

Configuration of the Remote Interface on Delta DSP Amplifiers

To configure the remote interface, from the home screen, press MENU, choose the INTERFACE Sub-Menu and press ENTER.



Use the encoder or BACK and NEXT keys to select External Interface and press ENTER.



Use the encoder or BACK and NEXT keys to choose the required interface and press ENTER.

For the purposes of working with the DeltaDirect app, the interface should be set to “Ethernet Only”. This will invoke a series of further options depending on the interface chosen – these are explained below:

Mode= Ethernet Only: The Ethernet control port on the rear panel is active. Selecting this choice will then ask for the following further information to be confirmed:

RS485 Relay: Set to OFF.

Remote ID Number: Set a device ID (still required even on Ethernet connections).

This must be unique to the connected unit – setting the same ID on multiple units may cause comms problems for all devices.

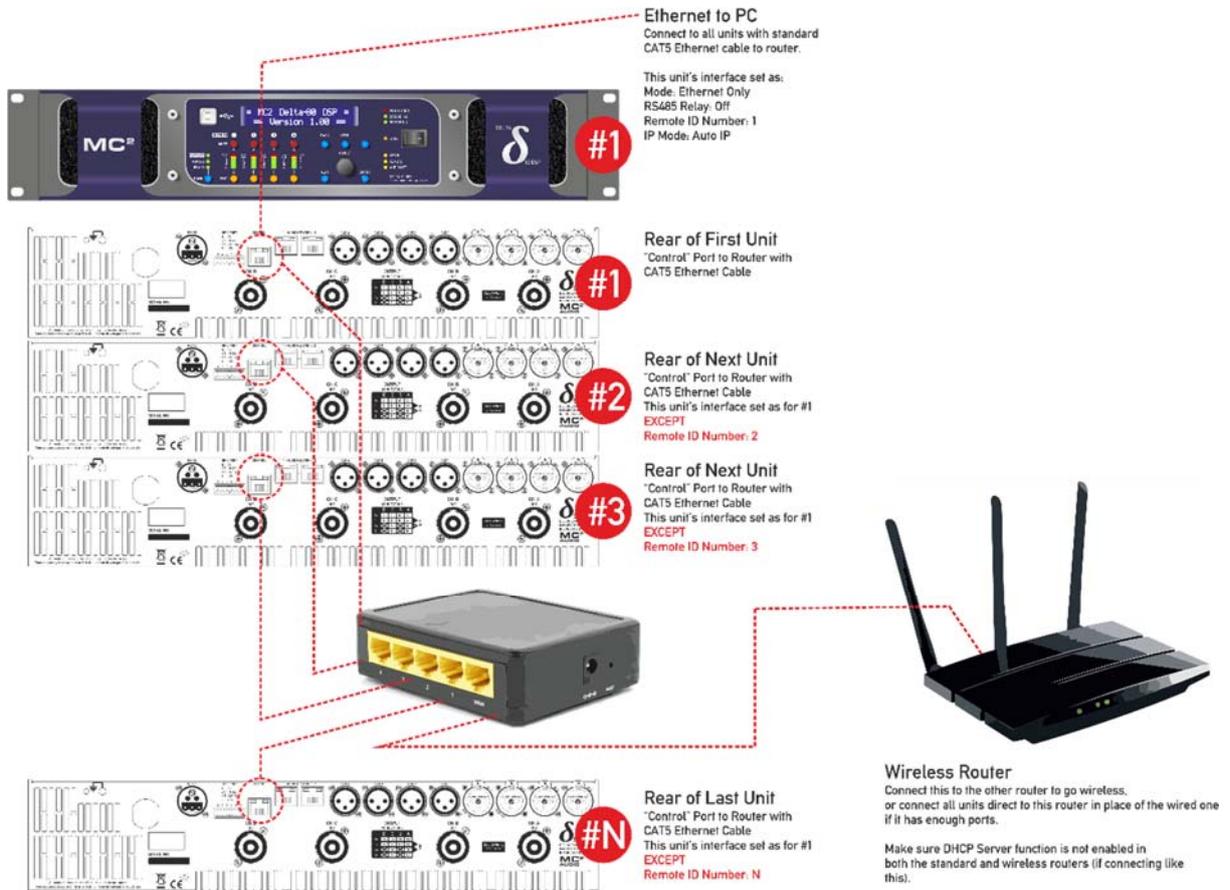
IP Mode: Choose either Static or Auto IP. Auto IP will generate an IP address based on unique hardware features such as MAC address. Choose Static if you need to select the IP address to lie within a specific range, for instance when working within a larger infrastructure.

