



# Qu-Pad

## user guide

# Qu-Pad Help – Setting Up

The Qu mixer can be set up and controlled using an iPad. The iPad connects to the mixer through a wireless router plugged into the Network port. This creates up a private Wi-Fi network for the mixer. It does not provide access to the Internet or other networks.

## 1.1 Requirements

**Number of connections** – Qu supports a maximum of 8 connections including up to 2 iPads running Qu-Pad. The others can be Qu-You.

**Apps** - You can get the Allen & Heath [Qu-Pad](#) mixing control app from the Apple Store. You can also get the [Qu-You](#) app for musicians personal monitor control using iOS devices including iPad, iPhone and iPod Touch. A version of Qu-You is available for Android devices from Google Play. These apps are free and can work with any Qu mixer.

**Qu mixer** - An Allen & Heath Qu mixing console running **V1.9** version firmware, with a suitable wireless router (wireless access point) connected to its Network port. Supported mixers: Qu-16, Qu-24, Qu-32, Qu-Pac and Qu-SB

**Version number** - The Qu mixer firmware and Qu-Pad version must be compatible. Both must run the same feature version number, for example V1.9. The maintenance version number can be different, for example Qu-Pad V1.90 will run with Qu mixer V1.91.

**iPad** - Qu-Pad supports all models of iPad running iOS7.1 or higher. iPad1 is not supported. The current version tested at time of this release is iOS9.

Qu-Pad handles a large amount of processing and metering data. For best performance shut down other applications running in the background. Make sure the iPad is charged before using it for a session.

**Wireless Router** - Qu-Pad is a professional mixing tool that justifies network equipment of suitably high performance, quality and reliability. For best results use a dual band (2.4 and 5GHz) wireless router (wireless access point) with auto channel selection. This can automatically set itself to an available or least congested channel when you power it up.

## 1.2 Set up the Wireless Network

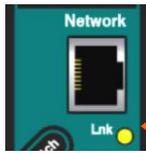


**Wireless router setup** – Connect the router to a PC or Mac using a Cat5 cable. Follow the instructions provided by the router manufacturer to access its setup menus. Once set up, disconnect the router from the computer and then plug it into the Qu mixer Network port using a Cat5 cable.

**ⓘ** We recommend that you set a router password (key) for security. You can also change the router SSID (name) to identify your network in the list that appears on your device.

**Router location** - Position the router high enough avoid obstacles such as people and equipment. Avoid locating it behind pillars or walls, near metal beams or on top of loudspeakers.

## 1.3 Connect the iPad



There are 3 User Profiles:

**Admin** – Access to all setup and mixing functions,

**Standard** – Live mixing only. Access to all processing,

**Basic** – Live mixing only. Access to faders and mutes only.

**Qu network address** - The mixer must have a TCP/IP (network) address compatible with the router. The Qu default is DHCP enabled which means that the router will automatically allocate a compatible address to the mixer when connected. If the mixer address has been changed and Qu-Pad does not connect then check its network settings. Refer to the mixer user guide.

**Power up the router** - Wait a few minutes for the router to boot up. The Network port indicator will flash once the link is established.

**Connect the iPad to the Qu network** – Go to the iPad **Settings / Wi-Fi** screen and choose your router in the NETWORK list. If it is not in the list wait a while for its broadcast to establish. Check that the iPad shows good signal strength.

**Start the Qu-Pad app** – The app opens on the Connection page. Choose your Qu mixer in the list and touch 'Connect'. Select one of the three Users. Enter the password if one has been set. The app will start in the **Processing** page once logged in.

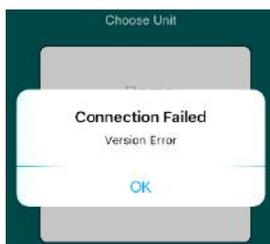
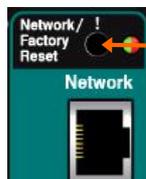
❗ The app version must be compatible with the Qu mixer firmware version. If not, the app will not connect to the mixer.

