

# HELIX CONSOLE MANUAL

Version 1.1



Logitek Electronic Systems, Inc.  
[support@logitekaudio.com](mailto:support@logitekaudio.com)



Logitek Electronic Systems, Inc.  
 5622 Edgemoor Drive  
 Houston, Texas 77081  
 USA

**Tel** 877-231-5870  
 +1-713-664-4470 (outside U.S. and Canada)  
**Fax** +1-713-664-4479

**Email** support@logitekaudio.com  
**Web** www.logitekaudio.com

Contents © 2017 Logitek Electronic Systems, Inc. All rights reserved.

#### Notice

Every effort has been made to supply complete and accurate information. However, Logitek Electronic Systems, Inc. assumes no responsibility for its use, nor any infringement of patents or other rights of third parties, which would result.

Worldwide rights reserved. Except for your own personal use, no part of this publication may be stored in a retrieval system, transmitted or reproduced in any way, including but not limited to photocopy, photograph, magnetic or other record, without the prior agreement and written permission of Logitek Electronic Systems, Inc.

Logitek, JetStream, and Helix Console are trademarks of Logitek Electronic Systems, Inc.

All other trademarks acknowledged.

All specifications are subject to change without notice.

## Document History

Month/Year	Author	Version	Notes
October 2017	John Davis	0.5	Preliminary Release
October 2017	John Davis	1.0	First Release with shipping consoles
November 2017	John Davis	1.1	Corrects errors in hotkey device numbers, adds HLX console definition information.

## Contents

Chapter 1 Introduction .....	5
About This Manual.....	5
Intended Audience.....	5
Helix Console Models.....	6
Helix Radio .....	6
Helix TV .....	7
Helix Studio .....	8
Logitek JetStream Audio Routers.....	8
Helix Module Types.....	8
Chapter 2 Unpacking.....	10
Parts List.....	10
Helix Radio .....	10
Helix TV .....	11
Unpacking .....	11
Contacting Logitek .....	11
Chapter 3 Physical Installation.....	13
Power Supply Unit.....	13
JetStream COM connection .....	13
Connecting The COM Port Data and Power To The Console .....	14
GPIO Connections .....	16
Helix Headphone Jack .....	17
Chapter 4 Configuration.....	18
IMPORTANT – YOU MUST DEFINE THE CONSOLE IN THE CONFIG .....	19
Softkey Configuration .....	20
Softkey Colors .....	23
Softkey Labeling .....	23
Glow Strip.....	24
Profanity Delay (Helix Radio Only).....	25
Helix Radio Monitor Presets .....	26
Helix Radio Guest/Studio Presets .....	26
Helix TV Monitor Preset Buttons .....	27

Helix TV Studio Preset Buttons .....	27
Helix Radio Talkback Microphone.....	27
Chapter 5 Helix Radio Fader Module Operation.....	29
Bus and Mode Assignment .....	29
Source Selection.....	30
Fader Operation.....	30
Channel On/Off.....	31
Cue Bus.....	31
Talkback Function .....	31
Pan Control .....	32
Trim Control .....	32
Pre-Fader Meter.....	32
Equalization.....	33
Dynamics.....	34
Chapter 6 Helix Radio Monitor Module Operation .....	36
Monitor Source Selection .....	37
Monitor Level Control.....	37
Monitor Mute Button .....	37
Monitor Mono Button .....	37
Headphone Source Selection .....	38
Headphone Level Control .....	38
Headphone Split Button.....	38
Headphone Follow Mon Button .....	38
Headphone/Monitor Quick Route Buttons .....	38
Guest/Studio Source Selection .....	38
Guest/Studio Level Control.....	38
Guest/Studio Quick Route Buttons.....	38
Guest/Studio Follow Mon Button.....	38
Guest/Studio TB Button .....	38
Profanity Delay Controls .....	39
Softkeys.....	40
Chapter 7 Helix TV Fader Module Operation.....	41
Bus and Mode Assignment .....	41