Gateway: The gateway address is used for external access to the Internet and should be left at the default setting.

Subnet: The subnet mask is used to subdivide IP addresses into groups that allow further sub-groups addressing to be defined, so further extending the address range.

Leave at default 255.255.255.0 unless specifically required.

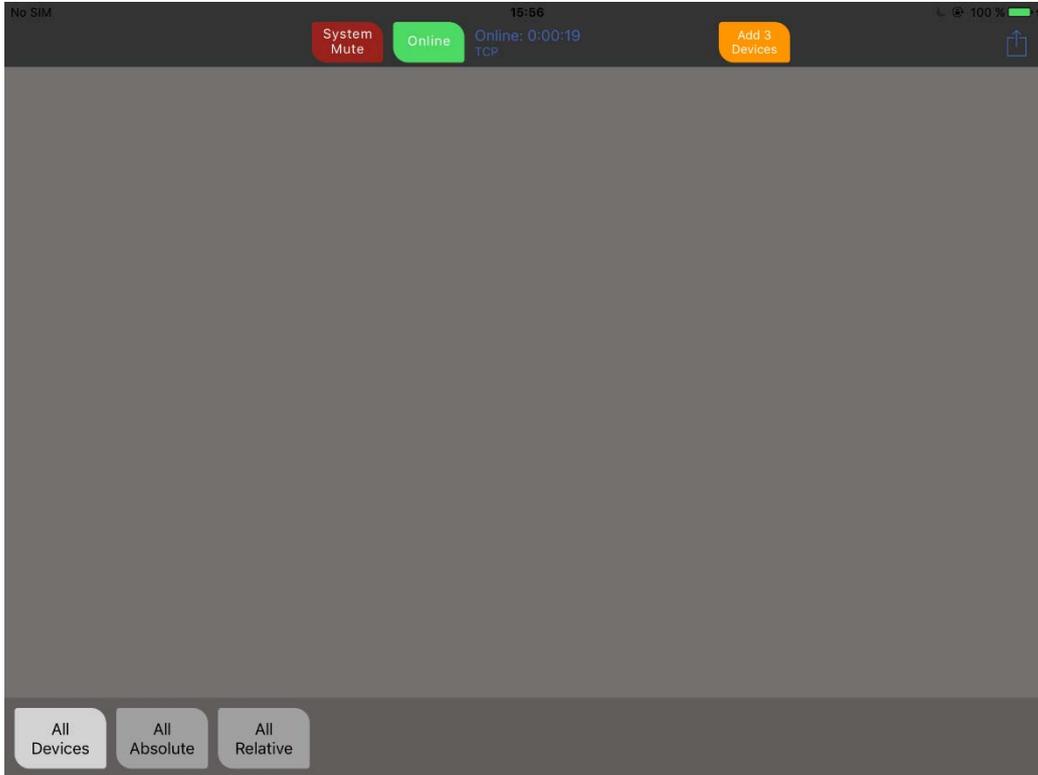
IP: The IP address specifies the amplifier’s unique identifier on the Ethernet network. It is used in conjunction with the amplifier’s Remote ID number to identify individual devices on the network. Make sure this is not set to the same value as any other devices or comms problems will occur.