**To disconnect the iPad** - To disconnect from the mixer and return to the Qu-Pad Login page use the Logout button at the top left of the screen. This keeps the app open ready to log in again. To disconnect from the mixer and close the app simply double click the iPad Home button and swipe the app off the screen.

The app returns to the login page if it loses connection with the mixer by going out of range for longer than a few seconds. An orange signal icon appears to warn you that this may happen.

❗ To prevent a guest engineer using their own iPad on your network without the password in future, select your network in their iPad Settings Wi-Fi menu and use the 'Forget this network' function.

## 1.4 Connection problems?



**Qu mixer not shown in Qu-Pad login list** – The mixer and router may have incompatible network addresses. Check DHCP is turned on in the mixer Network settings screen.

**For Qu-SB** you can reset to DHCP default by pressing and holding the front panel recessed switch until its red indicator starts to flash..

**Connection Failed - Connection Error** – If you attempt to connect more than the maximum of 8x devices then you will get this error message.

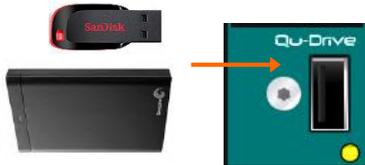
**Connection Failed - Version Error** – If this message appears during login then the app and mixer firmware are not compatible.

❗ The Apple Store will always have the latest Qu-Pad version available for free download. We recommend you turn off your iOS device Auto Update function to prevent the app being updated before you have had a chance to update the mixer firmware. Check [www.allen-heath.com](http://www.allen-heath.com) to download the latest Qu firmware.

**Good Wi-Fi signal but poor connection** – This may be caused by Wi-Fi interference. Try repositioning or rebooting the wireless router. If you still have problems you could try changing the router channel setting from auto to fixed. Start with channel 1, 6 or 11. You can use a Wi-Fi network scanner such as inSSIDer to view local wireless activity and help you find the least congested channel.

## 1.5 How to update the mixer firmware

V1.Fm →



**Version number** – The app and the mixer firmware must be compatible. The Feature Release Number 'F' must be the same for both. The Maintenance Release number 'm' does not need to be the same.

### Format a USB device

Qu firmware is updated using a USB device (key or hard drive). Before using the device it must be formatted on the Qu mixer. This need only be done once. Keep the USB device for use with the Qu mixer only. Use the Qu-Pad **Setup** screen **Qu-Drive** utility to test and format the USB device.

ⓘ Formatting will erase all existing data on the drive.

### Update the firmware

**Step1 Download the firmware** - Visit the Allen & Heath web site and download the latest firmware. Choose the firmware for your Qu model. Read the Release notes.

**Step2 Remove previous Qu firmware from the USB** - It is important to remove previous firmware files as the Qu will attempt to load the first version it finds. The firmware file is located in the root directory of the USB device and has a .QUU extension.

**Step3 Extract the .QUU file to the USB root directory** - Unzip the downloaded file on the computer and place the extracted .QUU file into the root directory of the USB device.

**Step4 Run the firmware update** - Plug the USB device into the Qu-Drive port. Use the Qu-Pad or mixer **Setup** screen firmware update utility.

**For Qu-SB** you can update the firmware using the iPad, or using the front panel recessed Firmware Update switch without iPad connected.



Status of USB firmware found:

Flashing green = Newer version  
 Solid green = Same version  
 Flashing red = Older version  
 Fast flash red = None found

Use a pointed object to press in the recessed Firmware Update switch. The indicator lights to show status of the firmware found on the USB device. If you wish to proceed keep the switch pressed in for longer than 3 seconds to start the update.

The indicator flashes red for a minute or two while the mixer updates. You can release the switch once the update starts. All connected Qu-Pad and Qu-You devices are disconnected. A green double pulse shows when the update is complete. The mixer reboots. Log back in to Qu-Pad. The new version is shown on the **Home** and **Setup** utility screen.

ⓘ Do not remove the USB device during the firmware update.