Source Selection.....	43
Fader Operation.....	43
Channel On/Off.....	43
Cue Bus.....	43
Pan Control .....	44
Frame Delay .....	45
Trim Control .....	46
Equalization.....	47
Dynamics.....	48
Aux Assignment.....	50
Chapter 8 Helix TV Monitor Module Operation .....	51
Submaster Levels .....	51
Submaster On/Off.....	51
Submaster Assign To Master, EQ, Dynamics .....	52
Master 1 Level, EQ, Dynamics.....	53
Master 2 Level.....	54
Studio Level.....	54
Monitor Level.....	54
Cue Level.....	54
Softkeys.....	54
Chapter 9 Maintenance .....	55
Opening The Console .....	55
How the Modules Connect .....	55
Replacing The Mini Computer .....	56
Setting The Module Type.....	57
Fader Replacement .....	58
UNAVAILABLE Error Message .....	58
Chapter 10 Two Year Limited Warranty .....	59

## Chapter 1 Introduction

On behalf of all of us at Logitek, we'd like to thank you for purchasing the Helix Console. The Helix is the first console we've created using design teams on multiple continents.



*Some of the folks who helped bring you this console.*

The hardware and firmware was designed and assembled in Houston, Texas by Logitek Electronic Systems. The graphical touchscreen interface was programmed in Sydney, Australia by Logitek Australia, a division of On Air Solutions.

### About This Manual

This manual explains how to install and operate a Helix Console.

### Intended Audience

Engineers and System Integrators should review the installation, configuration, operations, and maintenance sections for their console model to be aware of how to connect and operate the equipment.

Engineers and System Integrators should also review the manual for the JetStream AoIP Router that was purchased with the console (either **JetStream Mini** or **JetStream Plus**), and the **JetSet** configuration manual to understand how to set up the audio inputs and outputs. If advanced functions such as softkey

programming is desired, review the **Command Builder** scripting language manual. Manuals are available at <http://logitekaudio.com/support>

The Content Creation staff (radio on air talent, television audio operators, etc.) should review the fader and monitor operations sections in this manual for the console model installed at their station.

### Helix Console Models

There are two physical console models and one virtual console that mimics the physical ones.

The fader module is physically identical for both radio and television; the fader module is programmed to act as either a radio or television fader. The process of setting this up is explained in the **Maintenance** chapter.

**Helix Radio** and **Helix TV** monitor modules have different physical controls and thus have different hardware.

All Helix consoles connect to the Logitek JetStream AoIP router system. Helix Radio consoles can be used with either JetStream Mini or JetStream Plus routers. Due to the complexity of the TV console, the Helix TV may only be connected to a JetStream Plus.

### Helix Radio



With 7" touchscreens integrated in each module, the Helix Radio ranges from 6 to 24 motorized faders in increments of 6. EQ and dynamics controls are available at each fader, along with pan, trim, and mode settings. There is one stereo program bus and eight stereo aux buses. In addition to those buses on the

console, the JetStream audio router provides 24 mix minus buses to provide clean feeds to remote sources. Profanity delay controls on the monitor module operate the JetStream's built-in profanity delay.

#### Helix TV



Featuring 7" vivid touchscreens on each module, **Helix TV** offers 6 to 36 motorized faders, two master buses (Master 1 is capable of either 5.1 or stereo, Master 2 is stereo), 4 stereo aux buses, and 4 stereo submasters. In addition, the JetStream Plus offers 24 mix minus buses for clean feeds to your remote sources. There's EQ, dynamics, pan, trim, mode controls, and frame delay available at every fader. Popular television automation and workflow systems such as Ross Overdrive, Sony ELC, and Vizrt Opus can drive the motorized faders from the director position.

## Helix Studio



Optimized for the Microsoft Surface Studio, **Helix Studio** is a virtual console that mimics either the **Helix Radio** or **Helix TV**. Helix Studio may be operated either in place of the physical console or simultaneously.

When you move a fader on the Helix Studio screen, the motorized fader on the console will follow, and vice versa.

### Logitech JetStream Audio Routers

The Helix Console is a controller for the JetStream AoIP audio router.

**Helix Radio** consoles will connect to either the JetStream Mini or JetStream Plus.

**Helix TV** consoles may only connect to a JetStream Plus. Note that some TV installations may use a networked JetStream Mini for audio I/O, but the console can only connect to a JetStream Plus, as only the Plus has sufficient DSP processing power to handle the TV mixer architecture.

Category 5 or better networking cable with standard RJ-45 connectors are used for data connection between the JetStream and Helix. However, the data connection on that cable is a combination of RS-485 (serial) and AES audio (for the cue speaker). Therefore, the data cable between the Helix and the JetStream should not go through an Ethernet switch.