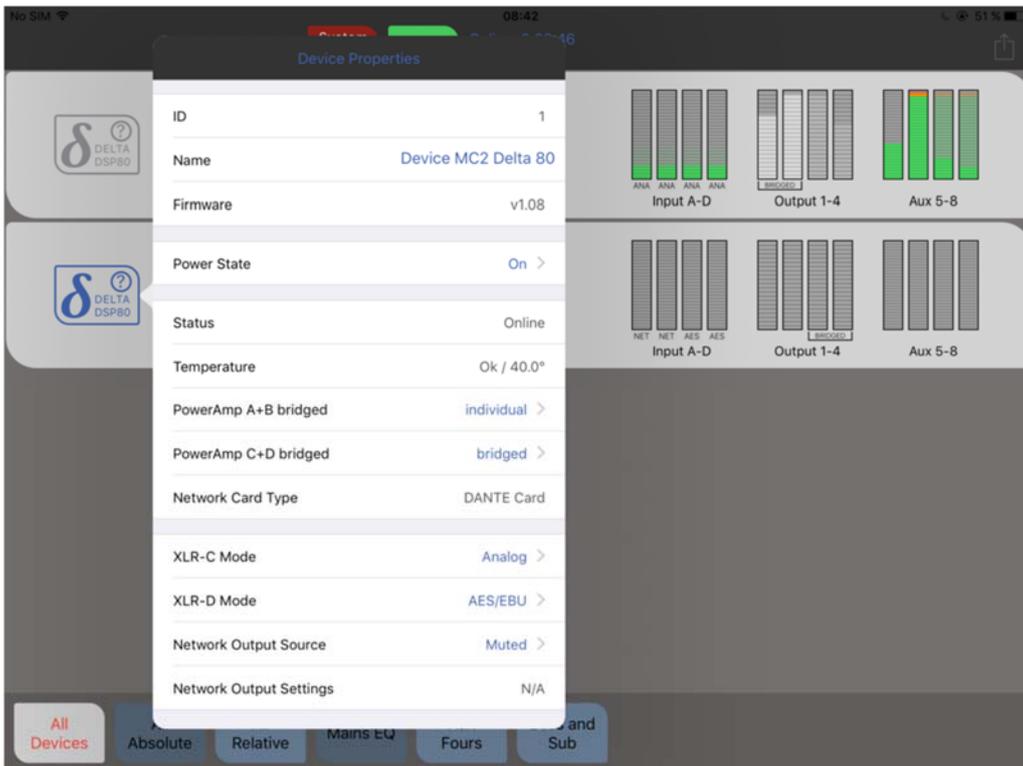
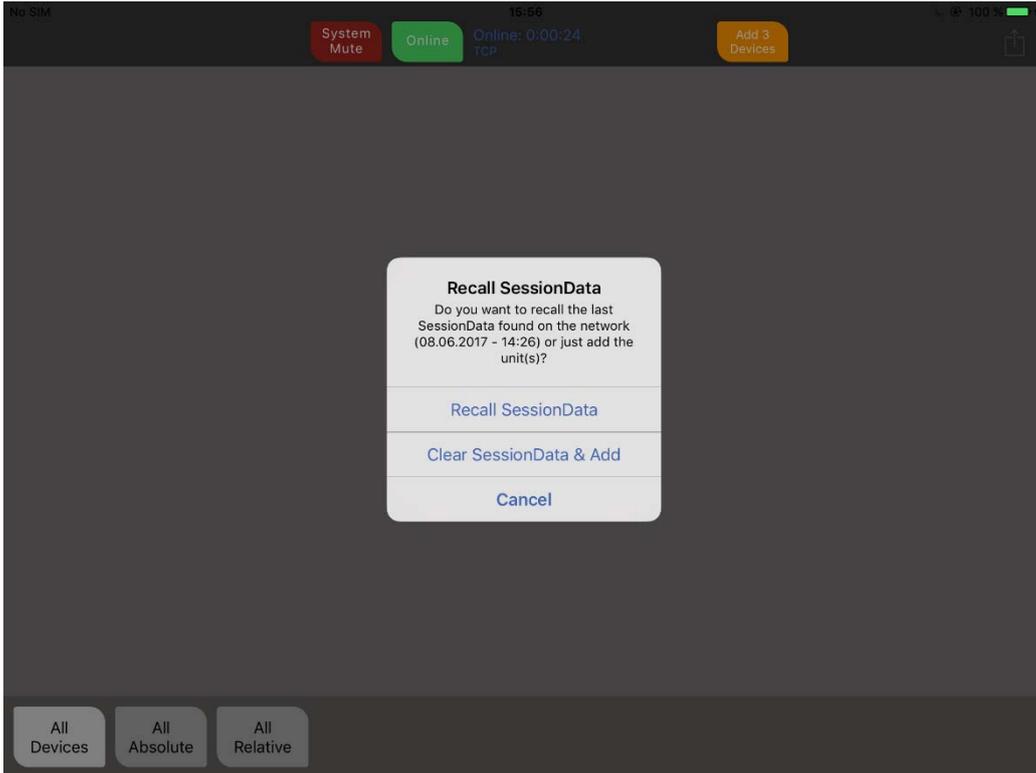
DeltaDirect connects to your WiFi network and to your Delta DSP amplifiers via a wireless router. All amplifiers must be connected via their Ethernet control port to the router, and we recommend that there is a DHCP Server on the system to issue IP addresses automatically (this is normally the case and most routers have this feature built-in - Ethernet **switches** may not so check the specs!)