## 1.6 How to completely reset the mixer



A power up hard reset is available if you wish to fully reset the Qu mixer settings and clear its memories.

ⓘ A hard reset clears all current settings, all Scenes, User Libraries and User Permissions.

**For Qu-16, Qu-24, Qu-32, Qu-Pac**, hold down the front panel Reset and Setup keys for 5 seconds while powering up the mixer.

**For Qu-SB**, use a pointed object to press and hold in the recessed Network / Factory Reset switch while powering up the mixer. Release after the indicator flashes green.



Learn more about using Qu-Pad from the Help manual in the **Setup** page **Help** tab, and from the Qu Reference Guide which can be downloaded from [www.allen-heath.com](http://www.allen-heath.com)

# Qu-Pad Help – Operation

All Qu mixer functions including setup and operation can be accessed using the Qu-Pad app for iPad.

This Help provides a quick guide to get you started mixing with Qu-Pad. For more information please refer to the latest version of Qu Mixer Reference Guide available for download from the Allen & Heath web site [www.allen-heath.com/key-series/qu-series](http://www.allen-heath.com/key-series/qu-series).

## 1.1 The Qu-Pad layout



**1 Logout button** – To disconnect and close the app, double click the iPad Home button and swipe the app off the screen. To disconnect from the mixer but keep the app open touch the Logout button.

**2 Page select buttons** – Touch to open the different pages. Qu-Pad opens with the live mixing **Processing** page selected. Other pages are Setup, Home, Scenes and IO Patch.

**3 Scene status** – Displays the names of the Current scene (last recalled since power up) and Next scene (highlighted ready to be recalled).

**4 Fader strips** - The lower pane presents the fader strips for live mixing. Use the tabs on the left to access the channels, FX, masters, DCA, Mute groups and SoftKeys. You can also assign up to 3 Custom Layers with any combination of these. Touch to select a strip.

**5 Channel processing** - The upper pane presents the related processing for the selected channel highlighted green on the fader strip. Use the tabs on the left to access its processing parameters. Qu-Pad opens with LR processing selected.

**6 Library** - Touch to open the Library window in the lower pane for the currently selected processing tab above. Factory (fixed) and User (editable) libraries are available.

**7 Mix select buttons** - Touch to select a different mix. The fader strips turn blue and become the sends to that mix. You can work with the mixes, groups and FX in this way. Touch the mix button again or touch LR to return to the main mix.

**8 Mix master strip** - This fader strip becomes the master for the mix selected using the buttons to the right.

## 1.2 Processing Screen – Live mixing

This is the main screen for live mixing. There are two panels. The upper panel presents the processing for the selected channel with tabs on the left to select processing type. The lower panel presents the fader strips with tabs on the left to select different layers. The Master strip with its mix select keys is on the right.



**To select Channel Processing** - Touch a channel strip. The strip highlights green and the top left processing tab displays the number and type of the selected channel. Qu-Pad starts with LR master selected.

**To select a Mix** - Touch a Mix button on the right to view and adjust its send levels and routing using the fader strips. The current mix button highlights blue. The strips turn blue to show you are no longer on the LR mix. The strip next to the mix buttons becomes the master for the selected mix. Tap the same button again or touch 'LR' to return to the main mix.

**i** To avoid adjusting the wrong mix always return to your main mix after working with other mixes.

**To adjust faders** - Touch anywhere in the fader area and drag up/down to adjust the level. Touch and move your finger left or right away from the fader to increase resolution.

**Mute** – Touch to mute the channel signal. This turns off the signal feeding all mixes including sends to LR, FX and monitors.

**On** – This is the routing assignment from the channel to the selected mix.

**To adjust pan** – Touch the pan box to highlight it, then slide your finger down to view the setting and drag left/right to adjust.

**To adjust parameters** - Controls are shown as horizontal sliders with their value displayed above. Touch and drag left/right to change the values. Touch and move your finger up or down away from the control to increase its resolution.

**Fader strips** - Use the left hand layer select tabs to view the different channel types and your own custom layers. Swipe your finger left/right to scroll through the channels. Tap the moving strip to stop the scrolling.

