## Soundcraft UI series

# User Guide v2.8 For Soundcraft Ui12 & Ui16





#### **INFORMATION**



## **IMPORTANT**

## Please read this manual carefully before using your mixer for the first time.

This equipment complies with the EMC directive 2004/108/EC and LVD 2006/95/EC.

This product is approved to safety standards:

EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013

And EMC standards EN55022: 2010 EN61000-3-3: 2013 EN55020 :2007+ A11 EN61000-4-2: 2009

EN61000-4-3: 2006 + A1+ A2

Warning: Any modification or changes made to this device, unless explicitly approved by Harman, will invalidate the authorisation of this device. Operation of an unauthorised device is prohibited under Section 302 of the Communications act of 1934, as amended, and Subpart 1 of Part 2 of Chapter 47 of the Code of Federal Regulations.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- \* Reorient or relocate the receiving antenna
- \* Increase the separation between the equipment and the receiver
- \* Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- \* Consult the dealer or an experienced radio/TV technician for help.

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For clarity, this manual uses section references rather than page numbers. In some instances, one section reference may extend to several pages.

#### INTRODUCTION TO Ui

The Ui Series mixers feature cross-platform compatibility with iOS, Android, Windows, Mac OS, and Linux devices, and can use up to 10 control devices simultaneously. In addition, the Ui12 and Ui16 each feature built-in HARMAN signal processing from dbx, DigiTech and Lexicon, including dbx AFS², DigiTech Amp Modeling, and more. Both models feature fully recallable and remote-controlled mic gain and phantom power, along with 4-band parametric EQ, high-pass filter, compressor, de-esser and noise gate on input channels.



#### **MAIN FEATURES**

- Tablet/PC/Smartphone Controlled Digital Mixer
- Integrated Wi-Fi
- · Cross-platform compatibility with iOS, Android, Windows, Mac OS, and Linux devices
- Use up to 10 control devices (tablets, phones, PCs) simultaneously
- Legendary Harman Signal Processing from dbx®, Digitech®, and Lexicon®
- Fully recallable and remote-controlled mic preamps
- 4-band Parametric EQ, High-Pass Filter, Compressor, De-esser and Noise Gate on input channels
- 31-band Graphic EQ, Noise Gate and Compressor on all outputs
- Real-Time Frequency Analyser (RTA) on inputs and outputs
- 3 or 4 dedicated Lexicon® FX effects processors: Reverb, Delay, Chorus, and Delay/Reverb (Ui16).
- Subgroups, Mute Groups, View Groups, and more mixer controls
- Show/Snapshot recall with channel safes and security lockout
- 2-channel USB audio playback and recording (Recording Ui16 only)
- Floor-ready rugged chassis for live applications

The Ui16 boasts eight XLR combo mic/line inputs, four XLR mic inputs, two channels of Hi- Z/instrument inputs, as well as a stereo RCA line input. A 2-channel USB media player is included, along with four balanced XLR Aux outputs, two quarter-inch headphone outputs with level control, plus balanced stereo XLR and quarter-inch main outputs. Two-channel USB audio playback is compatible with MP3, WAV and AIFF formats, and 2-channel USB Record direct-to-memory devices functionality is possible as well. The Ui16 also has an HDMI display connection output.

## **SAFETY NOTICES**

For your own safety and to avoid invalidation of the warranty please read this section carefully.

## **Important Symbols**



#### **Cautions**

Alerts the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.





#### Warnings

Alerts the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The internal power supply unit contains no user serviceable parts. Refer all servicing to a qualified service engineer, through the appropriate Soundcraft dealer.

## **WARNINGS**

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Clean the apparatus only with a dry cloth.
- **Do not** install near any heat sources such as radiators, heat resistors, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not use this apparatus near water.
- **Do not** defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- **Protect** the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- **Use** only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When the cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- No naked flame sources, such as lighted candles or cigarettes etc., should be placed on the apparatus.
- No user serviceable parts. Refer all servicing to a qualified service engineer, through the appropriate Soundcraft dealer.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.



• It is recommended that all maintenance and service on the product should be carried out by Soundcraft or its authorised agents. Soundcraft cannot accept any liability whatsoever for any loss or damage caused by service, maintenance or repair by unauthorised personnel.



- WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Do not expose the apparatus to dripping or splashing and do not place objects filled with liquids, such as vases, on the apparatus. No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, table cloths, curtains etc.

## **WARNINGS**



#### ADVICE FOR THOSE WHO PUSH THE BOUNDARIES

Although your new console will not output any sound until you feed it signals, it has the capability to produce sounds which, when monitored through an amplifier or headphones, can damage hearing over time.

Please take care when working with your audio — if you are manipulating controls which you don't understand (which we all do when we are learning), make sure your monitors are turned down. Remember that your ears are the most important tool of your trade, look after them, and they will look after you.

Most importantly — don't be afraid to experiment to find out how each parameter affects the sound — this will extend your creativity and help.



NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential

area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This Class A digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.



NOTE: The packaging, in which your console arrived, forms part of the product and must be retained for future use.

### WARRANTY

1 Soundcraft is a trading division of Harman International Industries Ltd.

End User means the person who first puts the equipment into regular operation.

Dealer means the person other than Soundcraft (if any) from whom the End User purchased the Equipment, provided such a person is authorised for this purpose by Soundcraft or its accredited Distributor.

Equipment means the equipment supplied with this manual.

2 If within the period of twelve months from the date of delivery of the Equipment to the End User it shall prove defective by reason only of faulty materials and/or workmanship to such an extent that the effectiveness and/or usability thereof is materially affected the Equipment or the defective component should be returned to the Dealer or to Soundcraft and subject to the following conditions the Dealer or Soundcraft will repair or replace the defective components. Any components replaced will become the property of Soundcraft.

3 Any Equipment or component returned will be at the risk of the End User whilst in transit (both to and from the Dealer or Soundcraft) and postage must be prepaid.

- 4 This warranty shall only be available if:
  - a) The Equipment has been properly installed in accordance with instructions contained in Soundcraft's manual.
  - b) The End User has notified Soundcraft or the Dealer within 14 days of the defect appearing; and
- c) No persons other than authorised representatives of Soundcraft or the Dealer have effected any replacement of parts maintenance adjustments or repairs to the Equipment; and
- d) The End User has used the Equipment only for such purposes as Soundcraft recommends, with only such operating supplies as meet Soundcraft's specifications and otherwise in all respects in accordance Soundcraft's recommendations.
- 5 Defects arising as a result of the following are not covered by this Warranty: faulty or negligent handling, chemical or electro-chemical or electrical influences, accidental damage, Acts of God, neglect, deficiency in electrical power, air-conditioning or humidity control.
- 6. The benefit of this Warranty may not be assigned by the End User.
- 7. End Users who are consumers should note their rights under this Warranty are in addition to and do not affect any other rights to which they may be entitled against the seller of the Equipment.

#### SOUNDCRAFT UI TYPICAL SPECIFICATIONS

#### • Frequency Response

20Hz-20kHz +/- 0.25 dB

#### • THD

-20dBFS @ 1kHz <0.006%

#### Noise

Residual Noise -96dBu Mic Input E.I.N.22Hz-22kHz unweighted -118dBu Mix Noise masters at unity < -90dBu 1 input to Mix at Unity gain < -86dBu

#### Cross Talk (@1kHz)

Channel ON attenuation <120dB Channel Fader Attenuation <120dB Mic-Mic -103dB@ 1kHz, -93dB@ 10kHz Line-Line -103dB@ 1kHz, -93dB@ 10kHz

#### Input Gain

Mic/Line Gain -40dB to +50dB (0.1dB steps, Step accuracy depends on size of fader in GUI)

#### Gate

Threshold -inf to +6dB Auto Attack Auto Release

#### Compressor

Threshold -90dB +6dB Ratio 1:1 - 50:1 Attack 1ms - 400ms Release 10ms - 2000ms Makeup Gain -24dB - +48dB

#### EQ Channel

4 band parametriq EQ
Each Band Freq 20Hz to 22kHz
Q .05 - 15
Gain -20dB to +20dB
HPF 20Hz to 1kHz

#### De-esser

Threshold -90dB to 6dB Ratio infinity to 1:1 Frequency 2kHz to 15kHz

#### EQ Outputs

32 band GEQ, 20Hz - 20KHz +-15dB

#### Compressor outputs

Threshold -90dB +6dB Ratio 1:1 - 50:1 Attack 1ms - 400ms Release 10ms - 2000ms Makeup Gain -24dB - +48dB

#### dbx® AFS on all outputs

12 parametric EQ's (6 fixed, 6 floating)

#### Latency

Mic in - ADC -DSP -DAC - Line output 1.8ms

#### Input and Output Levels

Mic Input +20dBu max
Line input +20dBu max
Mix output +23dBu max
Headphone outputs 500mW 1 output used
(@120Ω), 380mw both outputs used

#### • Input and Output Impedances

Mic input  $10k\Omega$ Line Input  $10k\Omega$ Hi-Z Input  $250k\Omega$ Outputs all at  $100\Omega$ 

#### • USB

Max Current 500mA

Max Current available to all ports: 900mA

#### • Power

Consumption (typical) < 25W AC input voltage range 88-265VAC auto sensing AC frequency 47-63Hz

#### Operating Conditions

Temperature range 5°C - 45°C Humidity 0%-90% Storage Temperature -20°C to 60°C

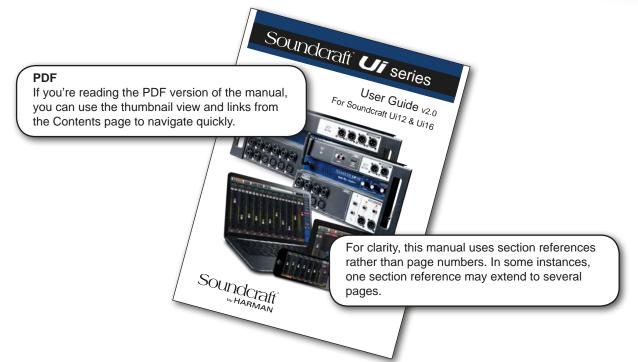
#### E & OE.