Going On-Line and Initialising...

Once the app is opened and on-line (pressing the on-line button does this!) the amplifiers will be sending out identity messages and the app will recognise these and inform that an amp (or a number of amps) are available to connect. Press the orange button that appears to start the process.



If grouping has been used, or previously configured using DeltaCore or AudioCore, a dialogue will appear asking do you want to use the most recent grouping session configuration found with a time and date of this session's last set-up. If you are unsure about the grouping session data, choose "Clear SessionData and Add" to start without using grouping architecture.



Once connected, all the amps appear on the default "All Devices" view, and real time metering should start.

The amp's icon on the left hand side of the virtual panel will show blue if the amplifier is running, grey in standby and red if there is a fault or the amp goes off line (stops communicating). The meter group for the outputs will also switch to show meters in greyscale if the power amp is in standby.

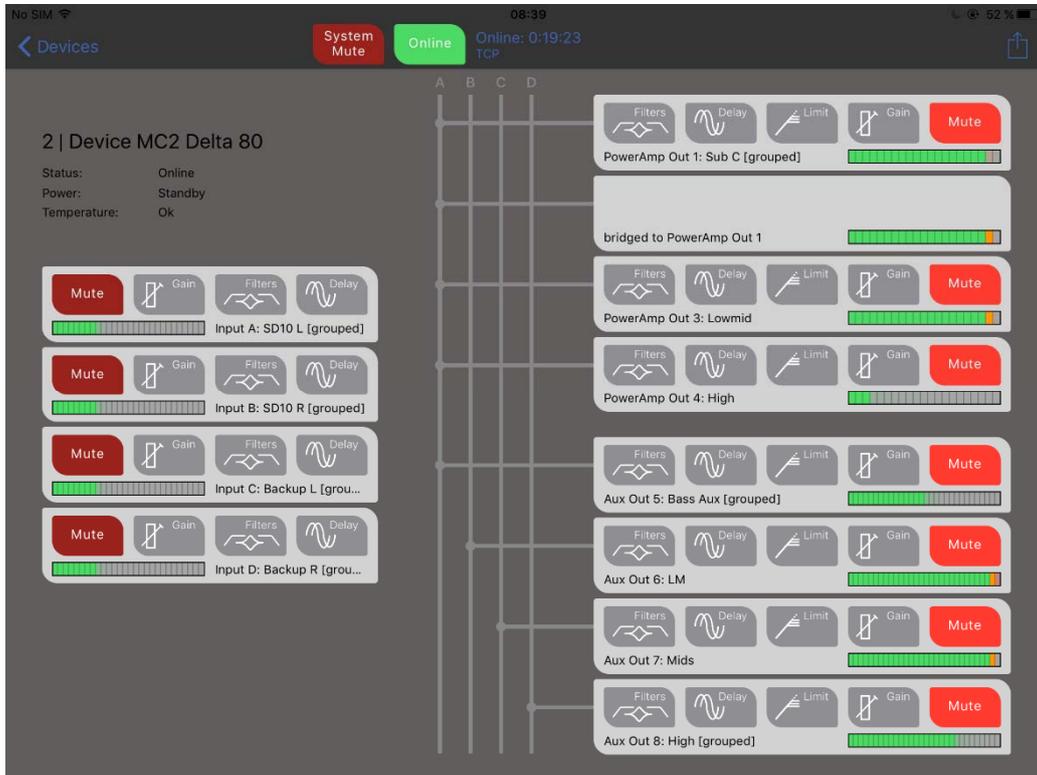
DSP continues to run and the aux outputs continue to function in standby, as does the network audio interface (if fitted).

