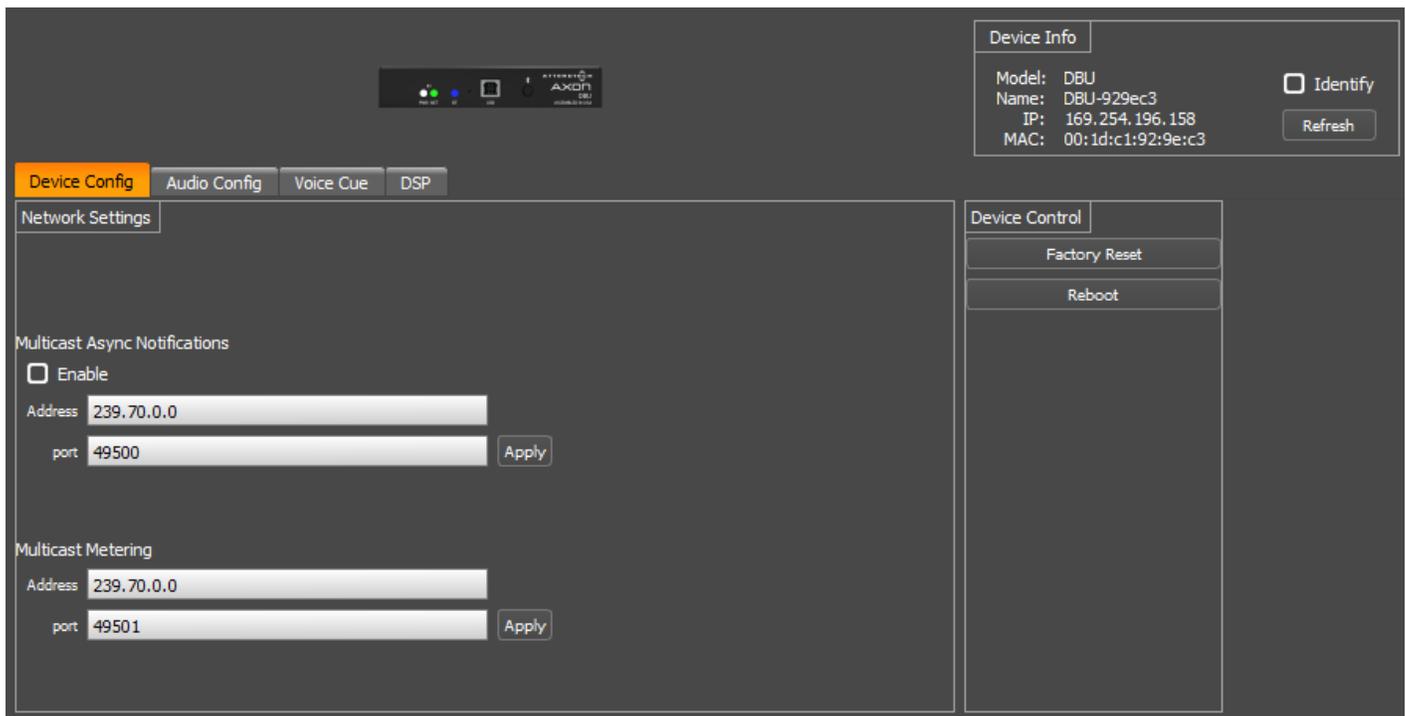




unIFY Control Panel

Axon DBU Configuration



The configuration for the Axon DBU is organized into four key sections:

- Device Config – Network multicast notifications and metering setup
- Audio Config – Bluetooth® and USB audio modes and settings
- Voice Cue – Audio prompts for Bluetooth® connections
- DSP – Mixer and audio level settings

Checking **Identify** in the “Device info” section will make the PWR and NET LED’s all blink white slowly to easily find the device when multiple units are in an installation. Unchecking this control will stop the ID mode.

Device Config

The screenshot shows the 'Device Config' web interface for an Axon DBU. At the top, there is a navigation bar with tabs for 'Device Config', 'Audio Config', 'Voice Cue', and 'DSP'. The 'Device Info' section on the right displays the following information: Model: DBU, Name: DBU-929ec3, IP: 169.254.196.158, and MAC: 00:1d:c1:92:9e:c3. There are 'Identify' and 'Refresh' buttons next to the device info. The 'Network Settings' section is active, showing 'Multicast Async Notifications' and 'Multicast Metering'. Both sections have an 'Enable' checkbox, an 'Address' field (set to 239.70.0.0), and a 'port' field (set to 49500 for Async Notifications and 49501 for Metering). There are 'Apply' buttons for each section. The 'Device Control' section on the right has 'Factory Reset' and 'Reboot' buttons.