Soundcraft reserves the right to change specifications without notice.

#### GETTING STARTED - AN INTRODUCTION TO THIS MANUAL

Anyone with minimal audio experience should be able to operate the Soundcraft Ui Series consoles without reading too much of this manual, though we do recommend you take the time to go through it. An excellent place to start would be the feature list on the introductory page (section 1.0), the Wi-Fi and software set-up guide (3.1), and the software control guides for phone (3.2) and tablet (3.3) software.

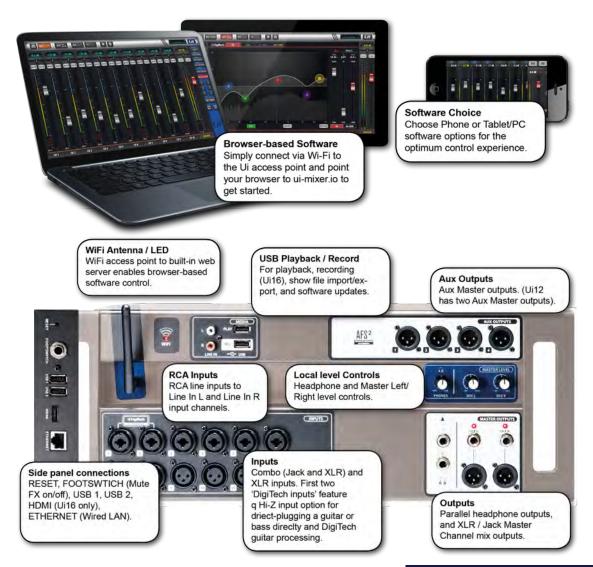




#### GETTING STARTED > SYSTEM OVERVIEW

This Soundcraft Ui console uses a compact main unit with built-in I/O, processing, and web server. Phones, tablets, and PCs can connect to the web server via Wi-Fi for platform-independant software control.





#### GETTING STARTED > HARDWARE

The Ui main unit's front panel hosts all local audio inputs and outputs plus three master level controls. On one side panel you will find the power connector and power switch; on the other you will find the RESET button, FOOTSWITCH connection, two USB ports, and the Ethernet (wired LAN) connection).



#### **PHONES**

#### Set level for headphones outputs

This controls the level on both headphone outputs. The headphone source signal defaults to the main stereo signal but switches to the Solo bus when AFL or PFL is selected.



#### MIX L/MIX R

#### Set levels for MIX L and Mix R outputs

The Mix output is the Ui's main left/right stereo output and appears on both the XLR and Jack Mix L/R outputs.



#### **COMBO INPUT**

#### Connection for Jack or XLR - mic or Line level

The input number corresponds to channel number in the Ui control software.



#### **XLR Input**

#### Mic or Line XLR Input

The input number corresponds to channel number in the Ui control software.



#### **LINE IN**

#### Line level RCA inputs

The RCA inputs feed the Line In L and Line In R channels in the UI mixer.



#### **HEADPHONES OUT**

#### Parallel headphone sockets

These are not independent, meaning each output receives the same signal. The headphone outputs receive the same audio signal as the main outputs unless a channel Solo is active, or the 'AUX' option is set in SETTINGS (this assigns the highest-numbered aux pairs to the headphones outputs).

#### GETTING STARTED > HARDWARE



#### MIX L/R OUTPUT - XLR

#### Master Channel XLR outputs

The Master Channel XLR and jack outputs are parallel connections (identical).



#### MIX L/R OUTPUT - JACK

#### Master Channel Jack outputs

The Master Channel XLR and jack outputs are parallel connections (identical).



#### **AUX OUTPUTS**

#### Physical outputs for the Aux Master outputs

The Ui12 has two Aux Master outputs and the Ui16 has four.



#### **MEDIA - PLAY**

#### USB Socket for USB Flash Drive with audio playback files

Audio files must be saved to the USB stick as either MP3, AAC, .WAV, .OGG, .AIFF, or .FLAC files. See section 9.0. This USB socket can also be used for Show File and Snaphot import/export, and software updates. There are two additional USB sockets on the side of the unit.



#### MEDIA - REC (Ui16 only)

#### USB Socket for USB Flash Drive - for recording audio

The Soundcraft Ui 16mixer will record the Master Channel stereo output as a stereo file onto the storage device. See guide for playback and recording instructions - section 9.0.



#### Wi-Fi Antenna

#### Necessary for wireless network connection - Hotspot or WiFi

Make sure the Antenna is firmly screwed into it's socket and normally orientated vertically. For more information on wireless network settings, see section 10.1.

#### GETTING STARTED > HARDWARE



#### **PWR**

#### Power Connector & Switch

The Ui mixer has a power adapter with threaded locking ring. Insert the connector and screw the locking ring onto the socket to prevent accidental removal and to ensure a satisfactory electrical connection for best performance. Use the power switch with the reset button (other side panel) to reset the unit to factory default settings.



#### RESET

Recessed push switch used to reset the unit.

To reset Network settings ONLY, switch the unit on while holding down the reset button for at least ten seconds. For a full system reset, see section 3.0.2.



#### **FOOTSWITCH**

Footswtich connector used to toggle FX Mute on and off.

Use a footswitch with a quarter-inch jack connection. The unit will auto-detect the connector type, though the footswitch itself must be a non-latching type.



#### **USB Connectors 1 & 2**

May be used for Show file import and export (section 8), and software updates.

There are USB connections on the front panel of the unit for audio recording and playback.



#### **HDMI Connector (Ui16 Only)**

Supports HDMI Video standard

The feature is not yet implemented.



#### **ETHERNET**

Standard RJ45-wired connector for use with wired Ethernet.

A wired Ethernet conenction to the Ui is the most secure. See section 10.1 for more details on network settings and configurations.

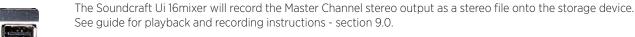
## 2.2: HARDWARE I/O & CONTROL

#### GETTING STARTED > HARDWARE



#### **MEDIA - REC (Ui16 only)**

USB Socket for USB Flash Drive - for recording audio





#### LINE IN

#### Line level RCA inputs



The RCA inputs feed the Line In L and Line In R channels in the UI mixer.



#### Wi-Fi Indicator

#### Shows Wi-Fi is operating normally



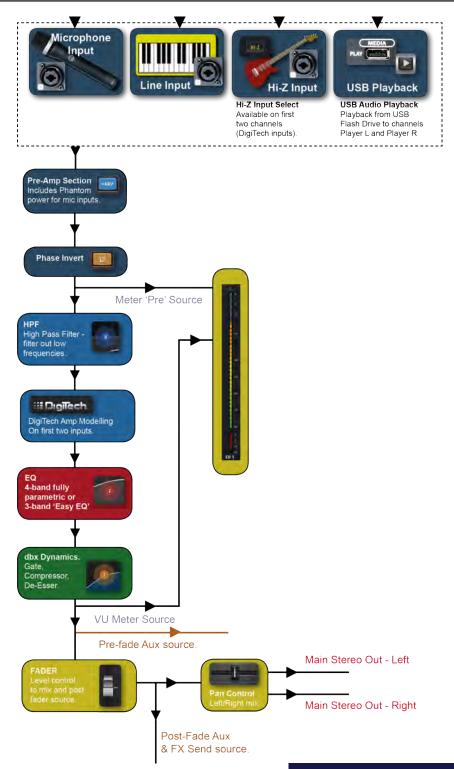
The indicator also shows Wi-Fi boot status during power up. It stops its timed flash sequence when booted and available for connections. Then flashes with data activity.

If the WiFi LED keeps flashing it can mean the firmware is not loading into the DSP. Make sure latest firmware is loaded into the unit and that the DC power connector is properly screwed on.

#### GETTING STARTED > INPUT CHANNEL ROUTING

The diagram shows the audio signal path through an input channel - from physical input to bus sends (Aux, FX, Mix, and so on).

Please note: The entire signal path (except for the hardware pre and output DACs) is clip-free with infinite headroom. It means that internal clipping is not introduced even by driving the EQ/Dyn to the max. Sufficiently reducing the level on the Master Channel strip will get rid of any clipping on the output.