The left hand icon on the amp's panel can be touched to reveal more info and adjust a selection of device properties including its name (touch to edit), standby switching, AES switching, bridging modes, and network output source selection (if audio network card is fitted).

The buttons along the bottom of the screen allow quick access to see all device, and all absolute and relative groups. If grouping session data has been retrieved from amplifiers on the network, then this area may populate with further buttons.

Editing an Individual Device

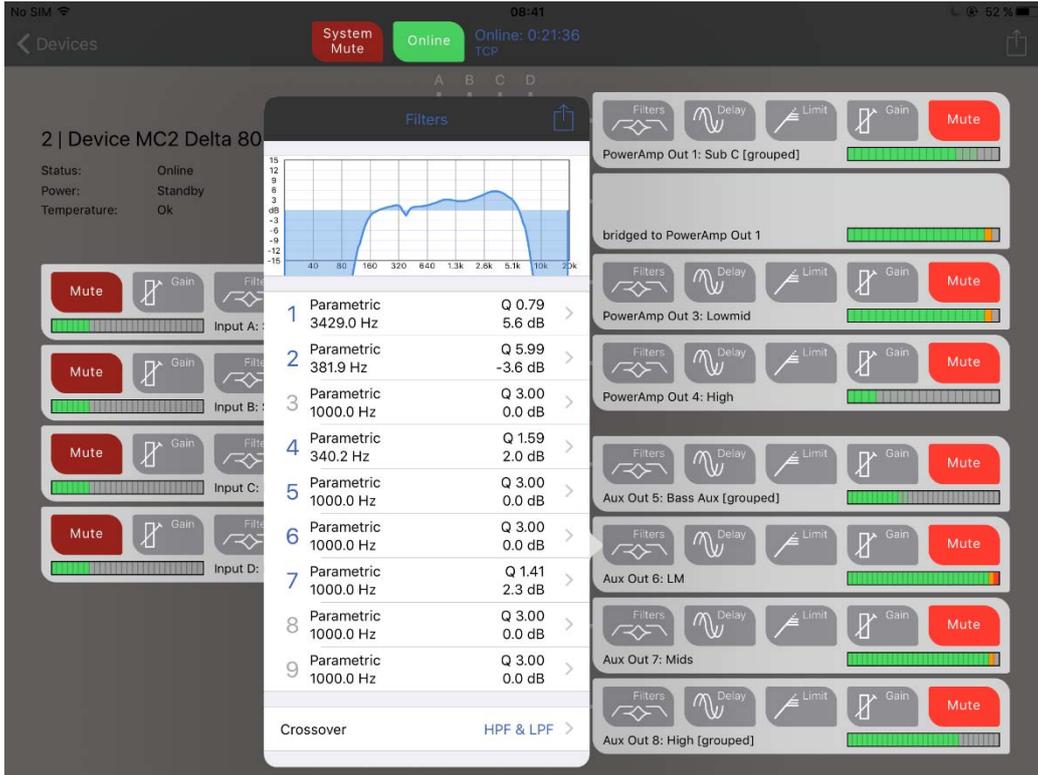
Touching an amplifier panel will open it up for editing:



Mute buttons directly mute outputs (if a meter is outlined in red it is muted elsewhere by a group mute).

The inputs are shown on the left of the screen, and the outputs are arranged in two banks of four on the right - main power amp DSP channels, then aux line level output DSP channels. Input channel sources are accessed through the Gain buttons, and output polarity is accessed through the output Gain buttons.

Delay and Limit buttons access input or output delays (polarity switching is additionally shown on output delays tabs), with Limit opening the RMS and Peak Limiters (plus auto time constants selection - across outputs or auxes in a bank of four). Filters will open a channel's EQ for editing...



Individual bands may be edited by touching them in the table and directly moving slides or typing in values. On outputs, the crossover filters are accessed at the bottom of the table. Bypassed bands numbers are grey (like 3, 8 and 9 above). Touch the options top right on the window to reset all bands and access copy and paste.

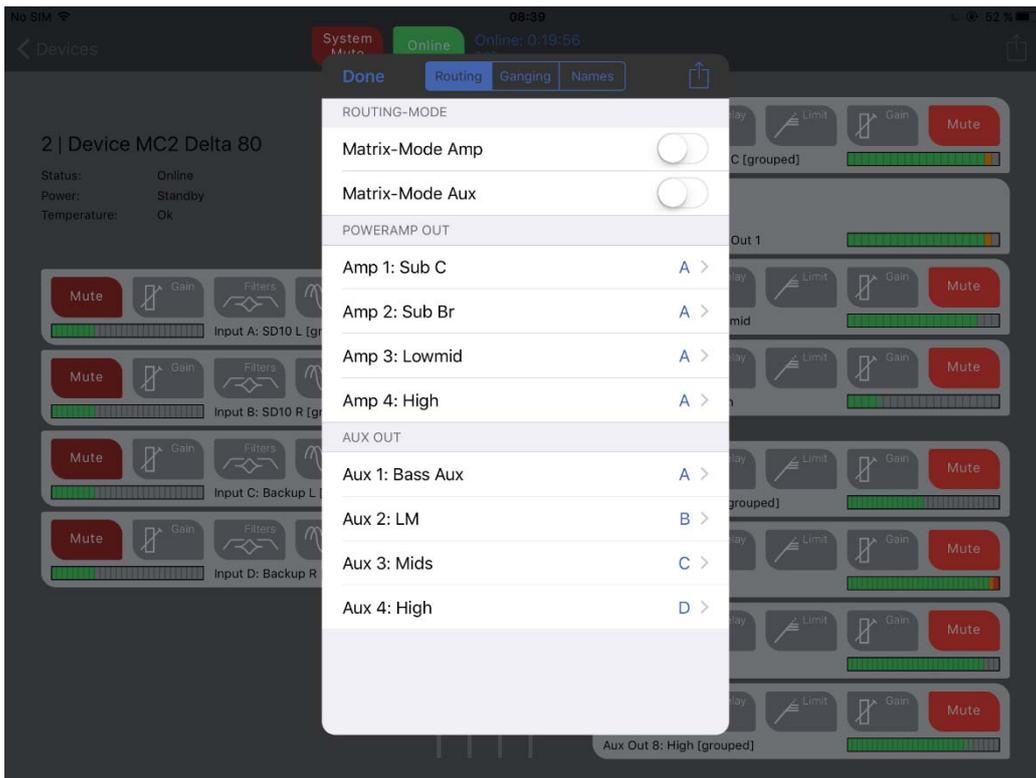


Touch the response graph to open full screen filter editing...



