **GAIN**

All Ui mixer models include remote gain control and remote phantom power. The GAIN screen - easily identified by its red fader level lines - features Gain Faders, and the 48V phantom power and PHASE buttons.



#### **SHOWS**

Shows and Snapshots management, saving, and recall etc. A Show is a collection of Snapshots. A Snapshot is a stored set of full mixer settings.



## **FX SENDS**

FX Send faders determine the mix that is sent to the selected FX processor. First, select which effect you wish to adjust using the tabs, then adjust the faders to increase or decrease the amount of reverb you would like added to each input channel. Select FX EDIT to edit the selected FX algorithm.



## **EDIT**

Double-Tap a channel name or select EDIT screen to open the channel Dashboard. This screen allows editing of EQ, dynamics, FX and aux sends. Simply click on the display you want and it will open that feature in full screen. Double-Tap the Master Channel name for the Master EDIT page.

### MIXER CHANNELS

The Ui mixers has a variety of input and output channel types. You can view all channels in the main MIX screen and drag-scrolling along the virtual console. You can also use the MIX page Slideout panels to select specific channel types and preset views.



#### INPUT CHANNEL - sections 4.1 and 4.2

A Ui Input channel consists of a GAIN section (physical input, pre-amp, phase, phantom power etc) and the MIX section. Input channels feed the main stereo bus (to the Master Channel), the aux send busses (to the Aux Master channels), and the FX send busses (and on to the FX Returns). An input channel's contribution to these busses is controlled on the relevant software page, or in the channel's EDIT screen.

#### **AUX SENDS / AUX MASTER CHANNEL - section 4.3**

Aux Outputs (short for Auxiliary) are the outputs on the top right of the Ui hardware. These outputs each have their own mix of input sources, separate from the master mix. Generally, aux outputs are used for musicians to hear their own mix on stage via a stage monitor speaker or to headphone amplifiers for in-ear monitoring. Alternatively, the aux outputs can be sent to external hardware FX units.

# **SUB GROUP MASTER CHANNEL - section 4.5**

If you want to have individual control over the drum kit mix components, for example, but also want single fader control over the whole kit's contribution to the mix, you would use a Sub Group.

#### FX SENDS / FX RETURN CHANNEL - section 4.4

FX SENDS faders effectively determine the amount of effect on each input channel. They work much like aux sends in that a mix of input channel contributions is created on the FX SENDS page - one for each FX processor.

#### **MASTER CHANNEL - section 4.6**

The Master Stereo Channel is the output channel for the main stereo (left & right) mix - determined by the input channel and FX Return channel faders and pan/balance controls.

## CHANNELS > INPUT: GAIN PAGE

The Gain page allows you to control the input stage aspects of a Ui input channel. It is a channel strip-type display with red fader level indicators.

**TABLET:** Click/tap MIX/GAIN button to toggle MIX and GAIN pages. **PHONE:** Use the GAIN menu button to navigate to the GAIN page.

NOTE: The GAIN screen has the Input Display and Pan/Balance controls in common with the MIX screen - please see section 4.2 for details.









All Ui mixer models include remote gain control and remote phantom power. This great feature allows you to change the Microphone input Gain and Phantom Power remotely on your Ui software without needing to touch the hardware).

### GAIN, PHANTOM POWER, PHASE REVERSE

The audio inputs have an input gain range from -40dB up to +60dB. It's a good idea to make sure the gain fader is down when plugging in new sources. Avoid 'clipping ' the input - when you see the red clip light constantly registering, the signal will be distorted. Simply reduce the gain to avoid this.

When you switch to MIX from GAIN, the volume faders change to GAIN faders (red line underneath the fader knob). In the tablet software, the MUTE and SOLO buttons change to +48V (Phantom power) and  $\phi$  (Phase Reverse) buttons. In the phone software those controls are in the EDIT page (you can double-tap a channel name to switch to the EDIT page faster).