#### GETTING STARTED > GETTING CONNECTED

The Soundcraft Ui series uses built-in web server technology to enable computer, tablet, and phone-based in-browser control of all functions - simply connect to the Ui Wi-Fi access point (hotspot) and browse to the appropriate URL. Alternatively, you can connect via an existing Wi-Fi network, or via a wired LAN (Local Area Network) using the Ethernet port on the side of the unit. See Section 10.1 for details on network configuration.

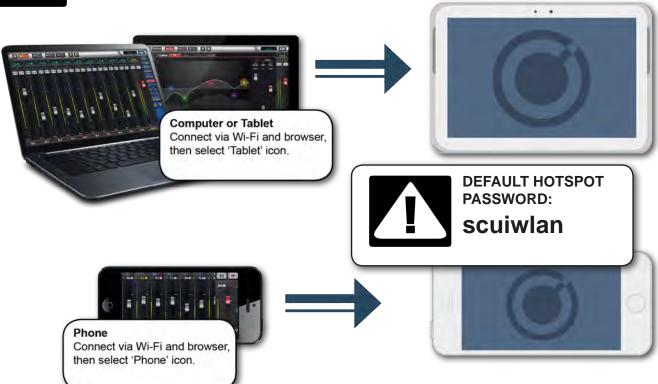
#### Connecting To Ui Hotspot with computer, tablet, or phone.

- 1) Ensure the Wi-Fi antenna is attached to the unit, connect the external power supply, and turn on the power to your mixer. You will see an LED light up inside the Wi-Fi logo on your Ui hardware; this will flash until booted successfully.
- 2) Navigate to Wi-Fi set-up on your device and connect to the "Soundcraft Ui" access point. If this is the first time you have connected, the default password will be 'scuiwlan'.
- 3) Launch your device's browser, and enter the URL ui-mixer.io. For Android users, you must use Android browser 4.4 or later, or another modern browser like Chrome to use the Ui web app.
- 4) You should see the device selection screen showing icons for large screen (tab icon) and small screen (phone icon) versions of the Ui software. Choose the version applicable to your device.



#### **IMPORTANT!**

The first time you connect, it is important to set up a new password for Wi-Fi access. Press the Settings icon, then choose the first tab: 'NETWORK' to access the password field.



#### SOFTWARE CONTROL

The browser-based software control for the Ui Series is available to any device in two versions. The small-screen version is optimised for phone-sized devices; the large-screen version is optimised for tablets and computers.

In order to make best use of your Ui mixer, please read this section of software control. There are several navigation and menu access functions that will greatly simplify Ui control.



## 3.0.1: UPDATES & REQUIREMENTS

#### SOFTWARE UPDATES & REQUIREMENTS

The browser-based software control for the Ui Series actually runs from a virtual web server in the main Ui unit itself and is compatible with any modern browser software running on your control device. For Android users, you must use Android browser 4.4 or later, or another modern browser like Chrome to use the Ui web app.

Up to 10 control devices can be used simultaneously.

#### **Software Updates**

Regular software updates are posted on the Soundcraft website and are available from the product page. In the Tablet software you can check your current Ui software version by navigating to the SETTINGS page and selecting the ABOUT tab. In the Phone software you can check your current Ui software version by navigating to the SETTINGS page and selecting the HELP tab.

#### To update the Ui software:

- 1. Download the Ui update file from the website and leave in .zip format.
- 2. Copy the .zip file to a USB media device suitable for connection to a Ui mixer's USB port. Note: The file can reside in any directory. Any USB port on the mixer is also acceptable.
- 3. Ensure your client device is connected to the Ui mixer GUI
- 4. Connect the USB media
- 5. The GUI display will display that the USB device has been mounted. After the stick has been read (maybe 10 more seconds) the update will be recognised.
- 6. The GUI will ask if you would like to update. Choose OK.
- 7. The mixer will perform the update
- 8. The GUI will present a message stating whether the update has been successful or not.
- 9. You must power-cycle the unit and reconnect a client device.
- 10. You can browse to the about page to see the new Firmware version information.



#### **IMPORTANT!**

Note that if you have any type of zip file (other than the update file) in any directory on the USB key already, the software update will not work.

#### SOFTWARE > RESET THE MIXER

There are two levels of reset for the Ui mixer. The first will reset network settings in the event that you are unable to connect. The second (uses a fullreset.txt file on a USB memory stick in conjunction with the reset button. This will fully reset the unit back to its factory firmware and default settings.

#### **Networking Reset**

Reset Networking and Admin password if you have forgotten the admin password or if you are no longer able to connect to the Ui.

Use a paper clip (or similar) to hold down the recessed reset button (side panel) down for approximately 10 seconds while you power on the unit. This will initialise the Ui's networking and admin password to the default state.

#### **Full Reset**

This method removes all updates you may have performed on the mixer and returns the unit to its default factory shipping firmware and state. All settings, snapshots, users, profiles and shows will be lost. Please ensure you have saved/backed up any shows before resetting your Ui.

- 1) Create a test file named fullreset.txt (no contents necessary) and copy to a USB stick
- 2) Insert the USB stick into one of the Ui's USB ports.
- 3) Use a slim, long object to hold the reset button down for approximately 10 seconds while you power on the unit.
- 4) The Ui will recognise the fullreset.txt file on the USB stick and perform a full factory reset.
- 5) You must power cycle the unit and reconnect the client device. Power off for at least 10-15 seconds before powering back on.

**Note:** A flick of the power off/on will almost always fail to boot properly, and can get stuck (with continuous flashing blue Wi-Fi LED). Make sure to power off, wait 10-15 seconds, then power on. The blue Wi-Fi LED will pulse/flash for around 10-15 seconds then remain on.

#### SOFTWARE > SOFTWARE NAVIGATION

There are many navigation / gesture techniques common to both the Tablet and Phone versions of the Ui control software. This section describes the main ones. Section 3.7 summarises all control gestures.

Please Note: The screen shots shown are from the phone version of the software, except where the two differ significantly in content.



#### **Scroll Mixer**

Touch /Click and slide on the mixer screen to scroll along to whole available mixer - including FX Send, Aux Send and Group masters.





#### **Fader / Channel Name**

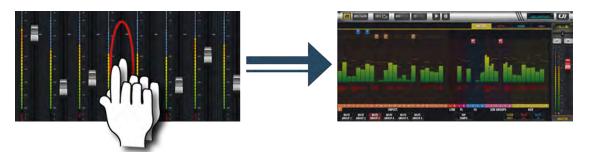
Select a channel by touching or clicking on a fader or channel name. The selected channel will remain active (keep focus) regardless of function screen until a new channel is selected.



#### **Double Tap Fader**

Access the channel EQ from MIX Screen. Double tap or double click.

#### SOFTWARE > SOFTWARE NAVIGATION



#### **Double Tap Channel Strip**

Double tap anywhere except the fader to access the METERS screen or switch back to the MIX screen from the GAIN screen.



#### **Scroll Channel Names**

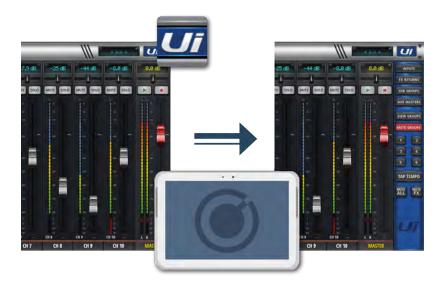
Touch/click-hold and slide on channel names to access channel names across the whole mixer, including FX Sends, Aux Sends, and Group Faders.

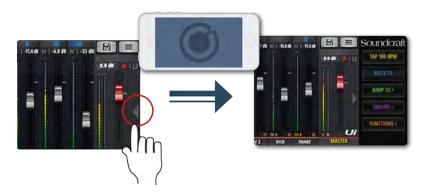


#### SOFTWARE > SOFTWARE NAVIGATION



A long tap/click on certain controls brings up a sub-menu specific to that control. For example, a long hold or click on a channel name gives access to channel presets, renaming, copy/paste settings, sub group assignment, stereo linking, channel reset, and the ASSIGN ME function.





#### Slideout View

Touch the Slideout Arrow to the right of the MIX screen to access the Slideout View panel.

For the tablet software Slideout panel, click/touch the Ui button in the top right corner of the screen. The tablet Slideout offers fast mixer navigation to common channel groups, MUTE and VIEW group access, the TAP TEMPO button, plus MUTE ALL and MUTE FX functions.

On the phone software this gives fast access to the TAP TEMPO and MUTE FX buttons, plus JUMP TO (mixer navigation), GROUPS (Mute & View Groups), and FUNCTIONS (fast functions such as playback and record) options.

You can pin the Slideout View in place via the SETTINGS Screen.

## 3.1.1: CONTROL / GESTURE SUMMARY

#### SOFTWARE > CONTROL SUMMARY

There are many control gestures, taps, and clicks to help navigate the Ui Control software quickly and intuitively. This is a summary of those control options.

#### List selectors

• Item selections available in list boxes can be made by double clicking/tapping on a selection in addition to using a 'load' button trigger.