Drag filter nodes to adjust frequency and gain. Pinch to adjust filter 'Q'. Touch the filter information above the graph to edit directly with sliders and numeric input.

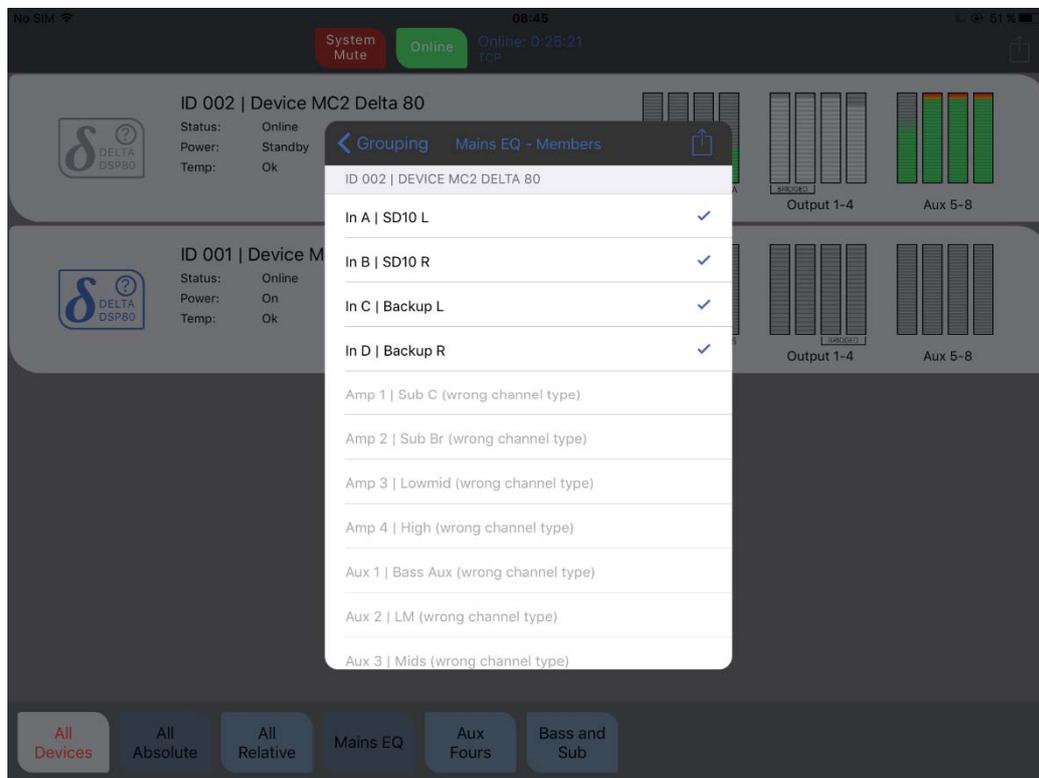
Touch options (top right) to reset a band, all bands and change what's shown - channel gain offset, Xovers included, phase response. Also, select Autolock to move in one axis only when sweeping curves - start moving vertically (adjusting a filter gain) and the frequency will lock and vice versa.



Touch routing matrix to access routing, channel ganging and channel naming. Full matrix mode can also be enabled independently for the power amplifier channels and aux channels.

Working With Groups

Advanced grouping architecture can be directly configured from the app, and grouping information is stored in the amplifiers so can be retrieved when reconnecting. Touch the options in the top right of the devices screen to select "Configure Grouping":



32 absolute groups and 32 relative groups are available. Absolute groups control multiple channels' EQ at once, and all will track identically. Input and output channels cannot be mixed in a group.

Relative groups control the gains, delays and limiters (outputs only) by applying relative offsets to all group members so they maintain their gain and delay relationships.