**PAFL** – Touch this button to listen to the channel signal using headphones and to check its level on the main meters. If the top red indicators light then reduce gain or level. You can set several options for PAFL operating mode in the [Setup / Audio / PAFL](#) page.

**Copy / Paste / Reset** – Double tap a fader strip or processing block to open the editing popup. Touch Copy to copy the associated parameters. Select another channel and double tap. Touch Paste to paste the copied parameters into that channel. Touch Reset to reset associated parameters to factory default.

**Library** - Touch to open the Library page for the currently selected tab (Channel, Gate, PEQ, GEQ, Compressor, FX). Touch to select and then Recall a Factory or User library preset. Factory libraries cannot be overwritten. You can store, name, recall, overwrite or delete up to 100 User libraries. Channel libraries store all processing including its Preamp settings. However, you can choose to recall them with or without the Preamp settings.

Touch the Library button again to close it and return to the fader strip view.

## Custom Layers

You can assign **Custom 1**, **Custom 2**, **Custom 3** layers within the Qu-Pad app with any combination of channel, master and control strips. These are stored in the iPad and cannot be recalled using scenes.

The Qu mixer also has its own **Custom Layer** available at the surface. This is stored in the mixer and can be recalled using scenes.

You can synchronise one of the Qu-Pad custom layers to the mixer custom layer using an iPad option:

**Custom tab 1 follows Qu custom layer option** – Go to the iPad Settings menu 'Qu-Pad' item:

- **Off** (default) = Qu-Pad presents 'Custom 1', 'Custom 2', 'Custom 3'. These are independent of the mixer custom layer.
- **On** = Qu-Pad presents 'Custom Layer', 'Custom 2', 'Custom 3'. 'Custom Layer' is the same as the mixer custom layer. 'Custom Layer' can be assigned using Qu-Pad

**i** Turn this option on if you are using Qu-SB (no surface) and want to assign and use the mixer Custom Layer, for example to set user permissions for Custom Layer only.

## Processing tabs

**CH** - Adjust the channel Preamp (Gain, Polarity, 48V), choose its source (Local, dSNAKE remote, USB playback), set input Delay and enter a Name for the channel. You can also switch the FX or ducker Insert in or out. Touch the arrow on the right to access the Direct Out level and global source settings. Touch the arrow on the left to return to the first view.

**Mix** – This tab appears when you select a mix master. Set the mix Delay and enter a Name. You can switch the Insert in or out if an FX has been inserted into the mix. Touch the arrow on the right to access the Matrix sends and the routing options available for that mix (source within channel path, assignments, pre/post fader). These options affect all sends to the mix. Touch the arrow on the left to return to the first view.

**FX** – This tab appears when you select an FX send or return strip. The associated FX parameters, Name, and return PEQ appear. FX types can be changed using the Library function.

**Names** - These are stored in the Qu mixer. Names can be edited at the mixer or using Qu-Pad. Touch the Name box to open the iPad keyboard. Double tap Shift for caps lock. Touch the 'x' to clear an existing name. You can enter a name with up to 6 characters. Names appear above the faders.

**Ducker** - Choose the trigger source and set the parameters for the channel Ducker. The ducking can be assigned as 'Single' (the trigger ducks just the selected channel) or to the 'Gang' (the trigger ducks multiple channels assigned to the gang).

**Gate** - Adjust the noise gate settings. You can use the parameter boxes or touch and drag the dots on the curve. The curve turns yellow when the gate is switched in. The input and gain reduction meters help you set the threshold point.

**Compressor** - Adjust the channel or mix compressor type and settings. Use the parameter boxes or touch and drag the dots on the graph. The curve turns yellow when the compressor is switched in. The input and gain reduction meters help you set the threshold point.