#### MIX page shortcuts

- Double click/tap on channel virtual LCD display to return channel Vol to 0dB.
- Single click/tap on channel Pan or Balance control zone to temporarily display channel Pan or Balance value in relative virtual channel LCD display.
- Double click/tap on channel Pan or Balance control to centre channel Pan or Balance.
- Double click/tap in INPUT channel strip zone (excluding fader cap) to navigate to METERS Page.
- Double click/tap in LINE INPUT channel strip zone (excluding fader cap) to navigate to METERS Page.
- Double click/tap in PLAYER channel strip zone (excluding fader cap) to navigate to PLAYER/MEDIA Page.
- Double click/tap in FX RETURN channel strip zone (excluding fader cap) to navigate to FX SENDS Page.
- Double click/tap in SUG GROUP channel strip zone (excluding fader cap) to navigate to METERS Page.
- Double click/tap in AUX MASTER channel strip zone (excluding fader cap) to navigate to AUX SENDS Page.
- Double click/tap on 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 channel label (channel type: FX RETURN) to navigate to selected channel EDIT page FX tab (Global FX parameters).
- Long click/press and hold on channel label to instantiate channel pop-up menu.
- Single click/tap on top level navigation panel virtual LCD display to instantiate shows/snapshot pop-up list short-cut activator.
- Long click/press-and-hold on top level navigation panel virtual LCD display to navigate to SETTINGS page SHOWS tab.
- Single click/tap on MASTER channel virtual LCD display to navigate to METERS Page.

#### **SLIDEOUT Panel short-cuts**

- Long click/press-and-hold on SUB GROUPS to navigate to Sub Group configuration (METERS page, SUBS tab.
- Long click/press-and-hold on VIEW GROUPS to navigate to Views configuration (METERS page, VIEWS tab).
- Long click/press-and-hold on MUTE GROUPS to navigate to Mute Groups configuration (METERS page, MUTES tab).
- Long click/press-and-hold on TAP TEMPO for numeric tempo entry.

#### **METERS** page

- Single click/tap on any channel meter VU zone to navigate to relevant channel on MIX page.
- Long click/press-and-hold on TAP button for numeric tempo entry.

#### Channel EDIT page > DIGITECH tab

- Single click/tap on amp head to bring up amp list selector
- Single click/tap on to bring up cab list selector

## 3.1.1: CONTROL / GESTURE SUMMARY

#### SOFTWARE > CONTROL SUMMARY

#### Channel EDIT page > EQ tab

#### Parametric EQ:

- Double click/tap in vacant space to navigate to MIX page.
- Drag PEQ frequency balls to adjust dB gain and frequency values.
- Double click/tap frequency balls to reset selected frequency band to 0dB and default frequency.
- Pinch-gesture or mousewheel/trackpad scroll on selected frequency ball to adjust Q value.
- Drag DE-ESSER frequency ball to adjust frequency and dB threshold values.
- Drag LC/HPF frequency ball to adjust LC/HPF frequency value.
- Pinch-gesture or mousewheel/trackpad scroll on DE-ESSER frequency ball to adjust ratio value.

#### **Graphic EQ:**

- Double click/tap in vacant space to navigate to MIX page.
- Drag GEQ frequency balls to adjust dB gain of selected frequency.
- Double click/tap frequency balls to reset selected frequency to 0dB.
- Single click/tap on mini GEQ segments (top left) to present high or low bands in main editor.

#### Channel EDIT page > DYN tab

- Double click/tap in vacant space to navigate to MIX page.
- Drag threshold ball to adjust dynamics threshold value.
- Drag ratio ball to adjust dynamics ratio value.

#### Channel EDIT page > FX tab

- Double click/tap in vacant space to navigate to MIX page.
- Single click/tap in virtual FX rack for Preset Manager.

#### Channel EDIT page > AUX tab

Double click/tap in vacant space to navigate to MIX page.

#### **AUX SENDS page**

- Long click/press-and-hold channel strip PRE/POST button for 'set all Pre or Post' option.
- Double click/tap in channel send strip zone (excluding fader cap) to navigate to MIX Page.
- Double click/tap on channel label to navigate to selected channel EDIT page DYN tab.
- Long click/press-and-hold on channel label to instantiate channel pop-up menu.
- Double click/tap in channel LCD to 'Return To Zero Level'.

#### **FX SENDS page**

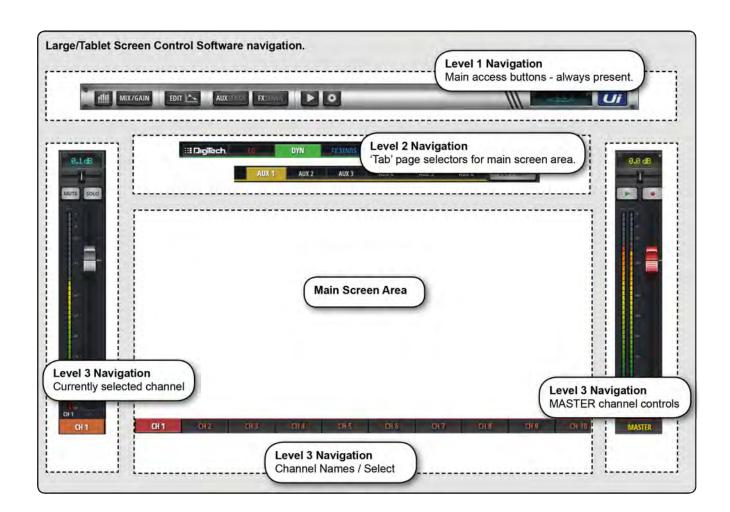
- Double click/tap in channel send strip zone (excluding fader cap) to navigate to MIX Page.
- Double click/tap on channel label to navigate to selected channel EDIT page DYN tab.
- Long click/press-and-hold on channel label to instantiate channel pop-up menu.
- Double click/tap in channel LCD to 'Return To Zero Level'.

#### PLAYER/MEDIA page

- Double click/tap in channel strip zone (excluding fader cap) to navigate to MIX Page.
- Double click/tap on channel fader cap to navigate to channel EDIT mode EQ tab.
- Double click/tap on channel label to navigate to selected channel EDIT page DYN tab.
- Long click/press-and-hold on channel label to instantiate channel pop-up menu.

#### SOFTWARE > TABLET / LARGE SCREEN NAVIGATION

The MIX Screen is the default for the Ui tablet / large screen software - You can navigate from there to other screens and functions in a variety of ways. The Level 1 Navigation controls take you directly to various primary screens, Level 2 navigation (page tabs) switches layers within the selected screen, and Level 3 navigation controls select individual channels.





#### **METERS**

#### Access the METERS page

Tabs on this page are METERS (meters & status), MUTES, VIEWS, and SUBS (Sub Groups). The default meters page shows status for phantom power, phase, mute, and solo, plus bargraph metering for level, gain reduction (dynamics). You can activate mute groups, use Tap Tempo, and CLEAR SOLO, MUTE ALL, AND MUTE FX directly from this page.

#### SOFTWARE > TABLET / LARGE SCREEN NAVIGATION



#### MIX / GAIN

#### Access the MIX and GAIN pages

When the button is orange, the MIX page is shown (channel faders) and when the button is Red, the GAIN page is shown (remote gain faders and input stage controls).



#### **EDIT**

#### Access the EDIT page for the selected channel

Resulting page configuration depends on selected channel. For example, the EDIT page for an input channel will have EQ, Dynamics, Aux Sends, and FX Send tabs. Certain Tabs will be preselected if you navigate from certain views. For example, selecting EDIT from the FX Sends main page will preselect the FX Sends tab in for the highlighted channel.



#### **AUX SENDS**

#### Access the AUX SENDS page

Shows a fader based view of all aux send levels for the selected aux bus. Also shows the Aux Master channel on right hand side. Selecting EDIT from the AUX SENDS page will preselect the AUX SENDS tab for the selected input channel.



#### **FX SENDS**

#### Access the FX SENDS page

Shows a fader based view of all FX send levels for the selected FX Send Bus. Also shows FX Return channel on right hand side. Selecting EDIT from the FX SENDS page will preselect the FX Send tab for the selected input channel



#### **MEDIA**

#### Access the MEDIA page

Playback and record controls, plus playlist and track selections. Also shows Playback L and Playback R channels on left hand side.



#### **SETTINGS**

#### Access the SETTING page

System and mixer settings and configurations.

#### SOFTWARE > TABLET / LARGE SCREEN NAVIGATION



#### **SNAPSHOT**

Access the Show and Snapshots pop-up selector

Load shows and snapshots directly from this pop-up.



#### **SLIDEOUT**

Access the SLIDEOUT view on the right hand side of the screen

Offers fast view and status switching functionality. The Slideout view can be configured as 'pinned' (permanent) in the SETTINGS page for Mix and Aux/FX Sends pages independently.

#### SOFTWARE > KEYBOARD CONTROL

For users mixing with a device that has a keyboard, please see below a set of easily accessible key commands, making it quick and efficient to access the most used features on the mixer.