Limiter thresholds can only be adjusted down from their original settings (i.e. threshold lowered for more protection).

All channels available for adding (or removing) from a group will be listed – adding the first member will prompt for the group to be named. Channels can be added to multiple relative groups, but channels can only exist in a single absolute group as these control EQ functions.



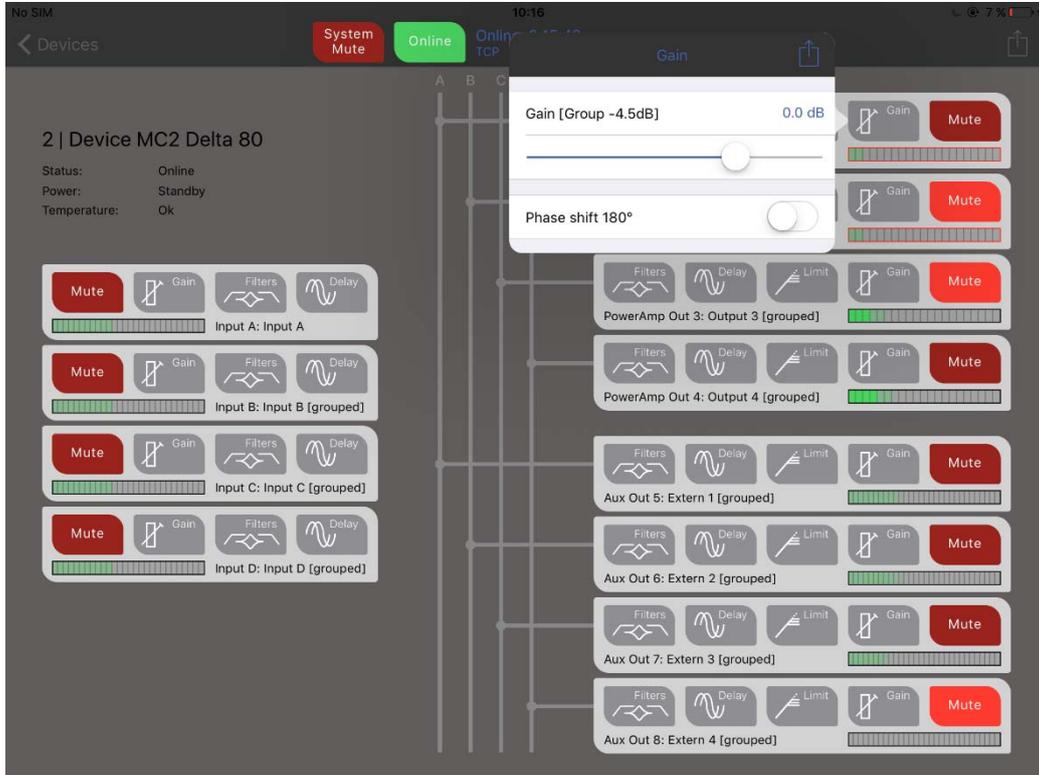
Groups appear below the devices on the main screen - Absolute groups have an "A" top left, relative groups have an "R".

Touch a group to see its members (dots above channels on devices that are part of the group). Controls for the group appear above the devices and can be directly edited. Muting a relative group will make the group button turn red. Meters outlined in red indicate that they are muted at an individual output level.

You can still access individual device channels when using grouping, but channels in absolute groups will not allow EQ to be edited – they will show the EQ and detail which group they are part of so it's quick to switch to that group and make changes as required.



Still in the device view, grouping is shown beside channel names, and channels in an absolute group cannot have EQ directly editing here. Channels in relative groups (a channel can be in multiple relative groups) can still have their gain, delay and if an output, limiter threshold changed, and any additional offset is shown in brackets beside the readout.



This value will be the aggregated value of all group memberships' offsets. Channel meters outlined in red show that this channel is muted by a group.