Network Settings

Multicast Async Notifications

When commands are sent to set a parameter, the DBU response is sent back unicast to the initiating device. However, in addition to this response, the DBU can be configured so that such changes can also be sent to other devices on the network using a multicast message. The multicast async notification settings are used to configure this if this feature is needed and if so, what specific IP and port the messages are sent to.

- **Enable** - Turns Multicast Async Notifications On/Off
- **Address** - Allows user to set custom multicast IP
- **Port** - Allows user to select custom port

Multicast Metering

Allows configuration of the multicast address and port the DBU uses to transmit metering messages.

- **Address** - Allows user to set custom multicast IP
- **Port** - Allows user to select custom port

Device Control

Factory Reset

Allows users to return the connected unit to factory default settings.

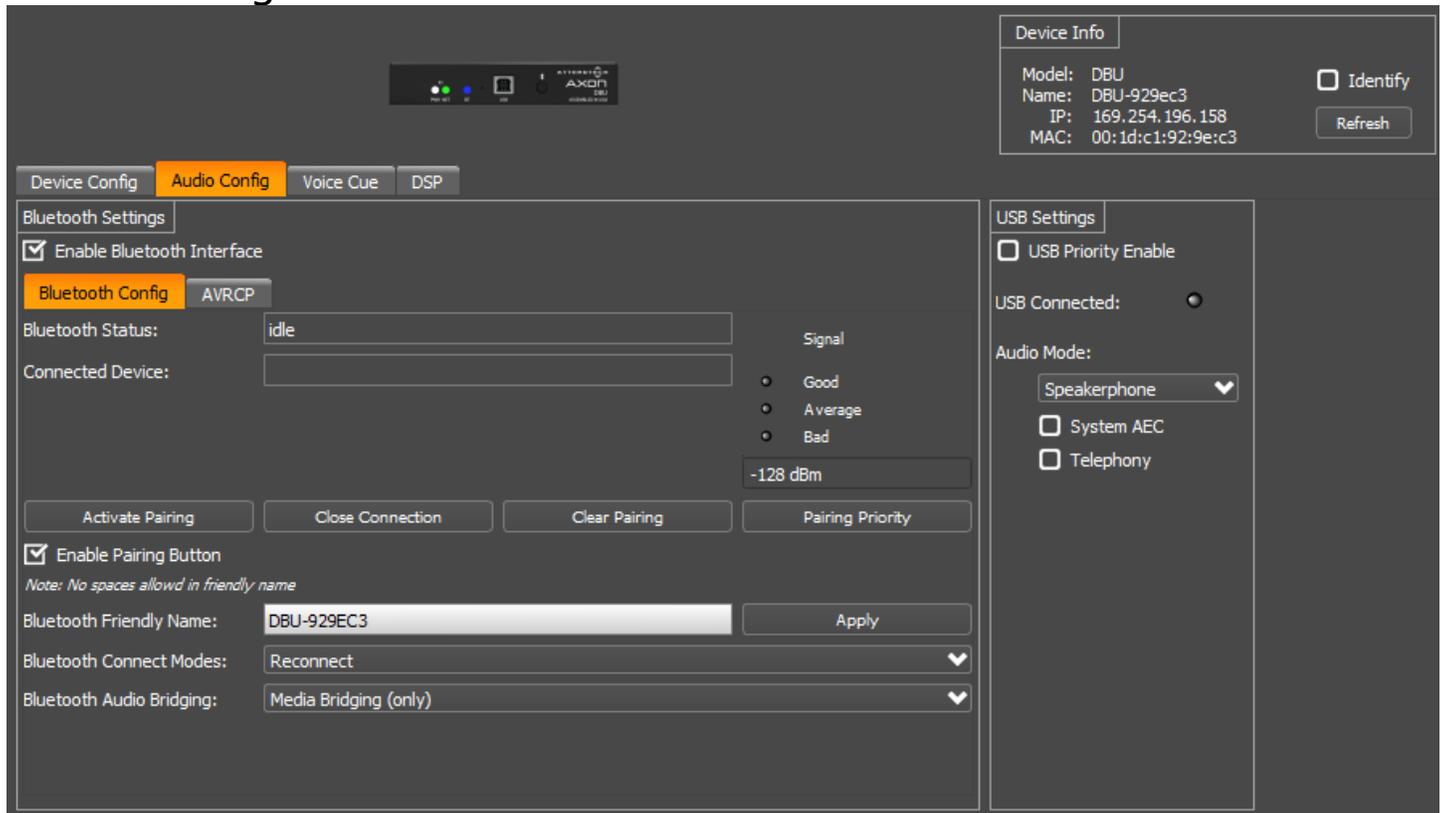
**Note: Use with care. This will reset the devices entire configuration back to factory defaults including the devices IP and if the IP is reset, this may result in unIFY being unable to communicate with the device (if this happens, change the PC's IP address to be in range of the device to re-establish communications),*