[1]	DASHBOARD
[2]	MIX/GAIN
[3]	EDIT
[4]	AUX SENDS
[5]	FX SENDS
[6]	MEDIA
[7]	SETTINGS
[8]	SNAPSHOTS (Same as click in NAV Display)
[9]	SLIDEOUT
[SPACEBAR]	SLIDEOUT.
[Q]	FX RETURNS
[W]	SUB GROUPS
[E]	AUX MASTERS
[A]	MUTE ALL
[P]	PRESETS
[F]	MUTE FX
[M]	MUTE
[S]	SOLO
[C]	CHANNEL POP UP MENU
[~]	UNDO (last page viewed)
[Left arrow]	Jump 1 channels to the left
[Right arrow]	Jump 1 channels to the right
[Up arrow]	Jump 8 channels to the left
[Down arrow]	Jump 8 channels to the right
[TAB]	Toggle through the tabs inside EQ, DYN, FX, AUX.

#### SOFTWARE > TABLET SOFTWARE SCREENS

The main tablet software screens are accessed from the level 1 Navigation Buttons along the top of the screen area, or via fast-access routes, such as double-tapping on a fader to access the EQ screen (see section 3.1).



#### **METERS**

The Tabs are METERS (for all channels), MUTES (Mute group Assignment), VIEWS (View Group assignment), and SUBS (sub-group assignment).

The Meters page features VU meters and gain reduction meters for all channels, and also provides fast access to the CLEAR SOLOS, MUTE FX, and MUTE ALL buttons, plus all Mute Groups.



#### MIX

MIX is the most used screen and includes a scrollable display of every channel fader. The channel order from left to right is: input channel faders, line in faders, media player faders, FX return faders, Sub Group faders, and AUX Master faders. The Ui hardware you own will determine how many channels you see in the control software.



#### 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 phantom power and phase invert buttons.

#### 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.



#### **MORE ME**

MORE ME allows users to assign their own personal channel, and create a personal monitoring mix with a single large fader. MORE ME channel names are highlighted in orange. To assign an input channel to the More Me 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 MORE me 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.



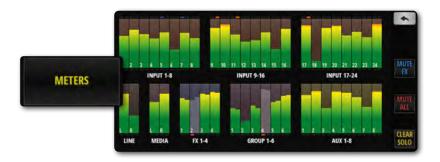
#### **PLAYER**

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#### **MORE ME**

MORE ME allows users to assign their own personal channel, and create a personal monitoring mix with a single large fader. MORE ME channel names are highlighted in orange. To assign an input channel to the More Me fader, long-press a channel name and select the ASSIGN ME function. Use the same process to assign an Aux bus as 'ME OUT'.



#### **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 φ (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.

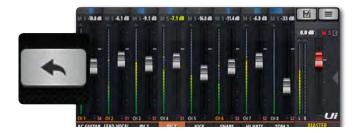
**TABLET:** Click/tap MIX/GAIN button to toggle MIX and GAIN pages. **PHONE:** The RETURN button will always return you to the MIX page.

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

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

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, Next Snapshot, Master EQ, Play, Record (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**

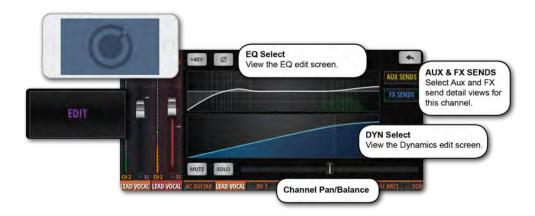
This is a fast way to set the channel fader level back to zero dB. Double tap the MASTER channel name, then touch SET TO ZERO DB.

## **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 > AFS2

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> SETUP

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 > AFS2



## 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

## CHANNEL EDIT > DYNAMICS



## **SOFT KNEE / HARD KNEE**

Set SOFT KNEE or HARD KNEE mode for the compressor

This determines how threshold level is interpreted. HARD KNEE mode means that the threshold represents an abrupt transition. SOFT KNEE means that it represents a gradual transition.



## **PRESETS**

Save / load Dynamics presets

Brings up a standard preset management pop-up box.

#### CHANNEL EDIT > AUX/FX SENDS

The AUX and FX SENDS tabs in the EDIT screen are a convenient way to access all output contributions for a single channel - as opposed to the 'mix view' approach of the dedicated AUX SEND and FX SEND pages. The AUX SENDS view/tab for both phone and tablet software versions includes PRE/POST and MUTE buttons for each send.

The FX SENDS view/tab for both phone and tablet software versions offer MUTE buttons and selections for editing the settings of the different FX processors. In the phone software, clicking/touching one of these takes you to an additional detail view to edit that FX processor.

For details on the internal FX processors, please see section 7.





#### MIX FEATURES > VIEW & MUTE GROUPS

In Ui software you can mute channels individually, or in Mute Groups. There are six Mute Groups available to be assigned to any muteable channels. To mute all channels in a Mute Group, simply select the required Mute Group button. View Groups work in much the same way, though these define mixer channel views. For example, you could assign all vocal channels, plus an aux master to View Group 1 for instant recall. The 'INPUTS', FX RETURNS, SUB GROUPS, and AUX MASTERS buttons available in the Slideout panel are simply convenient preset View Groups.

To assign Mute Groups, View Groups, (and Sub Groups) navigate to the assignment page. In Tablet software, choose the appropriate tab on the Meters page or long-click/touch the respective group button in the Slideout panel. You can then choose groups and assign channels to them as required.





#### MIX FEATURES > MORE ME

MORE ME allows users to assign their own channels (which may include a vocal mic and an instrument channel for example) and mix the balance of those channels with a single large fader. This is a simple way to mix your own sound against other band members.



To view MORE ME in the phone software, open the NAV menu and press MORE ME, or it can be accessed from the AUX SENDS screen with a double press on the green AUX MASTER fader. Double press the blank section in between the MORE ME faders to return to the AUX SENDS screen. In the Tablet software, choose MORE ME from the Slideout panel.

MORE ME can be displayed in both landscape and portrait orientations. Landscape is accessed from the NAV menu, whereas anytime you turn your phone to portrait orientation, the MORE ME page is shown in portrait view.

For MORE ME to work, you first need to assign your ME channels. Do this from a channel sub-menu in the MIX page. Long-press a channel name for the channel sub-menu, then select ASSIGN ME. Next you need to assign your aux output. Still in the MIX screen, scroll along to the AUX MASTER faders, Long press on your AUX Master output channel and select ASSIGN ME OUT.

When a channel is assigned to MORE ME, its channel name is displayed in orange colour.

#### **FX EDIT**

Digital FX are used in all types of audio to help create depth and colour to a mix. The Ui12 has three internal Lexicon FX processors: Reverb, Delay, and Chorus. The Ui16 has an additional processor that can either be an additional reverb or delay.

There are dedicated FX Sends and Returns for the internal FX - simply adjust the corresponding FX Send level and bring up the level of the FX Return channel to incorporate FX into your mix. See section 4.4 for more details of FX Sends.

FX Edit panels have Preset Save / Recall, and Fader-based parameter adjustment with numeric LCD-style numeric display.



#### FX EDIT > REVERB

Reverberation (or "reverb" for short) is the complex effect created by the way we perceive sound in an enclosed space. Reverb is dependent on many features of that space, including the size, shape and the type of materials that line the walls. Reverb is a natural component of the acoustic experience, and most people feel that something is missing without it.



#### TIME

## Reverb Time (milliseconds)

The amount of time it takes for the reverberation tail to decay. Reverb time is an aural indication of the type of space - large effective spaces have longer reverb times than small absorbent ones.



#### **HF**

#### **HF Damping**

By damping the high frequencies you can 'tune in' a more natural reverberation.



## **BASS**

## Bass Gain

Adding bass to a reverberant signal can help thicken audio that is been weakened by the reverberation algorithm, or create greater clarity in low frequencies that is sometimes masked by reverberation.



#### **LPF**

### Low Pass Filter Frequency

Higher frequency settings increase high frequency response, creating brighter reverbs; lower frequency settings create darker reverbs with more bass frequency emphasis.



#### **HPF**

### High Pass Filter Frequency

Reduce 'rumble' and undesirable muddiness by cutting the low frequencies.

#### FX EDIT > DELAY

Delays repeat a sound a short time after it first occurs. Delay becomes echo when the output is fed back into the input (feedback). This turns a single repeat into a series of repeats, each a little softer than the last. The Ui delay time is set in Milliseconds or in musical values. Press the DIV display to access a drop down box with the available musical note values. Press the TAP TEMPO button repeatedly to tap in the desired delay time. (This is usually done in time with the music.) Press and hold the TAP TEMPO button to manually type in the delay time in BPM.



### TAP / BPM

#### **Delay Tempo**



A delay time setting that uses a 'tapped' tempo as a guide. Tap the 'TAP TEMPO' button to set the delay time. The TAP TEMPO button is also available in the control software SlideOut panel.



#### TIME

#### **Delay Length**

Delay time set in milliseconds.



## DIV

#### Length Subdivision

Delay time set as a musical sub-division of the tempo. Press the DIV display to access a drop down box with the available musical note values.



#### **FBACK**

Controls the number of delay repeats by feeding the delay output signal back into the delay input

This creates a series of delay repeats, each slightly attenuated until they become inaudible. Higher settings create more repeats; lower settings reduce the number of repeats. When this knob is turned fully clockwise, it engages Repeat Hold – delay repeats play back in an infinite loop, but no further input signal is introduced into the delay effect. Repeat Hold is available only on Studio, Mono and Pong Delay.