Phantom Power is required to power certain microphones such as condenser microphones, or other active devices such as an active DI. It is activated per channel. You can get an overview of phantom power status in the METERS screen (blue indicator).

When phantom power is activated, the channel output is momentarily muted to avoid transients being transmitted to the rest of the audio chain (protecting your PA speakers).

# **METERING**

The GAIN page meters show input level and input clipping (topmost light, just above main meter).

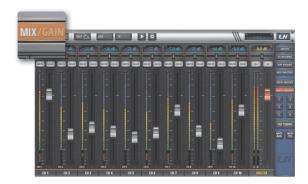
# CHANNELS > INPUT: MIX PAGE

The MIX page is the Ui control software's default page and allows you to control the routing and panning and fader of a Ui input channel. Please note - the phone software displays panning/balance, solo, and mute status, but for control you should use the EDIT page. Those controls are described in this section.

**TABLET:** Click/tap MIX/GAIN button to toggle MIX and GAIN pages. **PHONE:** The RETURN button will always return you to the MIX page.

A double click/tap on a GAIN channel strip (not the fader cap) will return you to the MIX page. A double click/tap on a channel name will take you to the EDIT page for that channel.











### **FADER**

Adjust the level of this channel in the master stereo mix.



### **METERING**

VU metering for input level and volume level.

The VU meters on the MIX page show two colours. The blue meters show the input gain (from the GAIN page) and the yellow meters over the top show the volume level. Please note, EQ & DYN affects the volume meters.

## CHANNELS > INPUT: GAIN PAGE



#### **MUTE**

#### Turn off the audio signal of a channel

MUTE is an immediate audio off, rather than having to slide down the fader (and removes the possibility of forgetting its original position). The MUTE button mutes the channel output to the main stereo bus. It *can* also mute an aux output, depending on the aux's PRE or POST status (post fader aux will be muted).



#### SOLO

#### Solo this channel

The SOLO button is grey when not in use and yellow when operational. Press the SOLO button to only hear the Soloed channel. In SETTINGS the SOLO button signal can be routed to the headphones or to the Master outputs + headphones. There are also two solo modes: SOLO 1 (pressing a SOLO button deactivates a previous solo) and SOLO+ (solos are cumulative and do not cancel previous solos). NOTE: If the 'AUX' option is set for the HEAD-PHONES OUT parameter (SETTINGS), the headphones output will not reflect the Solo selection. The default routing is 'PFL' (Pre Fade Listen. However, Solos can be set to AFL (After Fader Listen) in the SOLO TYPE parameter in GLOBAL SETTINGS (see section 10).



# PAN / BALANCE

# Adjust the Pan / Balance

In a mono channel this control is a Pan control, with a blue 'pan line'. In a stereo (linked) channel, this control is a balance control with an yellow 'balance line'. Pan moves a single source from left to right; balance moves the whole stereo image from left to right.



## **CHANNEL DISPLAY**

#### Numeric fader level and pan

Shows the input as a dB level. It also shows the Pan position for three seconds after the pan slider is moved.



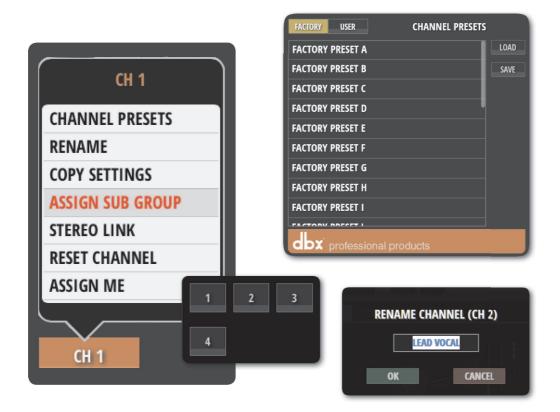
### **CHANNEL NAME**

#### Channel sub menu access, channel name scrolling, channel select

The Channel Name is usually a name/description of that channel. You can click on channel names to select that channel, double click/tap a channel name to go to the EDIT screen for that channel, or you can Long-Click/Tap on a channel name to access the channel sub-menu (See section 4.3).