Reboot

Allows users to remotely trigger a reboot cycle of the connected unit.

**Note: This will cause unIFY to lose communication with the device and close the plugin. Once the device comes back online, the plugin will need to be re-opened*

Audio Config



Bluetooth® Settings

Enable Bluetooth® Interface

Turns the Bluetooth® interface On/Off. The BT light on the front of the unit will light green when enabled.

Bluetooth® Config Tab

Bluetooth® Status

This field reports the Bluetooth® interface status. Available statuses are:

- Idle
- Discoverable
- Connected
- Connected – AVRCP (for devices with control capability)

Connected Device

Displays the friendly name of the paired/connected device.

Signal Quality



This is a reporting status that gives the Bluetooth® signal strength which the DBU is receiving from the device which it is connected. The status is reporting live when the plug-in is open and has a Bluetooth® connection; reporting "Good", "Average", and "Poor".

Activate Pairing

This function activates pairing mode on the device similar to pressing the front panel button.

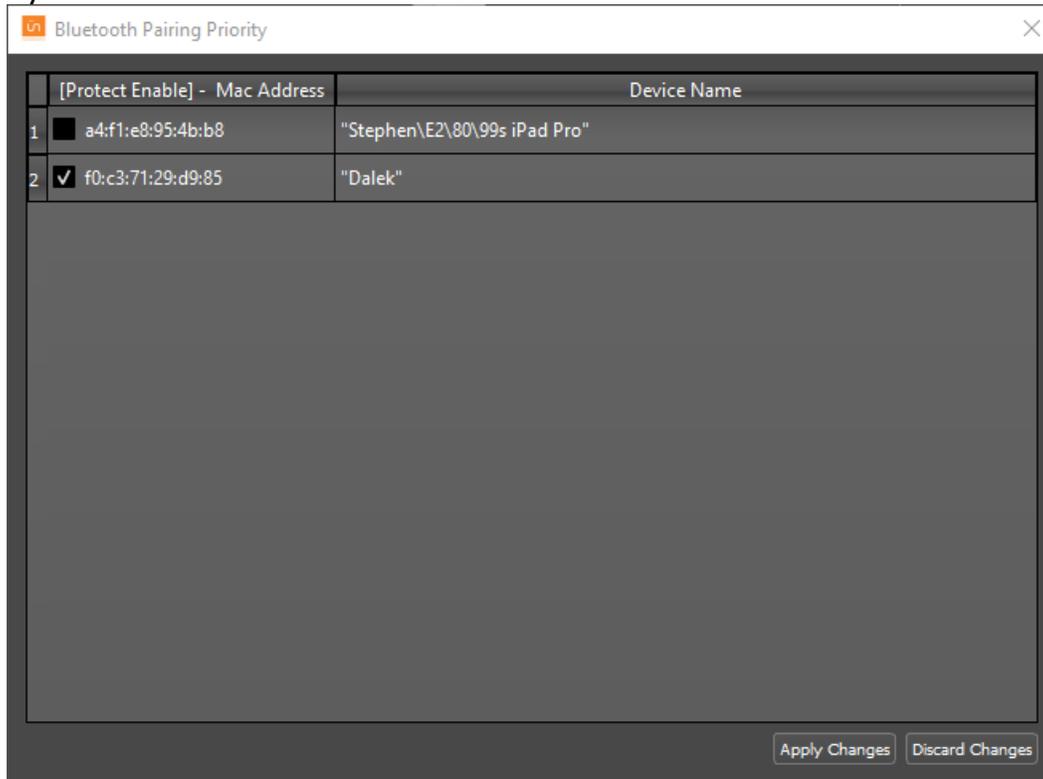
Close Active Connection

This function remotely closes the active Bluetooth® connection. Function is only available when the Bluetooth® status is "Connected".