#### **LPF**

### Low Pass Filter - Frequencies above this are filtered / removed

Cut the high frequency content by adjusting the cut-off frequency of a shelving filter.

#### FX EDIT > CHORUS

Chorus creates a lush, full sound by combining two or more signals together where one is unaffected and the other signals vary in pitch very slightly over time. Chorus is commonly used to fatten up tracks and to add body to guitars without colouring the original tone. Chorus can also be used with discretion to thicken a vocal track.



## **DETUNE**

Amount of deviation from the pitch of the original signal



## **DENSITY**

Adjust the density of the chorus effect

The more dense the chorus, the thicker and richer the result will be.



## **LPF**

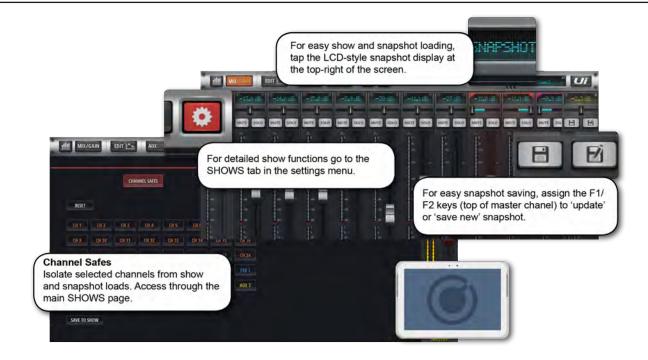
Low Pass Filter - Frequencies above this are filtered / removed

Cut the high frequency content by adjusting the cut-off frequency of a shelving filter.

#### SHOWS & SNAPSHOTS

A SHOW is a collection of SNAPSHOTS. A SNAPSHOT is a record of every setting on the console. You can save and recall snapshots and shows via the Ui control software - Phone or Tablet.

A snapshot remembers every setting of your mixer at one time. A common usage for snapshots is to have one snapshot per song. So your snapshot list could look exactly like your song list. At the end of each song, change to the next snapshot and every setting on the mixer is ready for that song to start.





The SHOWS & SNAPSHOTS page is accessible in the tablet software from the SETTINGS page OR by tapping/clicking the LED display in the top navigation bar (which displays the name of the currently loaded snapshot). The quick key to the snapshots pop-up is [8]. You can also assign an F1 or F2 key (top of Master Channel) to update the current snapshot or create a new one. In the phone software, simply tap the disk icon or assign the SlideOut F1 key to a snapshot function.

#### SHOWS & SNAPSHOTS

The unit ships with the Default Show loaded, and the \* Init \* snapshot. It is a good idea to create a new Show to work with and use the Default Show is an easy route back to default settings.

To set up a show, from a SHOWS & SNAPSHOTS view (Settings) select SHOWS and press the NEW button. Then name your show.

In the SHOWS AND SNAPSHOTS page you can create, load, delete, and rename shows and snapshots.

Now take a snapshot by pressing the SAVE button (next to the SNAPSHOTS column or in the SNAPSHOTS view). You can also assign the Update Snaphot and New Snapshot functions to the F1 and F2 keys (Settings menu).

Loaded Shows and Snapshots are shown in red text.

When you take a snapshot, it is saved inside the current Show.

Snapshot delete operations only work on Snapshots in the curent show. If you try to delete a Snapshot from a Show that is not loaded, an error message will appear.

#### **USB Import / Export**

You can export shows to and import Shows from a USB drive inserted into the USB port in the main unit. To Export, select the Show in the Show List, Touch EXPORT, then select the USB drive and touch OK. To import, touch IMPORT, select the Show you wish to import, then touch OK.

#### **Channel Safes**

Activating a channel safe means the highlighted channel will not change when a new snapshot is recalled.

You can configure select Channel Safes, and save them to the current show, via the CHANNEL SAFES view (accessed through the main SHOWS & SNAPSHOTS page).

#### PLAYBACK & RECORDING

The Ui mixer has built-in media factilities. The Ui12 can playback via a USB memory stick, and the Ui16 can play and record. The player can be used for backing tracks or for background music in between sets, for example, while the Record facility records the main stereo mix. Playback is via the PLAYBACK L and PLAYBACK R channels - these are normal input channels dedicated to the USB playback function.









The Record (Ui16) and Playback features use one or two USB Memory sticks placed in the USB sockets on the Ui hardware. The Ui16 has both play and record sockets on the front panel, the Ui12 has a USB 'PLAY' socket. There are two more USB sockets on the side panel of the unit.

Press the MEDIA icon to enter the player page, or go via the PLAYER menu button in Phone software.

Files can be played from a playlist or directly from the file list.

### Menu Pop-up

Press and hold the PLAYER channel name to bring up the channel menu. The menu items are:

#### **Disable Stereo Link**

This feature separates the stereo channel into two mono faders. This is useful for musicians who want the audio on one channel and a click (tempo) track on the other channel.

## **Place Before Inputs**

This useful feature moves the Player fader before Channel 1, so it is the 1st fader in the mixer.

#### File Types

Audio files must be saved to the USB stick as either WAV, AAC, MP3, OGG, AIFF, or FLAC files. Once this is completed, insert your USB stick into the USB slot labelled PLAY on the top of the Ui hardware and your song files will be shown in the USB media files column.

# 9.0: MEDIA PLAYER & RECORDER

#### PLAYBACK & RECORDING

#### F1 & F2 PLAY

In the tablet software the F1 & F2 buttons above the Master fader(and in the phone software the F1 button in the SlideOut panel) can be assigned to play next song (in the SETTINGS > CONFIG/SETUP screens). If the player is set to manual, then the player will stop at the finish of each song. Pressing the F1/F2 play button will play the next song in the list. This allows the musician to play the next song in his set without having to view the player page.

#### Manual / Auto

Manual mode means the player will stop playing at the end of each song. Auto mode means the player will automatically start playing the next song in the file list.

#### Cue

The Cue button is a jump to next song feature. CUE is only needed when working in manual mode. It allows the next song to be played using the F1 or F2 PLAY button (above the Master fader), without having to jump to the media player page before every song.

#### Recorder (Ui16)

Recording of the Master Stereo Output can be activated with a RECORD button. You can assign F1 and/or F2 buttons to this function.

#### **SFTTINGS**

The SETTINGS page allows the user to manage basic setup configurations, network parameters (including the password setting for the WiFi access point), GUI preferences, and access permissions on a per-user basis. Phone and tablet software versions display the settings in slightly different forms, but all are accessible on either platform. The sub headings used in this section refer to the Tablet software.









## **SETTINGS PRESETS**

You can save your GUI settings to, and load your GUI settings from a USB memory stick by touching the PRESETS button in the corner of the Settings page. This will open up a standard save / load screen.

# **GLOBAL**

# **HEADPHONES OUT**

MASTER/SOLO, AUX

Choose a source for the headphones. MASTER/SOLO is normal operation (either Master stereo output or Solo bus if an AFL or PFL is selected). AUX selects the highest pair of Aux buses as the source (3/4 for Ui12 and 5/6 for Ui16).

# **SOLO ROUTING**

HEADPHONES, MASTER + HP

When channels are soloed, either route the solo bus to Headphones only, or to both Headphones and the Master Output.

# **SOLO MODE**

SINGLE, MULTIPLE

SINGLE deactivates any previous solo when a new one is pressed. MULTIPLE is an accumulative solo mode (previous solos are not deactivated).

## **SOLO TYPE**

AFL, PFL

Choose a Solo type for channel solos. PFL (Pre Fade Listen) is a 'tap' before the channel fader, so you can monitor the channel signal without having to push the fader up. AFL (After-Fade Listen) is a tap after (and affected by) the channel fader.

## **SETTINGS**

## **RECORD MODE**

32-bit, 24-bit, 16-bit

Choose a sample rate for the media recording function.

## **GUI PERFORMANCE**

## FRAME RATE

FULL, 1/2, 13, 1/4

Choose the highest frame rate that your device can reproduce for best performance.

# **DISABLE RESCALING**

ON, OFF

Enable/Disable display rescaling. Disable this if your display is struggling with GUI movements..

# **DISABLE LED METERS**

OFF. ON

If you are using a slower CPU, you may wish to turn off the LED channel meters to reduce CPU usage.

# **LOCAL**

## **MASTER LOCK**

ON, OFF

When ON, the Master Channel fader is locked in place. Other parameters are still changeable.

# **METER QUANTISATION**

OFF, ON

Choose between quantised metering - rather like an LED bargraph - or non-quantised (continuous).

# **FADERGLOW**

OFF, THIN, NORM

Options for the coloured lines under the faders. 1. On, 2. Thin and 3. Off. These lines are handy to quickly see which group of faders you are viewing (blue for FX, orange for AUX, and so on).

# **HIDE COMP/GATE**

OFF, ON

When off, the channel meters include shorter red LED gain reduction metering below the primary meters.

# **DIM LED METERS**

OFF, ON

Turn on to lower the intensity of the metering colours.

# **DISABLE VU INPUT LEVEL**

OFF, ON

Disable/Enable the blue VU input level meters.