### CHANNELS > INPUT SUB-MENU

By long-clicking/tapping on a channel name you can access the channel sub-menu for access to various channel parameters...



#### **CHANNEL PRESETS**

Recall and save whole channel settings - Factory and User preset banks.

## **RENAME**

Rename the channel. The new name will be shown in the Channel Name fields.

#### **COPY / PASTE SETTINGS**

Copy the channel settings to the pasteboard. A 'PASTE SETTINGS' option will appear when you select another input channel sub menu. Use that to paste the copied settings to that channel.

#### **ASSIGN SUB GROUP**

Choose a sub group for this channel. For example, you might want to assign all drum kit microphones to a 'Drum Kit' sub group. Once assigned, the sub group assignment grid will be replaced with an 'UNASSIGN SUBGROUP' option.

#### **STEREO LINK**

Create and stereo channel from two mono channels. Odd/even (L/R) pairs are linked, so if you link channel 2 (right), it will create a stereo channel with channel 1 (left).

## **RESET CHANNEL**

Reset channel settings to their defaults.

# CHANNELS > AUX SENDS (4 on Ui12, 6 on Ui16)

Aux Outputs (short for Auxiliary) are the outputs on the top right of the Ui hardware. These outputs each have their own mix of input sources, separate from the master mix. Generally, aux outputs are used for musicians to hear their own mix on stage via a stage monitor speaker or to headphone amplifiers for in-ear monitoring. Alternatively, the aux outputs can be sent to external hardware FX units.









AUX SENDS is where the aux mixes are created - these can be for monitor outputs, for external FX sends, and more. They have dedicated outputs on the Ui hardware. The aux faders have orange level indicator lines and determine how much of each input channel is contributed to the Aux bus. Ui12 has four main Aux busses available, and Ui16 has six. The highest-numbered aux pairs (3/4 for Ui12 and 5/6 for Ui16) are available as physical outputs when the HEADPHONES OUT option is set to 'AUX' in SETTINGS. You can view all aux contributions from a single channel by navigating to that channel's EDIT page and selecting the AUX SENDS screen / tab.

Select the AUX tab you wish to mix (AUX 1 to AUX 8), and then adjust the channel volumes (contributions from input channels). The AUX SEND fader on the right (orange fader) is the Aux Master channel fader - the overall output volume for your AUX mix.

Aux Master channel faders can be viewed together either with the AUX MASTERS button in the Tablet version Slideout panel, or from the JUMP TO option in the phone software slideout panel. You can also scrolling to the right-hand end of the Mix page channels. Aux Master channels can be renamed and stereo-linked (see below).

#### **STEREO AUX**

Stereo-linking channels is possible for both the input channel sends and the Aux Masters. To stereo link Auxes, use the Aux Master channel sub-menu (long-click/tap on the channel name).

Go to the channel pop-up menu (long click channel name) to access the Stereo Link feature. When 2 mono input channels are stereo-linked on the main MIX page, those channels will also be stereo-linked on the AUX SENDS page. (2 channels panned left & right with a green link line above the dB display).

# **FX ON AUX**

It is possible to add FX to your aux mix. Scroll to the end of the channel list and you will see the FX RETURN faders. Please note that you cannot control the FX of every channel for the AUX. When adding the FX you are adding a global FX signal from the main mix.

4.3: AUX SENDS

# CHANNELS > AUX SENDS



### M-AUX / COPY MIX

Copy the main mix to this aux mix



This button copies the fader positions from the MIX page and moves all aux send faders to the same position on the AUX SENDS page. This is a handy starting point for an AUX mix rather than starting from all faders down. You can press this button at any time if you want your monitor mix fader positions to resemble the MAIN mix. For safety, user confirmation is required.



# PRE/POST (Tablet software)

Switch input channel's Aux contribution between PRE and POST sources

AUX channels are pre-fader by default, meaning the volume faders on the MIX page do not affect the aux levels. Press the PRE button to change individual channels to POST fader. A long press on the PRE/POST button opens a dialog for ALL CHANNELS TO PRE or POST.