**PEQ** - Touch and drag the PEQ band dots to adjust the HPF (high pass filter) and to shape the EQ. Drag up/down to adjust Gain and sideways to adjust Frequency. Touch a dot to select a band and use the Width slider or pinch horizontally, diagonally or vertically either side of the dot to adjust the width (octaves) of the band. At its widest settings the LF and HF bands become shelving rather than bell shaped. Buttons are available to switch the PEQ in/out and to reset the EQ flat.

**GEQ** - 28 sliders display the GEQ settings. Touch a slider and move your finger to adjust its setting. Touch and move your finger left or right away from the slider to increase the resolution. The area above the sliders displays the RTA. Buttons are available to switch the GEQ in/out and to reset the EQ flat.

**RTA** - An RTA (Real Time Analyser) fed by the current PAFL selection is displayed above the GEQ sliders. This displays the signal activity as a green meter for each of the 1/3 octave frequency bands. The dominant frequency (peak band) displays as a red dot above the meters. This can be helpful when ringing out monitor speakers or finding problem frequencies in a room. Check that you have selected PAFL for the channel or mix you want to analyse.

**DCA Groups** – These control the levels and mutes of the channels assigned to them. Normal setting for no effect is fader position '0'. Touch PAFL to turn on PAFL monitoring of all assigned channels. Touch the strip to open the assignments and naming page.

**Mute Groups** – These control the mutes of the channels assigned to them. Touch the strip to open the assignments and naming page.

**SoftKeys** - There are 15 user assignable keys. Their current functions are labelled. Touch the strip to open the assignment page. Scroll the wheel to select the function to assign to the key. Touch Apply to confirm.

**Custom Layers** - Three custom layouts can be assigned using the **Setup** screen. These layouts are stored in the iPad and do not affect the mixer.

## 1.3 Setup Screen

Access setup functions and user preferences. Use the vertical tabs on the left to select different setup types. Use the horizontal tabs across the top to select the associated options.



### Strips

Create your own fader layouts with up to 32 strips in each of up to three Custom layers. These let you combine channels, mixes, FX, matrix, mute and DCA groups and SoftKeys you want to use in any combination, and to even add blanks to separate groups of channels. Adding the Inputs AMM item will let you quickly access the automatic mic mixer settings. Choose Custom 1, 2 or 3 in the bottom panel.

Select the type of channel you want to assign from the top panel. Use your finger to drag and drop channels where you want them. Drag them down into the Custom layer to add them. Drag them up out of the layer to remove them.



Insert a channel by dragging it on top of the strip you want to position it in front of. Add a channel at the end by dragging it and holding your finger at the right of the window until it scrolls to the end. Drop it into the space that becomes available. To reposition a strip already in the Custom layer first touch it until it highlights blue, then drag it left or right to move it.

Touch and drag the 'Blank' item to add blank spaces between fader strips.

A position highlights yellow to show if a touched channel can be dropped there. It highlights red if it is about to be removed from the strip or if the layer is full (32 strips).

Swipe left or right to scroll through the Custom strips without reordering them.

 Turn on the 'Custom tab 1 follows Qu custom layer' option in the iPad Settings screen 'Qu-Pad' item if you want Qu-Pad to access the mixer Custom Layer.

## Audio

**PAFL** – Choose how you want the PAFL monitoring system to work. You can set inputs and outputs for PFL (pre fade listen) or AFL (after fade listen). Choose additive mode if you want to be able to listen to more than one channel at a time. Send the main LR mix to the monitor when no PAFL is selected. Set delay if you want to time align the headphones to the distance from the acoustic sources. Trim PFL if you find its level louder than the average AFL level.

**Talkback** (not available for Qu-SB) – Use this page to adjust the Talkback mic preamp, HPF and to assign it to any combination of the mixes. Touch the Options button to choose either momentary or latching action for the Talk switch. Latching is useful if you are using a switched talkback microphone.

**SigGen** – Use the Signal Generator to test speakers and align signal levels. It can be patched to any combination of Mix, Group, LR and Matrix out.

Pink noise is an excellent source for testing speakers. It generates equal energy per octave across all frequencies. It can be used to check that all speaker drivers are working and to listen for phasing and polarity issues.