Clear Pairing List

This function clears the actively paired devices in the pairing list. This is generally not required but may help in resolving any connectivity issues that users experience.

Pairing Priority



This allows the user to identify devices which have paired to the DBU and establish priority devices with the device. A priority paired device is one that will be retained in the DBU's pairing list and not dropped should the paired devices exceed the pairing list capacity; the oldest paired device that are not priority will be removed first.

Click Pairing Priority and select the checkbox for those devices that priority pairing is desired. Use "Apply Changes" to apply any changes to the device. Use "Discard Changes" to leave the Pairing Priority selection window without making any changes.

Enable Pairing Button

This checkbox allows the installer to lock out the front panel pairing functionality for applications that require restricted access to the audio system.

Bluetooth® Friendly Name

Allows user to configure an appropriate Bluetooth® friendly name that will be visible to users on their Bluetooth® equipped devices when attempting to connect. This allows for multiple DBU devices to be placed in close proximity and still provide clarity to users trying to connect to a particular DBU device and audio system.

Bluetooth® Connection Modes

Manual Mode

This usage model is intended for applications where casual users of a public venue (sports bar, spa, stadium luxury box, fitness center) have access to connect their devices to the audio system but headaches are minimized by eliminating automatic reconnect and pairing history features.

In this mode, users connect their Bluetooth® audio enabled smart device by simply pressing the front panel PAIR button. The Bluetooth® status LED will begin flashing blue to indicate that the DBU is now visible to other Bluetooth® devices and accepting pairings. This pairing period lasts 60 seconds after which the status LED will stop flashing and turn off and the DBU will disable its Bluetooth® interface.

If a successful pairing is made during the pairing period, the status LED will stop flashing and turn constantly on.

To disconnect a Bluetooth® device from the DBU, press and hold the PAIR button for 5 seconds and then release it. The status LED will turn off, and the connection will be reset. Another device may now be connected by repeating the pairing process.

Reconnect Mode

In this mode, a previously paired device will be permitted to reconnect when in range of the DBU without requiring the front panel button to be pressed but is limited to a single device and is intended for restricted/personal use.

Exclusive Mode

In this mode, the exclusively paired device will be permitted to reconnect when in range of the DBU without requiring the front panel button to be pressed but is limited to a single device and is intended for restricted/personal use.

Any other pairing/connect requests beyond the first paired device is rejected.

**Note: This mode applies to both A2DP and HFP profiles.*

Bluetooth® Audio Bridging

Media Bridging (only)

In this mode (A2DP), users may stream audio from media applications on the paired device. The user is protected from errant streaming of phone audio over Bluetooth® link.

Call Bridging (only)

In this mode (HFP), users may stream incoming/outgoing calls from the paired device using the system integrated inputs and outputs. The user is protected from errant streaming of media audio over Bluetooth® link.

Call & Media Bridging

In this mode, both profiles are available giving users the ability to control access of content (call/media) to the system from the paired device.

AVRCP



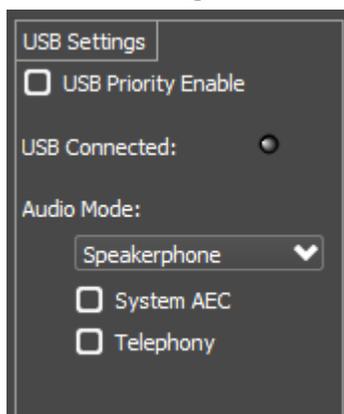
Many installed AV Systems in both residential and commercial markets feature control products with customizable user interfaces. With a connected Bluetooth® audio device as a source, it is desirable to have access to the device information and source content (artist/album) for use on the control system UI. Additionally, the end user of the system may control the source from any control panel that has this is useful if the device is left somewhere to charge and is out of reach to simply change songs or stop the audio playback.

Control access will be available for the following AVRCP pass through commands:

- Play
- Pause
- Stop
- Next Track
- Previous Track
- Volume Up
- Volume Down

**Note: Some devices, such as iOS devices do not support AVRCP pass through volume control. In order to provide broad compatibility it is recommended that volume control be implemented by adjusting the DBU Bluetooth® hardware rather than the remotely connected device.*

USB Settings



USB Priority Enable

If enabled, the Bluetooth® interface will be muted when a USB connection is detected. When USB is disconnected, the Bluetooth® interface will be unmuted.