# **AUX SEND MUTE (Tablet software)**

Mute the input channel's contribution to this aux mix.

Separate to the normal input channel mute - only affects contribution to the selected aux mix.

# CHANNELS > AUX MASTER CHANNEL

The Aux Master channel is the output path for Aux busses. In other words, the Aux 1 mix of contributions from all input channels passes through the Aux 1 Master channel before being sent out of the physical Aux 1 output. Ui12 has four Aux busses available, and Ui16 has six. The highest-numbered aux pairs (3/4 for Ui12 and 5/6 for Ui16) are available as physical outputs when the HEADPHONES OUT option is set to 'AUX' in SETTINGS





Aux Master channels have their own EDIT channels, featuring a GEQ (Graphic EQ) rather than a parametric EQ, and dbx AFS<sup>2</sup> feedback elimination (See section 5).

You can view all Aux Master channels either in the MIX screen (scroll to right) to by selecting AUX MASTERS from the tablet software Slideout panel or from the JUMP TO pop-up menu in the phone software Slideout panel.

## CHANNELS > FX SENDS

FX SENDS faders effectively determine the amount of effect (delay, reverb, chorus) on each input channel. They work much like aux sends in that a mix of input channel contributions is created on the FX SENDS page - one for each FX processor. After processing, that mix is returned via its own FX Return channel, which works just like an input channel - adjusting the overall level of that processor's mix in the master stereo mix. The FX Return channel for the selected FX processor is shown in the FX SENDS view, next to the Master Channel.









All FX Return channels can be viewed either by scrolling in the main MIX view, by choosing FX RETURNS from the Slideout panel in the tablet software, or from the JUMP TO option in the phone software Slideout panel.

You can view all FX contributions from a single channel by navigating to that channel's EDIT page and selecting the AUX SENDS screen / tab.

In the FX SENDS page, first select which effect you wish to adjust using the tabs. Adjust the grey faders to increase or decrease the contribution of that channel to the selected FX processor. Adjust the blue FX RETURN fader labelled FXR 1 REVERB to control the total amount of REVERB heard in the mix.

Input channel FX Sends can be individually muted in the FX SENDS page.

NOTE: FX sends are POST FADER, meaning a change of level on the main mix page affects the level sent to the FX processor. This ensures that each input channel's contribution to the FX send is always proportional to its prominence in the main mix.

# CHANNELS > SUB GROUP MASTER CHANNEL (4 x Sub Groups)

If you want to have control over the drum kit mix, for example, but also want single fader control over the whole kit's contribution to the mix, you would use a Sub Group.

When input channels are allocated to Sub Groups, either via the input channel sub-menu, or via the SUBS screen in the DASHBOARD/METERS page, they are mixed together into a single stereo channel, according to the relative positions of the main channel faders. That stereo channel is the Sub Group Master and is used as a stereo input channel.



Sub Group Master channels have their own EDIT channels, as per any other Ui input channel.

## CHANNELS > MASTER CHANNEL

The Master Stereo Channel is the output channel for the main stereo (left & right) mix - determined by the input channel and FX Return channel faders and pan/balance controls. The Master Channel has its own EDIT page tabs, just like other channels (see section 5). The EQ for Ui Output channels (including Aux Masters) is a Graphic EQ (GEQ) rather than a parametric EQ (input channels and sub group masters).

The Master Fader (red fader knob) controls the overall output volume of your mixer. The actual level set by the fader is shown in the top display above the fader in dB (decibels).





## **Display & Indicators**

As well as dB, this display also has 3 useful indicators:

## CLIP (C)

Notifies you of any input gain clipping. When an input channel signal is too hot and likely to be distorting, press this display to jump to the DASHBOARD page. In DASHBOARD, press the word GAIN in the top right corner of the bank that is clipping, then reduce the channel GAIN fader.