Sine wave provides a steady pure tone ideal for aligning levels between the mixer and other audio devices.

**AMM** – The Automatic Mic Mixer is designed for speech applications such as conferences and seminars involving several microphones around a table. The Qu AMM can automatically take over the level of these mics to improve clarity and reduce the risk of feedback caused by many open microphones.

To set up the AMM, start with the mix master fader turned down. Use PAFL to check each mic signal and set preamp gain for a healthy meter reading for speech at the expected distance from the mic. Use this screen to turn on the associated mic channels. Their fader levels will jump to their '0' open position. Now slowly bring up the mix master fader. We recommend you use a DCA or audio Group as a master fader for the speech mics if you are also mixing other audio sources.

You can assign the AMM together with its related channel strips to a custom layer for instant access to all the controls you need while mixing speech.

Refer to the Qu Mixer Reference Guide for more about how the AMM works and can be used.

## Control

**Network** – Use this page to set the IP address and a unit name to identify it on the network. The mixer is set to DHCP by default so that the wireless router allocates an address to the mixer automatically. The default manual address is 192.168.1.60.

**MIDI** – Set the MIDI channel number for communication over the USB B port.

**Footswitch** – Qu-SB has a TRS jack socket to work with one or two footswitches (tip = FSB, ring = FSA). The switch operates by shorting the

jack tip or ring contact to the sleeve. You can assign a different function to each by scrolling through the menu. Touch Apply to confirm. Plug the footswitches in and touch Calibrate to set how they should function. Follow the onscreen instructions. 'Soft latch' lets you use a momentary switch for a latching function. Touch Apply to confirm.

**i** We recommend you plug the footswitch in before turning on the mixer to avoid triggering its function as the jack gets pushed in.

## USB Data

**Scenes** – Transfer Qu Scenes between the mixer and a USB device plugged into the Qu-Drive port.

**Libraries** - Transfer Qu Library presets between the mixer and a USB device plugged into the Qu-Drive port.

**Shows** – A Show archives everything (current settings, user preferences, all scenes and libraries) to a USB device plugged into the Qu-Drive port. Shows are archived directly to USB and not stored in the mixer.

**i** Do not move or edit the names of the Qu directories or files on the USB device.

## Utility

**Diagnostics** – Lists information about the mixer.

**Qu-Drive** – This page lets you check and format a USB device (key or hard drive) to use with the Qu-Drive port for data transfer, stereo/multitrack recording, and firmware update. Once formatted using this page you do not need to format it again.

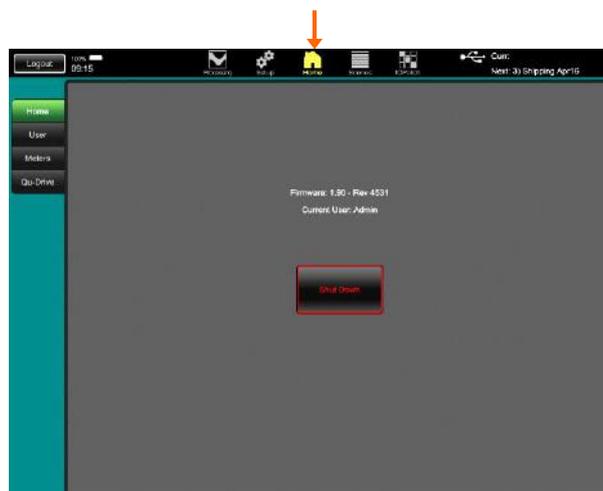
**i** Formatting a USB device will erase all its current data. If you want to keep this then make sure you archive the data elsewhere first.

**Firmware** - The mixer operating firmware can be updated using a USB device (key or hard drive) plugged into the Qu-Drive port. This page shows the current version running in the mixer. Check the Allen & Heath web site for the latest version available for download.

For situations where the Qu-Pad and mixer firmware are not compatible you can update the Qu-SB using a front panel switch. Refer to the section on Firmware Update in the Connection Help available on the Login page.