USB Connected

Indicates if an active USB connection is present

Audio Mode

2x2 Soundcard

Allows connected PC to detect DBU as a standard 2x2 soundcard

Speakerphone

Allows connected PC to detect DBU as a speakerphone device

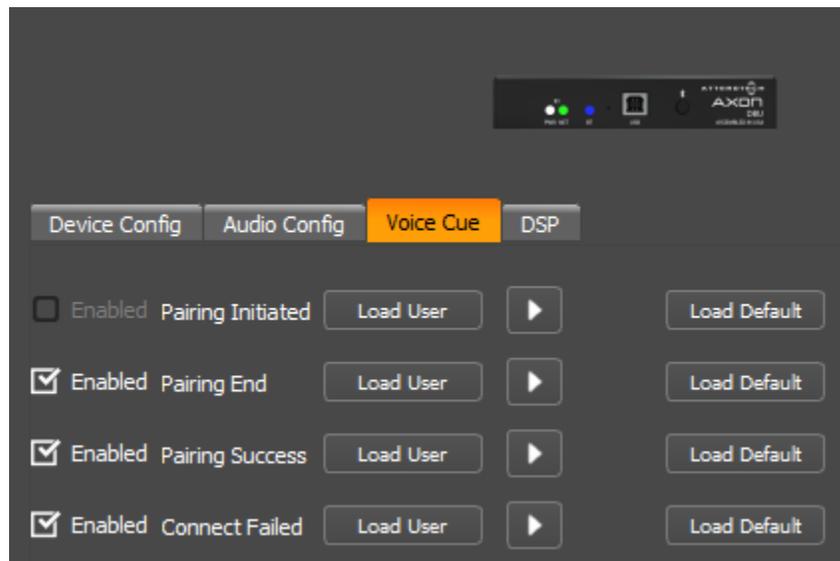
System AEC

The user should check System AEC if the DBU is used with external DSP processing that provides acoustic echo cancellation. When checked, the DBU advertises itself to the host PC as an echo cancelling speakerphone.

Telephony

The user should check this to enable HID Telephony controls. Some soft codec applications support external controls that are needed for implementing mic mute and call volume controls.

Voice Cue



The Voice Cue section allows users to enable preset and/or customize audio prompts for Bluetooth® pairing status feedback.

Enabled

Turns On/Off the desired Pairing/Connection message.

Load User

Allows the user to select a custom pre-recorded message for the corresponding message type.

Files must be wav file format in mono 16 bit/16kHz.

The following length limitations apply for each message type:

- **Pairing Initiated** - 5 seconds
- **Pairing End** - 3 seconds
- **Pairing Success** - 3 seconds
- **Connect Failed** - 10 seconds