#### MUTE (M)

This indicates that a channel is muted. Press the display to see the DASHBOARD overview where all mutes are viewable.

#### SOLO (S)

This indicates that a channel is in solo mode. Press the display to see the DASHBOARD overview where all SOLOS are viewable.

### **BALANCE** (Tablet Software)

The horizontal Balance fader allows the volume of left and right to be increased or decreased, but the mix of left and right is unchanged. Double press the balance slider to return it to the centre position. To adjust balance in Phone Software, double tap the Master Channel name to access its EDIT page.

#### F1 & F2 Buttons (Tablet Software)

The picture shows F1 and F2 set as PLAY and RECORD (Ui16). F1 and F2 are programmable buttons that can be used for multiple options. These options are selectable in SETTINGS > CONFIGURATION. The options are: New Snapshot, Update Current Snapshot, Play, Record (Ui12 latest Firmware, Ui16).

If Record is selected, press record to start recording directly to your USB stick. The REC button will highlight in red. You must have a USB stick mounted to make a recording.

# CHANNELS > MASTER CHANNEL > SUB MENU

By long-clicking/tapping on a the Master Channel name you can access the Master Channel sub-menu for access to the 'Set To Zero' function and the Master Channel Preset Manager.



### **SET TO ZERO DB**

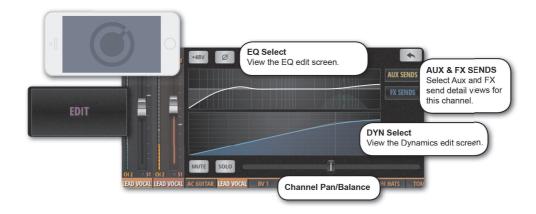
This is a fast way to set the channel fader level back to zero dB. Double tap the MASTER channel name, then touch SET TO ZERO DB.

# **MASTER PRESETS**

Save Master Channel setups as presets. Useful for building up a library of final-stage processing set-ups.

#### CHANNEL EDIT

The EDIT page is the basic access point for channel-based signal processing: EQ, dynamics, and FX and auxiliary sends. The actual processing and options available depend on the channel type. The selected channel strip will be shown on the left of the EDIT screen. In the phone software, the default EDIT page is a via-point for more detailed views and also offers access to basic channel parameters such as pan/balance, phase, phantom power, and more.





#### **EDIT PAGE ACCESS**

The EDIT page is available from a number of different Ui Software screens. To select the EDIT page directly either click/tap the EDIT button in the top-line navigation bar (tablet software) or select the EDIT menu item (phone software).

# Alternatively you can:

- Double click/tap on a channel fader cap to navigate to channel EDIT mode EQ tab.
- Double click/tap on channel label (channel types: INPUT, LINE IN, PLAYER, SUB GROUP, AUX) to navigate to selected channel EDIT page DYN tab.
- Double click/tap on a channel label (channel type: FX RETURN) to navigate to selected channel EDIT page FX tab (Global FX parameters).

### CHANNEL EDIT > DIGITECH

DigiTech input processing and channel view is available to the first two Ui mixer channels, and includes Hi-Z (high input impedance) selection for sources such direct-input guitar pick-ups. The DigiTech processing includes amp modelling: Emulations of guitar amps (with associated parameters) and cabinets. The DigiTech view also allows single-view editing of selected channel features via the 'Jack-Plug Buttons'.





#### **AMP SELECT**

### Choose a guitar amp model

Clicking or tapping anywhere on the guitar amp graphic will bring up a pop-up menu of available guitar amp models.



# **CAB SELECT**

### Choose a guitar speaker cabinet model

Clicking or tapping anywhere on the guitar cab graphic will bring up a pop-up menu of available guitar cab models.



## HI-Z ON/OFF

#### Turn the Hi-Z input on or off

If you have an input source that requires a high impedance input - such as the direct output from electric guitar pick-ups - turn the Hi-Z option on.

# CHANNEL EDIT > DIGITECH



# **DIGITECH ON/OFF**

Turn DigiTech processing on or off

When DigiTech processing is turned off, the channel will revert to its standard input stage.