## **DISABLE VU PEAK**

OFF, ON

Disable / Enable the peak indicators for VU meters..

#### **SFTTINGS**

# PIN SLIDEOUT IN MIX MODE

OFF. ON

When this option is on, your mixer page will always display the Ui SlideOut without having to re-open it each time you go back to the main mix screen.

#### PIN SO FOR AUX/FX SENDS

OFF. ON

When this option is on, your Aux Sends page will always display the Ui SlideOut without having to re-open it each time you go to that screen.

# KINETIC SCROLL

OFF, ON

Allow screen to continue scrolling after release. Ensure the screen is not scrolling for channel sub-menu selection.

## MIXER SCROLLING

1 FINGER. 2 FINGERS

For more stability across the mix screen, you can yet the swipe mode to two fingers.

## **BUTTON FUNCTION**

## F1, F2

NEW SNAPSHOT, UPDATE CURRENT SNAPSHOT, PLAY, RECORD

Choose functions to assign to the F1 and F2 buttons. On the tablet software these buttons appear at the top of the Master Channel. In the phone software only F1 is available; F2 is always the MENU or RETURN button.

# **LANGUAGE**

ENGLISH, CHINESE, GERMAN, FRENCH, SPANISH

The default language for Ui software is English, but here you can change to Chinese or German language version. The browser will automatically refresh when these options are selected.

# **NETWORK**

The Network page shows network settings for hotspot, WiFi network, and wired LAN. To configure these settings, select the CONFIG button. The default administration username and password is 'admin' (for both).

You can connect to the Ui in three ways. You can connect to the Ui's WiFi hotspot, you can connect the Ui to an existing WiFi network and connect to the Ui via it's IP address on this network, or you can connect to the Ui using the wired LAN (Ethernet) connection. See Section 10.1 for Network setup details.

IMPORTANT: It is advisable to setup unique passwords for hotspot connection and for administration privileges. The default password for hotspot connection is 'scuiwlan'. When you first power on your Ui mixer, it will automatically send out a WiFi signal so you connect your device to the Ui network, and enter the password.

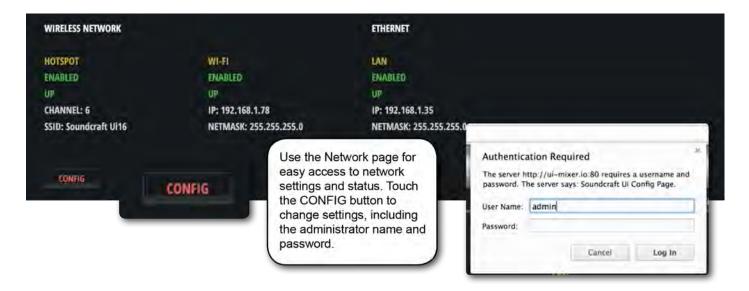
# **MONITOR ACCESS LIMIT**

This Tab/View manages access permissions - limiting feature access per user. Given that a typical setup may have multiple users logged into the Ui software, each doing their own monitor mix, it makes sense to limit their access to reduce the possibility of accidentally changing a front of house mix.

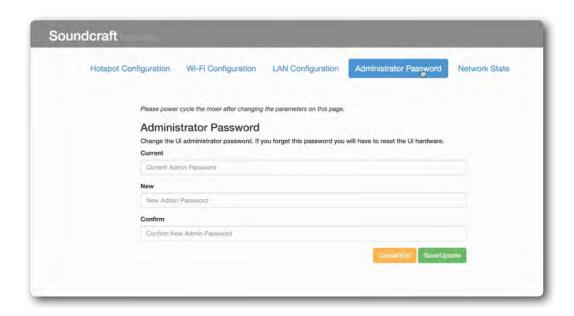
This feature is not password protected, it is intended as a safety measure to protect accidental corruption of your mix by other users. It is especially helpful for setting up monitor permissions.

#### SETTINGS > NETWORK CONFIG

The Ui Config page allows you to enable/disable and edit settings for Hotspot wireless connection to the Ui hotspot), WiFi (connection to an existing WiFi network), and LAN (wired connection via Ethernet). There is also an Administration password change page, and a summary 'Network State' page.



IMPORTANT: The default administration user name is 'admin' and the default administration password is 'admin'. You will be asked for these when you touch the CONFIG button.

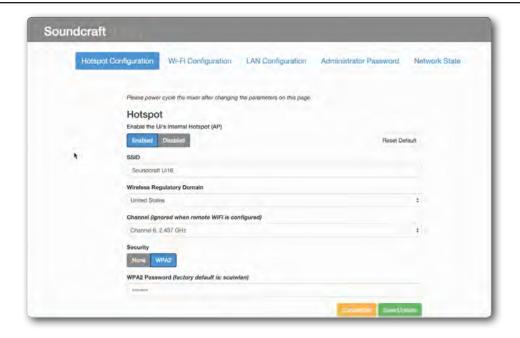


You can change the password using the Administrator Password page once you are in the CONFIG area.

In order to reset the unit's network settings back to the factory default settings you can use the hardware reset procedure, detailed in section 3.0.2.

## SETTINGS > NETWORK CONFIG > HOTSPOT

The Ui has it's own hotspot, so it can create it's own network so other devices can connect to it and access the software in it's built-in webserver. Select the Hotspot Configuration menu in Network Config to edit the Hotspot settings.



Use the Save/Update button to save Hotspot settings.

IMPORTANT: You must recycle the Ui power (turn the unit off and on) for settings to take effect.

# **Hotspot**

# Enabled / Disabled

Enable or disable the UI's own Hotspot. Please note, if the Hotspot is disabled you will need to connect to the Ui via either an existing Wi-Fi network, or a wired LAN connection (Ethernet).

# SSID (Service Set Identifier)

## Text Entry

This is the name of the Ui Hotspot. The default is 'Soundcraft Ui'

# **Wireless Regulatory Domain**

# Region Selection

Select the correct region - you current location. This will help select the correct channel selection.

#### Channel

# Channel Selection

A number of channels are available within the Wi-Fi spectrum, depending on the Regulatory Domain. There is third-party software available to help you select a local Wi-Fi channel.

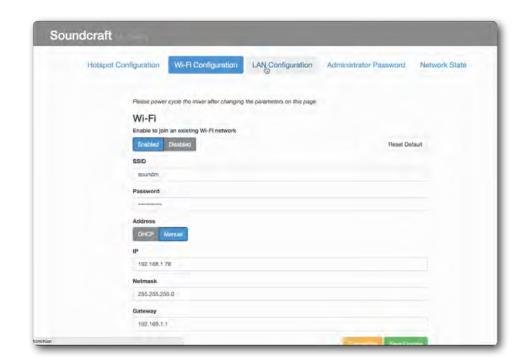
# **Security**

## None / WPA2

Choose either no security, or WPA2 (Wi-Fi Protected Access II) protection. IN the latter case, you will have to choose a password.

## SETTINGS > NETWORK CONFIG > WI-FI

The Ui can connect to an existing Wi-Fi network / Hotspot, and you can access the control software via the unit's IP number (shown in Settings > Network). Select the Wi-Fi Configuration menu in Network Config to edit the Wi-Fi settings.



Use the Save/Update button to save Wi-Fi settings.

IMPORTANT: You must recycle the Ui power (turn the unit off and on) for settings to take effect.

# Wi-Fi

Enabled / Disabled

Enable or disable the Wi-Fi connection.

# SSID (Service Set Identifier)

Text Entry

This is the name of the network you wish to connect to.

## **Password**

Text Entry

This is the password for the network you wish to connect to.

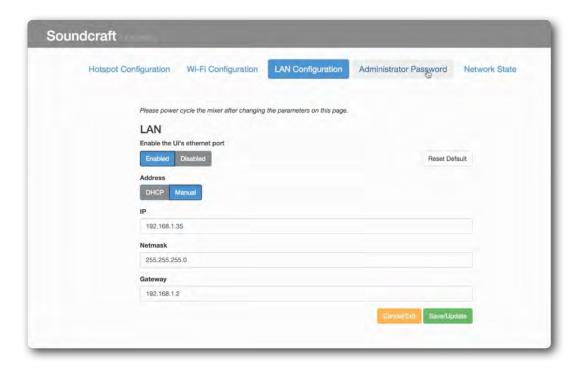
# **Address**

DHCP / Manual

You can choose dynamic IP allocation, in which case the Ui will automatically allocate an IP, Netmask, and Gateway. If you choose Manual IP allocation, you will need to complete these fields yourself. Please refer to your network administrator for manual IP allocation.

## SETTINGS > NETWORK CONFIG > LAN

The Ui can connect to an existing wired LAN (Local Area Network) by connection the Ethernet port on the side of the unit. This is the fastest, most secure method of connection to the Ui. Select the LAN Configuration menu in Network Config to edit the LAN settings.



Use the Save/Update button to save LAN settings.

IMPORTANT: You must recycle the Ui power (turn the unit off and on) for settings to take effect.