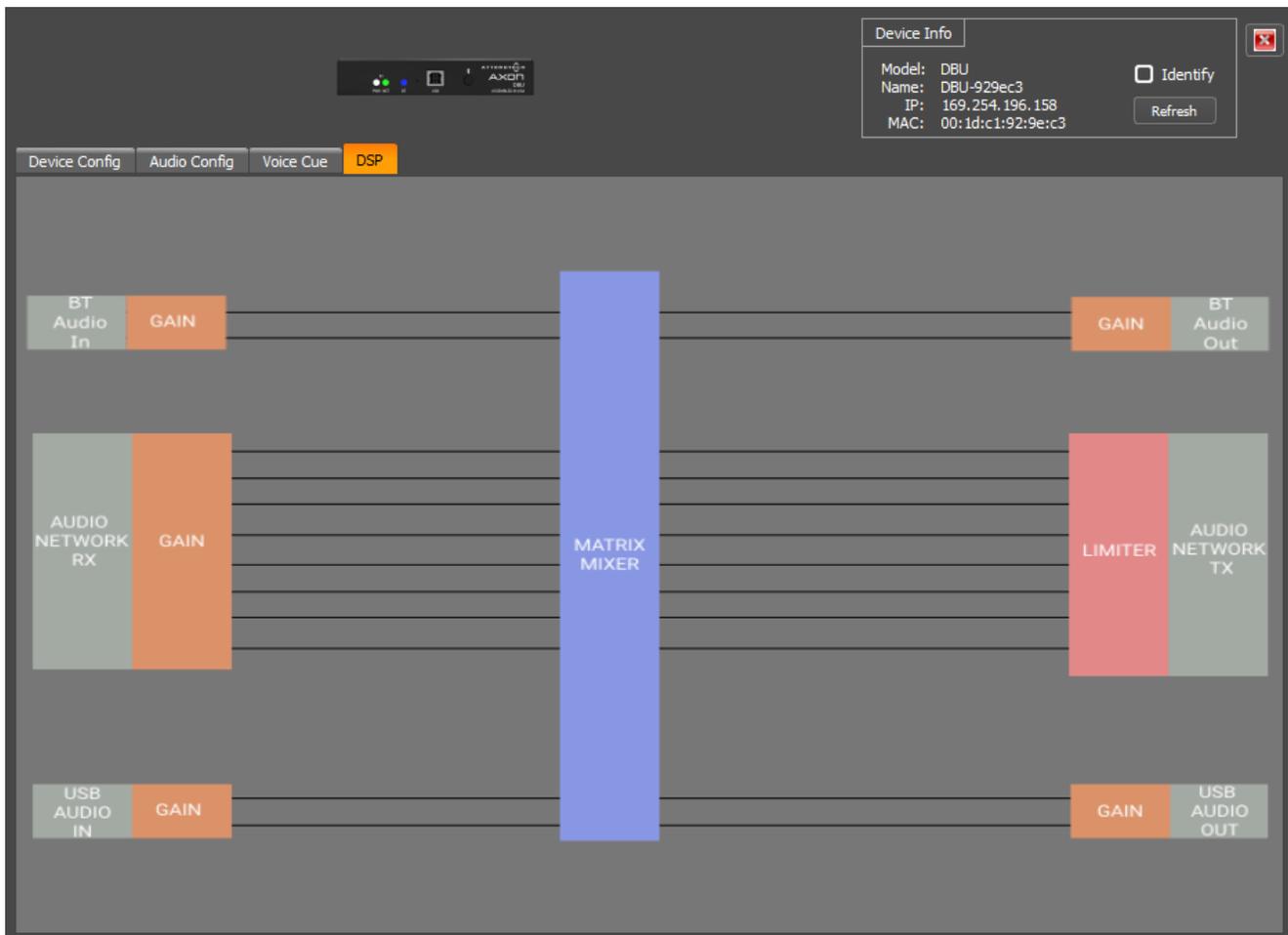


Allows the user to preview the currently selected Voice Cue message

Load Default

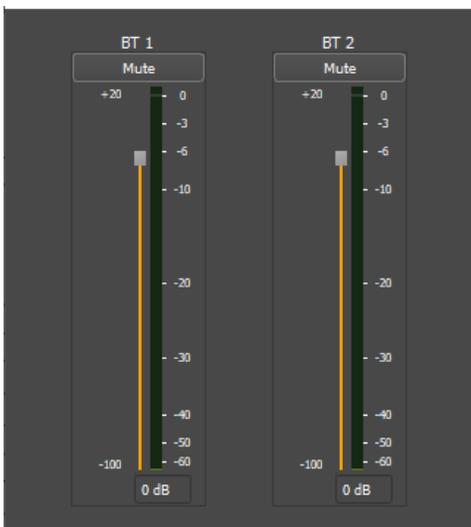
Restores the factory recorded message to the corresponding slot.

DSP



The DSP section allows configuration of mixer and audio level settings through the device.

BT Audio In Gain



Mute

Mutes the audio on the corresponding input

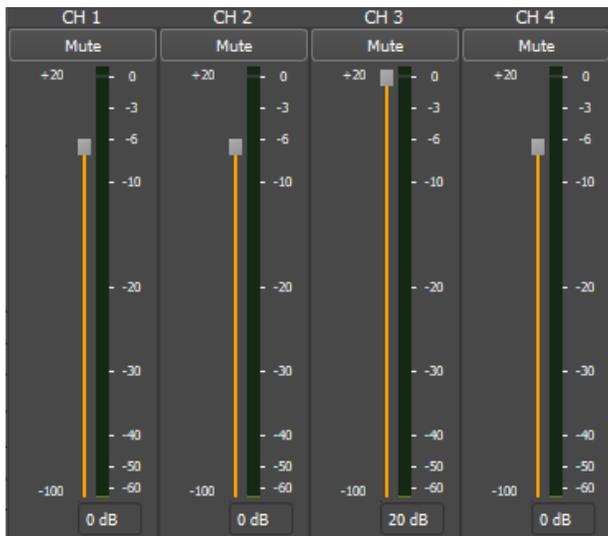
Digital Gain

Apply a digital gain to the input signal as it passes through the DSP. Value applied can be between -100dB and +20dB.