### **PRESETS**

Open the PRESETS management pop-up

You can save and load settings presets for the DigiTech processing using this pop-up.



# **AMP CONTROLS**

Adjust detailed settings for the selected amp model

The controls include GAIN, LEVEL, BASS, MID, and TREBLE. Use the GAIN control to overdrive the amp model.



### **CHANNEL CONTROLS**

Single view editing of selected input channel controls

Available input channel sections are: FX, High Pass Filter, Notch Filter, Compressor, Gate

EQ adjusts the amplitude of an audio signal at particular frequencies. Ui input channels, FX Return channels, and Sub Group master channels have a four-band parametric EQ, plus High Pass Filter (HPF), and a De-Esser controlled from the same screen. The display also incorporates an optional Real Time Analyser (RTA), which shows a spectral view of the incoming signal. In addition, the EQ can be switched to a three-band (fixed frequency, fixed Q) 'Easy EQ'.





### **EASY EQ ON/OFF**

### Turn Easy EQ feature on or off

Easy EQ is a three-band, fixed frequency, fixed Q mode with a Mid bell-type band plus low and high shelving bands. Switching Easy EQ OFF preserves the 'curve' in the parametric EQ, However, turning Easy EQ ON resets the current curve because parametric EQ settings cannot be mapped to the Easy EQ format.



### **RTA - REAL TIME ANALYSER**

# Turn RTA feature on or off

The RTA display shows a real-time spectral view of incoming audio. This is sometimes useful for targeting specific characteristics with EQ bands quickly. Note that RTA is only active on one channel at a time. If activated it will deactivate any other channel's active RTA (on other clients)



## **DE-ESSER ON/OFF**

#### Turn De-Esser processing on or off

When off, no draggable De-Esser ball will be shown in the main EQ graphic interface.



# **RESET**

#### Reset the EQ to default values

The EQ is set 'flat', and frequency and Q values are reset to defaults.



#### **BYPASS**

# Bypass the EQ section of channel processing

This control bypasses only the parametric EQ. HPF and De-Esser processing is unaffected.



### **EQ / DE-ESSER FADER CONTROL**

#### Choose EQ or De-Esser fader control



Controls for whichever is selected are assigned to the three control faders. For EQ, the faders show values for the currently selected band.



### **DS - DE-ESSER BALL**

## Draggable graphic 'ball' for De-Esser control

Drag this graphic element to control. UP/DOWN adjusts Threshold, LEFT/RIGHT adjusts frequency; use a pinch-gesture or mouse-wheel/track-pad scroll on DE-ESSER ball to adjust the ratio value. Double-click/tap to reset.



## 1/2/3/4 - EQ BAND BALL

## Draggable graphic 'ball' for EQ band control

Drag this graphic element to control. UP/DOWN adjusts Gain, LEFT/RIGHT adjusts frequency; use a pinch-gesture or mouse-wheel/track-pad scroll on the EQ ball to adjust 'Q' value. Double-click/tap to reset an individual band.



### H - HPF BALL

# Draggable graphic 'ball' for High Pass Filter control

Drag this graphic element to control. Left/Right adjusts Cut-Off frequency. Double-click/tap to reset.



## **DE-ESSER FREQUENCY**

#### Fader control of De-Esser Frequency



Determines the centre frequency of the De-Esser dynamic filter - the frequency on which the de-essing process is focussed. To access the De-Esser fader controls in phone software, tap the DE-ESSER SETUP button.



### **DE-ESSER THRESHOLD**

#### Fader control of De-Esser Threshold



De-Esser threshold is the level at which the De-Esser starts to attenuate the 'ess' band. To access the De-Esser fader controls in phone software, tap the DE-ESSER SETUP button.



# **DE-ESSER RATIO**

#### Fader control of De-Esser Ratio



De-Esser Ratio is the amount by which the 'ess' band is attenuated when the audio level crosses the Threshold. To access the De-Esser fader controls in phone software, tap the DE-ESSER SETUP button.