## 1.4 Home Screen

Access User login and permissions, Qu-Drive audio, metering and mixer shut down.



**Home** – Touch the Shut Down button to safely close processes such as data transfer and USB audio before turning power off.

**User** - Three User Profiles are available to protect selected functions and restrict user access, for example for volunteer operators in houses of worship, or guest engineers visiting venues.

- **Admin** – Full access to all functions. This is the factory default and normal setting when User Profiles are not needed. Admin can set the passwords and permissions for the other users.
- **Standard** – Operation only. The user is locked out of setup. Admin configures which channels and mixes can be accessed, the strip layout, patching and scene range to be allowed for the day-to-day or guest operator.
- **Basic** – Faders and mutes only. This is for very simple level control. Admin can set access to none or a range of scenes.
- **Qu-You** – Lets Admin set a password for Qu-You personal monitor app users. This is not a login for the Qu-Pad app.
- **Qu-Control** - Lets Admin set a password for Qu-Control app users. This is not a login for the Qu-Pad app.

To change user, touch to select a user then touch the Login button. You will be prompted to enter the password if one has been set.

**i** Turn on the 'Custom tab 1 follows Qu custom layer' option in the iPad Settings screen 'Qu-Pad' item if you are using the Qu-SB mixer (no surface) and wish to set the 'Custom Layer only' user permission.

**i** A system hard reset will reset all permissions and clear their passwords.

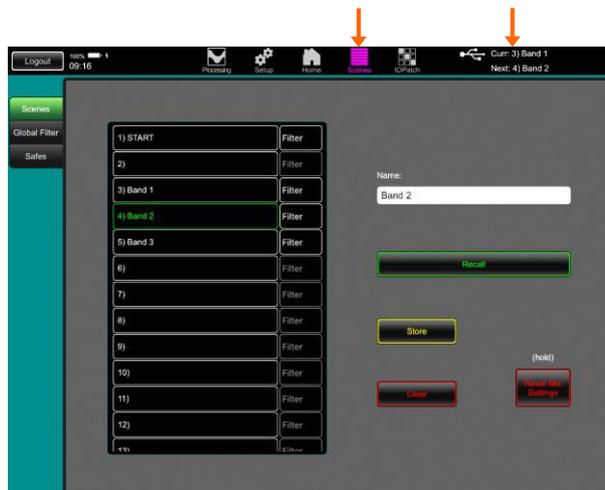
**Meters** - This page gives you an overview of all the channel and master meters, also showing channel Names, Mute and PAFL status. The RTA with its Peak Band red dot display is shown at the bottom of the screen. The RTA follows the currently selected PAFL signal.

**Qu-Drive** – You can record or play back stereo or multitrack audio WAV files direct to USB hard drive. The top part of the screen presents the stereo controls the lower part the multitrack controls. Qu records 18 tracks to Qu-Drive. However you can simultaneously stream up to 32 tracks to a PC or Mac plugged into the USB B port. Refer to the Qu Mixer Reference Guide for more information on using Qu-Drive.

**i** The USB drive must first be formatted on the Qu mixer using the **Setup** utility.

## 1.5 Scenes Screen

Store and recall Qu mixer Scene memories, set recall filters and make channels safe from being overwritten by scene recall. The top toolbar displays the names of the Current (last scene recalled) and Next (scene currently highlighted ready to recall) scenes.



**Scenes** – This page presents a list of the 100 Qu Scenes. Swipe up/down to scroll through the list. Touch to select. You can store, name, recall and clear scenes as you do at the mixer. A confirmation popup appears if you are about to recall, overwrite or clear a scene.

Touch the button next to a scene to open its Recall Filter popup. You can block selected parameters so that they are not overwritten when that scene is recalled.