Digital Gain Meter

Meter showing current level post gain control level

Audio Network RX Gain



Mute

Mutes the audio on the corresponding input

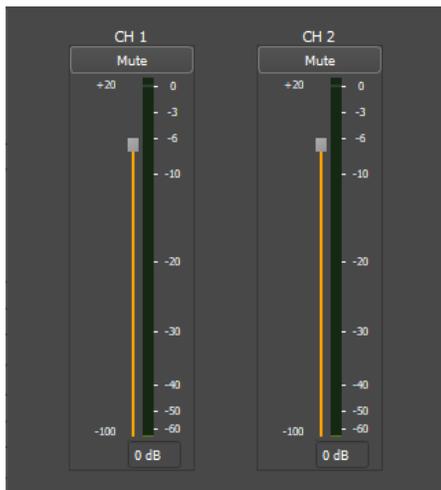
Digital Gain

Apply a digital gain to the input signal as it passes through the DSP. Value applied can be between -100dB and +20dB.

Digital Gain Meter

Meter showing current level post gain control level

USB Audio In Gain



Mute

Mutes the audio on the corresponding input

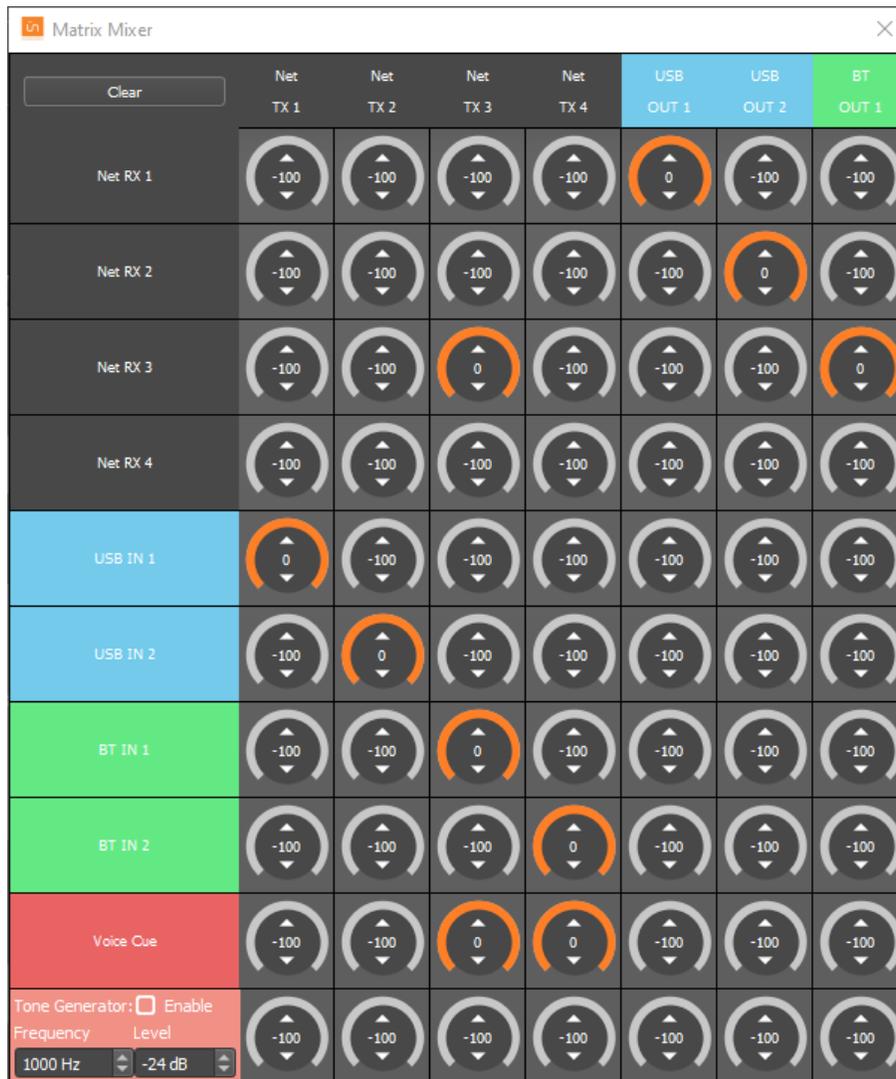
Digital Gain

Apply a digital gain to the input signal as it passes through the DSP. Value applied can be between -100dB and +20dB.