## **EQ FREQUENCY**

## Fader control of EQ band Frequency



Fader control of EQ is only available with tablet software. Double-click/tap to reset.



# EQ Q

#### Fader control of EQ 'Q'



Q is effectively a measure of how tall and thin the bell shape of the EQ band is - the lower the Q, the wider the bandwidth affected, and vice versa. Fader control of EQ is only available with tablet software. Double-click/tap to reset.



# **EQ GAIN**

### Fader control of EQ Gain



The amount by which the selected EQ band is either boosted or attenuated. Fader control of EQ is only available with tablet software. Double-click/tap to reset.

# CHANNEL EDIT > GRAPHIC EQ

Ui Aux Send Master channels and the Stereo Master Channel incorporate Graphic EQ (GEQ) instead of the parametric EQ of the input channels. This includes 31 fixed frequency bands (selected in banks of 16 and 15 with the mini-GEQ graphic) with adjustable boost/cut. In addition, the GEQ screen gives access to the dbx AFS<sup>2</sup> (Automatic Feedback Suppression) processing. The display also incorporates an optional Real Time Analyser (RTA), which shows a spectral view of the incoming signal.





# **GEQ Band 'Ball'**

### Adjust the boost/cut in this audio band

Each ball can be dragged up (boost) or down (Cut), or double-tapped/clicked to reset to zero. Switch bands in two banks of 16 and 15 by selecting the upper or lower portion of the mini GEQ graphic.



#### **RTA**

# Activate the Real Time Analyser feature

The RTA display shows a real-time spectral view of incoming audio. This is sometimes useful for targeting specific characteristics with EQ bands quickly.



## **RESET**

Reset the GEQ to 'flat'

# CHANNEL EDIT > GRAPHIC EQ



# **BYPASS**

Bypass the GEQ processing



# dbx AFS<sup>2</sup> SETUP

Set up and operate the feedback elimination system for this bus.

Only available with tablet software. See section 5.3.1 for more detail.



# **PRESETS**

Save / load GEQ presets

Brings up a standard preset management pop-up box.

# CHANNEL EDIT > GRAPHIC EQ > AFS<sup>2</sup>

AFS2 is a dbx feedback suppression system that uses 12 intelligent filters to detect and eliminate feedback across the audio spectrum. You can set AFS2 up on the master stereo output and/or Aux bus master channels by navigating to the channel's Edit screen and selecting the EQ tab.



AFS<sup>2</sup> works in two modes. **Fixed mode** is used for 'ringing out' a system *before* a performance to ensure maximum headroom. **Live Mode**, continuously updates filter placement and is used *during* a performance.

Live filters are smarter than Fixed filters. They have the ability to detect feedback within complex program material. This makes them ideal for protecting the system from feedback as conditions change during the performance. Live filters can also detect when they are no longer needed and remove themselves from the chain, effectively restoring sonic fidelity and freeing up Live filters for use elsewhere.

In normal operation, you would setup AFS<sup>2</sup> in Fixed mode before a performance, then switch to Live mode for the actual performance.

# **Ringing Out The Sound System**

Fixed filters are set before a performance in a process called 'ringing out a system'. This is done after all other system EQ has been performed. Ringing out the sound system for feedback before use allows you to squeeze more gain out of the system before the onset of feedback and can help ensure you're not right at the edge of feedback during system use.



# dbx AFS<sup>2</sup> SFTUP

Set up and operate the feedback elimination system for this bus.

A dialogue box will open up with setup options.



#### **CLEAR FILTERS**

Clear the AFS<sup>2</sup> filters for a new performance / set-up

All filters need to be cleared before normal set-up. However, you can also reset the Live and Fixed filters independently, depending on need.

# CHANNEL EDIT > GRAPHIC EQ > AFS<sup>2</sup>



# AFS<sup>2</sup> MODE

Choose LIVE, FIXED, or LOCK

Fixed mode is for pre-performance set-up, Live mode is for use during performance, and LOCK prevents changes to the current filters status.