# **Default Settings**

LAN IP: 10.10.2.1

Subnet mask: 255.255.255.0

## **Direct Connection**

Most computers with a GigaBit adapter will AutoNegotiate and so when connected directly to the unit (not via a switch) there will be no need for an Ethernet crossover cable. Use a static IP for the computer, in the same range as the unit, such as 10.10.2.5 and enter the IP address of the unit in the computer's browser.

# LAN

## Enabled / Disabled

Enable or disable the Ui's Ethernet port.

## **Address**

## DHCP / Manual

You can choose dynamic IP allocation, in which case the Ui will automatically allocate an IP, Netmask, and Gateway. If you choose Manual IP allocation, you will need to complete these fields yourself. Please refer to your network administrator for manual IP allocation.

## NO SOUND? A TROUBLESHOOTING GUIDE

# A Troubleshooting Guide.

One of the most common problems experienced with mixing consoles is finding that an input isn't appearing at an output. There are many possible reasons for this, but the best way to troubleshoot it is to go through the expected signal path and workout where the 'break' is...

It is also important that you double checking all routing, assignments, and Solo / Mute Group status.

You can check the exact audio path of any signal by referring to the input signal path diagram in Section 2.3.

# Are Solos inactive?

Check for the yellow 'S' is shown in the Master Channel display or a yellow active solo indicator in the DASHBOARD page, If a channel is soloed then all other channels may be muted.

This shouldn't affect a main Left/Right or Mono output unless the MASTER + HP solo mode is enabled in the SETTINGS.

Clear all active Solos either individually, or by using CLEAR SOLO in the DASHBOARD screen.

# **Check The input!**

The physical input should be correctly connected. The physical input numbers correspond to the input channel numbers in the Ui Control Software.

# Is there anything on the meters?

By checking the Input and Output path meters, you should be able to localise a problem to a large extent.

The Input channel metering comes after the Mic/Line input but before the rest of the Input Channel. Therefore, if the input signal is valid, and you have applied enough Gain, you should see a level indication on the input meters.

Output Channel metering is tapped just before the physical output.

# Are they 'in phase'?

Phase is only likely to cause an issue if coherent signals are applied to more than one channel and they are both routed the same way. For example, you might be using a test signal, or using two channels for the same signal.

You can check if phase is an issue by switching the Phase (GAIN page) on ONE of those channels. If the audio comes back, then look for the cause of the phase issue - it may be that a balanced connection has been wired incorrectly, for example.

## NO SOUND? A TROUBLESHOOTING GUIDE

# Is the Gate shut?

It is possible for an incorrectly set Gate process to stop all signal.

This happens most often when the threshold is set too high and the signal never gets loud enough to 'open' the Gate. You can easily check this by bypassing active Gates in the dynamics (DYN) tab of the channel EDIT page.

# Are there any active mutes?

The Ui allows you to mute channels individually, via Mute Groups, or via MUTE ALL and MUTE FX buttons the in the DASHBOARD.

Mute Group operation is described in section 6.1.

# Is the Fader up?

The channel fader needs to be set high enough when routing to any post-fade destination. If your problem output route is pre-fader, then fader position will have no effect.

# Is the Output Master Channel Path valid?

Almost exactly the same checks as above can be done on an output channel (Aux Sends, Master Output).

Run through the same checks as above but for the Output channel.

# Is the Physical Output Valid?

Check the connection, and your replay system.

If metering is showing a valid output, it is likely there is a problem at, or after, the physical output.

## SYSTEM FAQ

The Ui is not just an audio mixer - it is a WiFi hotspot and a web server, and it runs sophisticated control software for phone and tablet-type devices. The following FAQ addresses any issues you might have with this 'system' aspect of Ui operation.

# Q: How do I download the Ui app?

**A:** The Ui series mixers do not need an app. Simply connect to the your Ui mixer via Wi-Fi from any device (PC, Tablet, Phone). Start an HTML5 Browser (Google Chrome, Mozilla Firefox, Safari, etc.) and type in the following URL into your browser: "ui-mixer.io". From there, choose either the Large interface (PC or tablet) or Small Interface (phones).

# Q: Why does my iOS Wi-Fi keep changing to another network when my device goes to sleep?

A: How iOS decides which wireless network to auto-join: https://support.apple.com/en-us/HT202831

You can configure your iOS device to automatically join a specific wireless network with a profile. Both Apple Configurator and OS X Server Profile Manager support this option in the user interface. https://support.apple.com/en-au/HT4989

# Q: The GUI doesn't work on my android device?

**A:** The Ui web application requires a 'modern' browser that supports HTML5 features like canvas and websockets. Android devices using the stock built in Android browser prior to Version 4.4 do NOT support websockets, and as such will not function. We suggest upgrading your device to a more current version of OS and browser. We also recommend installing and using the Chrome browser which fully supports modern browser features.

# Q: How do I operate fullscreen just like an app?

**A (iOS):** Launch the Safari browser on Apple's iOS and navigate to the website or web page you want to add to your home screen. Tap the Share button on the browser's toolbar — that's the rectangle with an arrow pointing upward. It's on the bar at the top of the screen on an iPad, and on the bar at the bottom of the screen on an iPhone or iPod Touch. Tap the Add to Home Screen icon in the Share menu.

**A (Android):** Launch Chrome for Android and open the website or web page you want to pin to your home screen. Tap the menu button and tap Add to homescreen. You'll be able to enter a name for the shortcut and then Chrome will add it to your home screen.

The icon will appear on your home screen like any other app shortcut or widget, so you can drag it around and put it wherever you like. Chrome for Android loads the website as a 'web app' when you tap the icon, so it will get its own entry in the app switcher and won't have any browser interface getting in the way.

Other popular Android browsers also offer this feature. For example, Firefox for Android can do this if you tap the menu button, tap the Page option, and tap Add to Home Screen.

A (Windows 8, 8.1, RT): This is obviously most useful on tablets, not on desktop PCs where you don't

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## SYSTEM FAQ

want to see the Start screen. Navigate to the website you want to pin, pull up the app bar by right-clicking or swiping up from the bottom of your screen and tap the star icon. Tap the pin icon, enter a name for the shortcut, and click Pin to Start. The website will appear as a tile on your Start screen.

**A (Windows Phone):** Open the website you want to pin in Internet Explorer. Tap the More (...) button and tap Pin to Start in the menu that appears.

# Q: Can I charge my USB device from the Ui's USB ports?

**A:** Yes, the Ui hardware USB ports can be used as a device power source.

# Q: Can I connect a more powerful antenna?

**A:** Sure, the included antenna will suffice for many environments. However it is easily screwed off and can be replaced with a larger. more powerful booster antenna.

# Q: How do I reset a Ui mixer?

A: There are several reset modes:

**Reset Networking and Admin password** only If you have forgotten the admin password, For hotspot or Wi-Fi settings you can simply use the reset button on the left hand side panel. Use a paper clip to hold the reset button down for approximately 10 seconds while you power on the unit. This will initialise the Ui's networking and admin password to the default state.

# Reset to the default factory firmware

This method removes all updates you may have performed on the mixer and returns it to the default factory shipping firmware and state. Create a test file named fullreset.txt (no contents necessary) and copy to a USB stick. Insert the USB stick into one of the Ui's USB ports. Use a paper clip to hold the reset button down for approximately 10 seconds while you power on the unit. The Ui will recognise the fullreset.txt file on the USB stick and perform a full factory reset.

# Q: How long does the Ui take to bootup?

**A:** Approximately 20-22 seconds.

# Q: How do I update the Ui's firmware?

A:

- **1)** Download the Ui update file from the website. The format is: uiupdate-1.0.3434-ui12.zip (leave in zip format)
- **2)** Copy the file to a USB media device suitable for connection to a Ui mixers USB port. Note: The file can reside in any directory. Any USB port on the mixer is acceptable.
- 3) Ensure a client device is connected to the Ui mixer GUI
- 4) Connect USB media to the Ui mixer 5/ The GUI display will display that the USB device has been mounted. After the stick has been read (maybe 10 more seconds) the update will be recognised.
- 5) The GUI will prompt you if you would like to update the Ui mixer. Options are Ok/Cancel.
- 6) Select OK to confirm
- 7) The Ui mixer will perform a firmware update

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## SYSTEM FAQ

- 8) The GUI will present a message stating whether the update has been successful or not.
- 9) You must power cycle the unit and reconnect their client device.
- 10) You can now browse to the about page to see the new firmware version information.

# Q: How do I attenuate the media player input? It is really hot signal?

**A:** You can use adjust the Compressor Gain control down -24dB to compensate for the incredibly hot signal that many audio files are mastered at. This adjustment will act like a PAD and allow you additional range on the level fader to operate.

# Q: Why are some elements of the GUI semi transparent (greyed out)?

**A:** A greyed out graphical control element is one that is displayed with a light shade of grey (or semi transparent state), to indicate that it is currently disabled, and cannot be operated or selected by the user. This convention is widely used in graphical user interfaces, to visually indicate which actions cannot be taken in the current situation. This approach makes it possible to disable a control when it cannot be used, and give a clear signal of that state, while maintaining the graphical control element in a consistent location, thereby minimising confusion for the user.

# Q: Can I use the same USB stick for playback and recording?

**A:** For FAST speed USB media devices this will work. For insufficiently fast USB sticks the recorder may skip samples and record crackle.

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