Digital Gain Meter

Meter showing current level post gain control level

Matrix Mixer



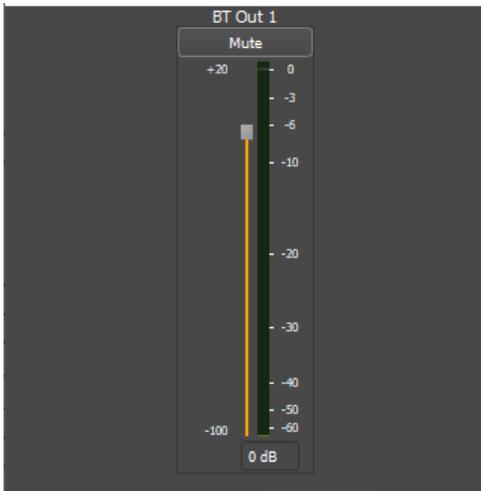
The mixer allows any input signal to be routed to any output signal with each cross point able to accept a value from -100dB to 0dB. Each cross point will show an orange level indication as the level is increased from -100.

There are several methods to change a cross point value:

1. **Mouse scroll wheel** - Place the mouse cursor over a cell and then using the scroll wheel to adjust the value up or down.
2. **Up/Down Arrow keys** - Left-click on a cross point to show a text entry cursor then use the up or down arrow keys to either increment or decrement the value by 1 respectively.
3. **Page Up/Down keys** - Left-click on a cross point to show a text entry cursor then use the "Page Up" or "Page Down" keys to either increment or decrement the value by 1 respectively.
4. **Keyboard entry** - Left-click on a cross point to show a text entry cursor then type the new value.

There is also a built in configurable tone generator for configuration and testing purposes.

BT Audio Out



Mute

Mutes the audio on the corresponding output

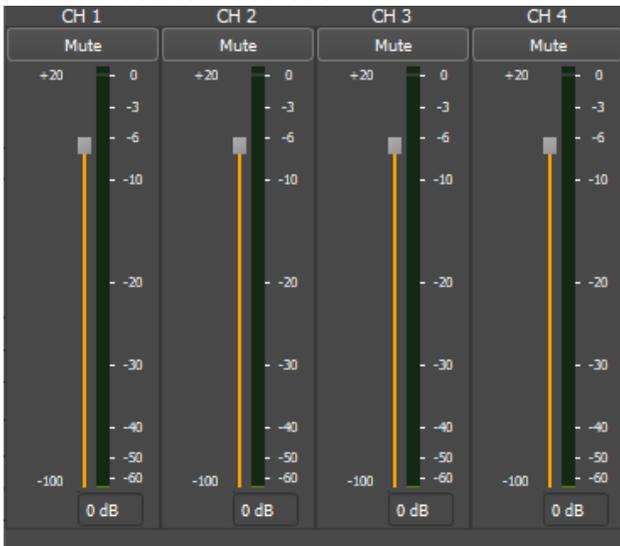
Digital Gain

Apply a digital gain to the output signal as it passes from the DSP. Value applied can be between -100dB and +20dB.

Digital Gain Meter

Meter showing current level post gain control level

Audio Network TX



Mute

Mutes the audio on the corresponding output

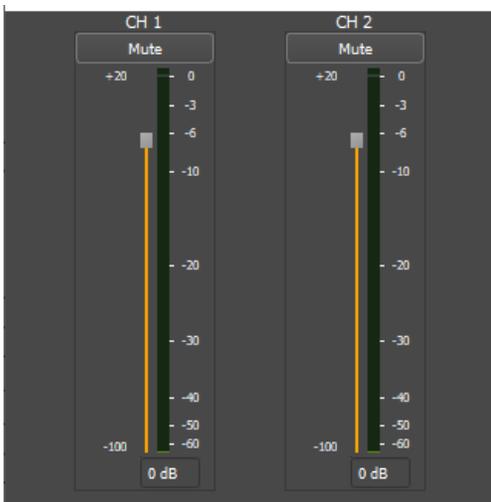
Digital Gain

Apply a digital gain to the output signal as it passes from the DSP. Value applied can be between -100dB and +20dB.

Digital Gain Meter

Meter showing current level post gain control level

USB Audio Out



Mute

Mutes the audio on the corresponding output

Digital Gain

Apply a digital gain to the output signal as it passes from the DSP. Value applied can be between -100dB and +20dB.

Digital Gain Meter

Meter showing current level post gain control level