# **SENSITIVITY**

Adjust the input level feeding the AFS<sup>2</sup> detector and make AFS<sup>2</sup> more or less prone to mark a signal as feedback.

Setting this parameter high will allow AFS $^2$  to detect the feedback and notch it out more quickly. Conversely, setting it low will cause AFS $^2$  to be a little more hesitant to set a filter on the feedback until it reaches a higher level



#### **BYPASS**

Bypass the AFS<sup>2</sup> process.

You need to bypass the process while setting up for Fixed Mode set-up ('ringing out')...

# Manual AFS<sup>2</sup> Set-up in FIXED mode (Ringing Out The System)

- 1) Make sure all filters are cleared and set the AFS<sup>2</sup> process to Bypass using the blue bypass button.
- 2) Perform a sound check and set up a rough mix for all microphones that will be active during the performance. Take note of the output fader position for the aux master or stereo master that you are ringing out your TARGET GAIN will be around 5dB above this (see step 6).
- 3) If noise gates are being used on active mics including inside FX processors, bypass them before ringing out the system. You can re-enable them once the ring-out procedure is complete.
- 4) Have the musicians stop playing and fully lower the master bus faders. NOTE: When ringing out the system in Fixed Mode, any sustained sound detected by AFS<sup>2</sup> will trigger Fixed filters to be set. Therefore, make sure the microphones are active, but there is no appreciable signal present at the mics.
- 5) Ensure the musicians are not playing, then set the FILTER MODE parameter to FIXED.
- 6) Un-bypass the AFS<sup>2</sup> process then slowly raise the master fader until you reach your target gain (described in step 2) or run out of Fixed Mode filters, whichever happens first.
- 7) Lower the Master bus fader back to performance level.
- 8) Set the FILTER MODE parameter to LIVE. The system is now ready for use and any available Live filters will be available for on-the-fly feedback suppression during the performance.

### CHANNEL EDIT > DYNAMICS

The Ui dynamics section is a comprehensive audio compressor/limiter and gate section. Basically, a compressor reduces the level of the audio once it passes a particular threshold. You can set the Ui Compressor Release parameter to 'Inf' (Infinite) to create a Limiter. An audio gate uses a threshold to determine its 'open ' (above Threshold) or 'closed' (below Threshold) status. When a gate is closed, the signal level is reduced, or cut completely. A gate can, for example, be used to reduce ambient noise picked up by a microphone when the source (instrument/voice) is not active.





# **THRESHOLD**

# Adjust the Threshold of the compressor



The tablet version of the software includes a horizontal THRESHOLD fader. You can drag the orange 'T' ball in the dynamics graphic in both phone and tablet versions.



### **GATE**

## Adjust the Threshold of the gate



When the audio signal level falls below this threshold, the signal is attenuated. The gate threshold is depicted in the dynamics graphic as a darkened horizontal zone.



#### **RATIO**

#### Adjust the compression ratio



This determines how much the compressor attenuates the audio after the threshold level has been passed. An infinite (inf) RATIO setting causes the compressor to become a limiter.

# CHANNEL EDIT > DYNAMICS



### **ATTACK**

#### Adjust the compressor Attack



This is the speed at which the compressor reacts and reaches the attenuation set by the RATIO parameter.



### **RELEASE**

### Adjust the compressor Release



This is the speed at which the compressor returns to 'no attenuation' after the signal level has fallen below the threshold level.



### **GAIN**

## Adjust the compressor Make-up Gain



Compression results in an overall reduction in signal level, so a GAIN control is provided to 'make-up' the lost gain. Heavy compression plus make-up gain can often result in an increase in perceived overall loudness.



### **GRM - METERING**

# Gain reduction metering

There are three meters: Input signal, output signal, and a meter showing the amount of attenuation currently being applied due to the dynamics processing.



## **RESET**

Reset the Dynamics for this channel to default values



# **BYPASS**

Bypass the Dynamics for this channel