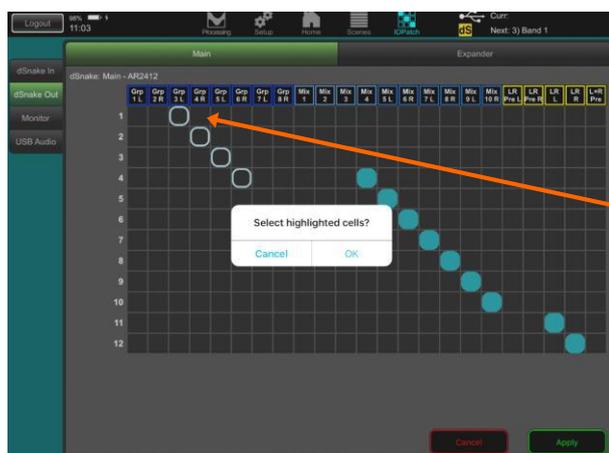
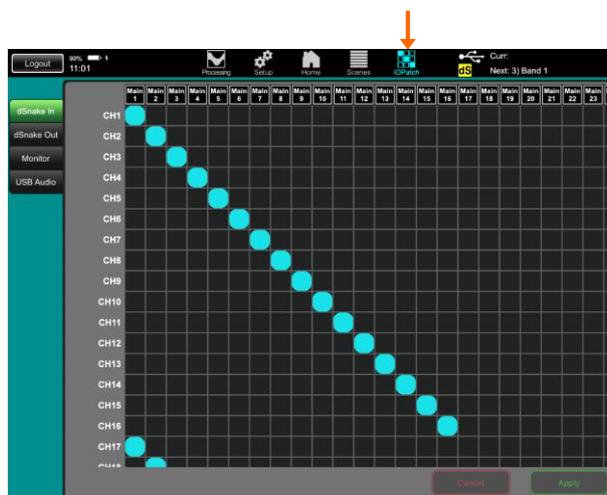
Touch and hold the Reset Mix Settings button if you want to reset all live mixing parameters to a default starting point ready for a new show or user (zero the board). This affects all processing, levels, assignments and patching but does not affect user preferences and the memories. Refer to the Qu Mixer Reference Guide for more information.

**Global Filter** – This page lets you block selected parameters of all channels so that they are not overwritten when any scene is recalled. For example, to protect Custom Layer and SoftKey settings from changing if you set these after sound checking several bands.

**Safes** – This page lets you protect all parameters of selected channels so that they are not overwritten when any scene is recalled. For example, to protect background music and the announcer microphone while recalling settings for the next band on stage.

## 1.6 IO Patch Screen

Patch the mixer input and output sockets and select signals to send to the ME personal monitor system and USB recording.



The patching pages present a grid showing the source (at the top) and destinations (on the left). The default is typically one-to-one mapping.

Touch a cell in the grid and then touch Apply to change the patch.

Touch and hold a cell and then drag your finger diagonally up or down to quickly patch a one-to-one mapping of sources to destinations.

Touch and hold a cell and then drag your finger up or down to quickly patch one source to many destinations.

Pinch the screen to zoom in or out.

**Surface** (not available on Qu-SB) – Scroll through the list of options to choose the sources for the mixer Alt Out and AES Out sockets.

**dSNAKE In** – Patch remote AudioRack sockets to the mixer channels. You can patch one socket to one or more channels. A channel can only have one socket patched to it.

**dSNAKE Out** – Patch Qu mixes to remote AudioRack output sockets. You can patch one mix to one or more sockets.

**Monitor** – Patch Qu signals (channel direct outputs and mixes) to the optional ME personal monitor system channels. The ME system can receive up to 40 channels via the mixer dSNAKE port.

It is typical to set the direct outputs to Post-PEQ and Follow Mute for this purpose. The global direct out setting is in the channel Preamp Routing page.

**USB Audio** – Patch Qu signals to the Qu-Drive stereo and multitrack record USB drive, and to the USB B streaming outputs. These use the same patch shared as follows:

- Qu-Drive Multitrack = Track 1 to 18
- Qu-Drive Stereo = Track 17, 18
- USB B Streaming = Track 1 to 32

The channel send default source is Insert Sends (no processing). You can change this to Direct Outputs using an option button if you wish to record a different point in the signal path.