### Helix Module Types

Each Helix Console will have at least one HLX-FADER module and will have one HLX-MON-R or HLX-MON-T (for radio or TV, respectively) module. They connect via RJ-45 to the card mounted in the console's tray.

The fader modules receive their address from the tray card. When you plug the fader into the jack labeled Fader 1, the fader is told by the tray that it is controlling faders 1-6. Tray card jack 2 controls faders 6-12, tray card jack 3 controls faders 13-18, tray card jack 4 controls faders 19-24, and so on.

Because the same fader module is used in both **Helix Radio** and **Helix TV** consoles but each has different functions and mixing architectures, the mini computer built into the module is set up at the factory for its correct function. If this computer needs to be replaced, you will need to tap the appropriate box on the screen to set it up the first time it boots. This process is explained in the ***Maintenance*** chapter.

## Chapter 2 Unpacking



Let's get to the fun stuff and open the box!

### Parts List

You will receive one console and one power supply. There will be one CAT-5 cable supplied to connect the console to the power supply. North American customers will receive a power cord; we omit the power cord when shipping to 220V countries, but your local dealer will usually supply one.

### Helix Radio

Helix Radio consoles use a Helix Power Supply. This wall-mountable supply is generally shipped in the same box with the console.



We'll discuss the connections in the next chapter.

Note that the silkscreen on the chassis may say ROC Power Supply unit we use up the existing inventory; the Helix Radio uses the same power supply of its predecessor, the ROC II.

## Helix TV

Helix TV consoles use the MOSAIC-PS. This is a 1RU rack mountable power supply with redundant supplies and redundant mains. The power supply will ship in a separate box from the console.



1 A front and rear view of the power supply used by the Helix TV.

We'll discuss the connections in the next chapter.

## Unpacking

Please do not discard your packaging right away. If a shipping damage claim needs to be filed, the shipper may need to inspect the packaging, so please hang onto everything until after it's all hooked up and operational.

Carefully remove the console and power supplies from the packaging.

We have placed protective film on the touchscreens and some painters tape on the wrist rest to avoid scuffs in packing; you will want to remove this before use.

The console is designed to sit on a tabletop/countertop. We have installed some rubber pads on the bottom of the tray to keep the tray from sliding on or scratching up the table. It's best to pick the console up to move it as opposed to pushing it across the counter.

## Contacting Logitek

If at any point along the way you need help, we're here for you.

If you purchased your console from an authorized dealer, contact them first for support in your time zone and language. They can contact the factory on your behalf.

If you purchased direct from Logitek, here's who to contact:

### **Logitek North America (Headquarters)**

Toll Free (US & Canada): 877-231-5870

Telephone: 713-664-4470

Email: [support@logitekaudio.com](mailto:support@logitekaudio.com)

### **Logitek Australia**

Telephone: +61 2 8882 7777

Email: [support@logitek.com.au](mailto:support@logitek.com.au)

**Logitek Asia**

Telephone: +61 2 8882 7777

Email: [support@logitek.asia](mailto:support@logitek.asia)

## Chapter 3 Physical Installation



The Helix Radio and Helix Television consoles are designed to be installed on a semi-permanent basis on a desktop or countertop. No cutout is required.

1 RJ-45 to RJ-45 network cable connects the console to the power supply.

1 RJ-45 to RJ-45 network cable connects the COM port on the JetStream to the console.

These connections are made inside the console frame on the tray card. A hole in the rear of the chassis is provided to route the cables into the tray.

Cables are provided for your convenience. If a longer run is required, please observe the following guidelines:

- ✓ ***Do not exceed more than 25 feet of 24 gauge standard CAT-5 cable between the console and power supply.***
- ✓ ***The COM port connection between the console and JetStream should not exceed 1000 feet using standard 25 gauge CAT-5 cable.***

### Power Supply Unit

On the **Helix Radio** power supply, there is one standard IEC connector to connect to the mains.

On the **Helix TV** power supply, there are two standard IEC connectors to connect to the mains.

Because switching power supplies are installed, no voltage selection is necessary.

Connect your CAT-5 cable to the RJ-45 jack labeled “To Surface.”

We suggest labeling the CAT-5 cable as “power” on both ends now so you don’t get confused later.

### JetStream COM connection

The JetStream has multiple COM ports on it so it can connect to different Logitech products.

If this is a **Helix TV** console, your COM connection will be to COM 1 on the **JetStream Plus**. (A JetStream Plus can only handle one TV console and no other devices.)

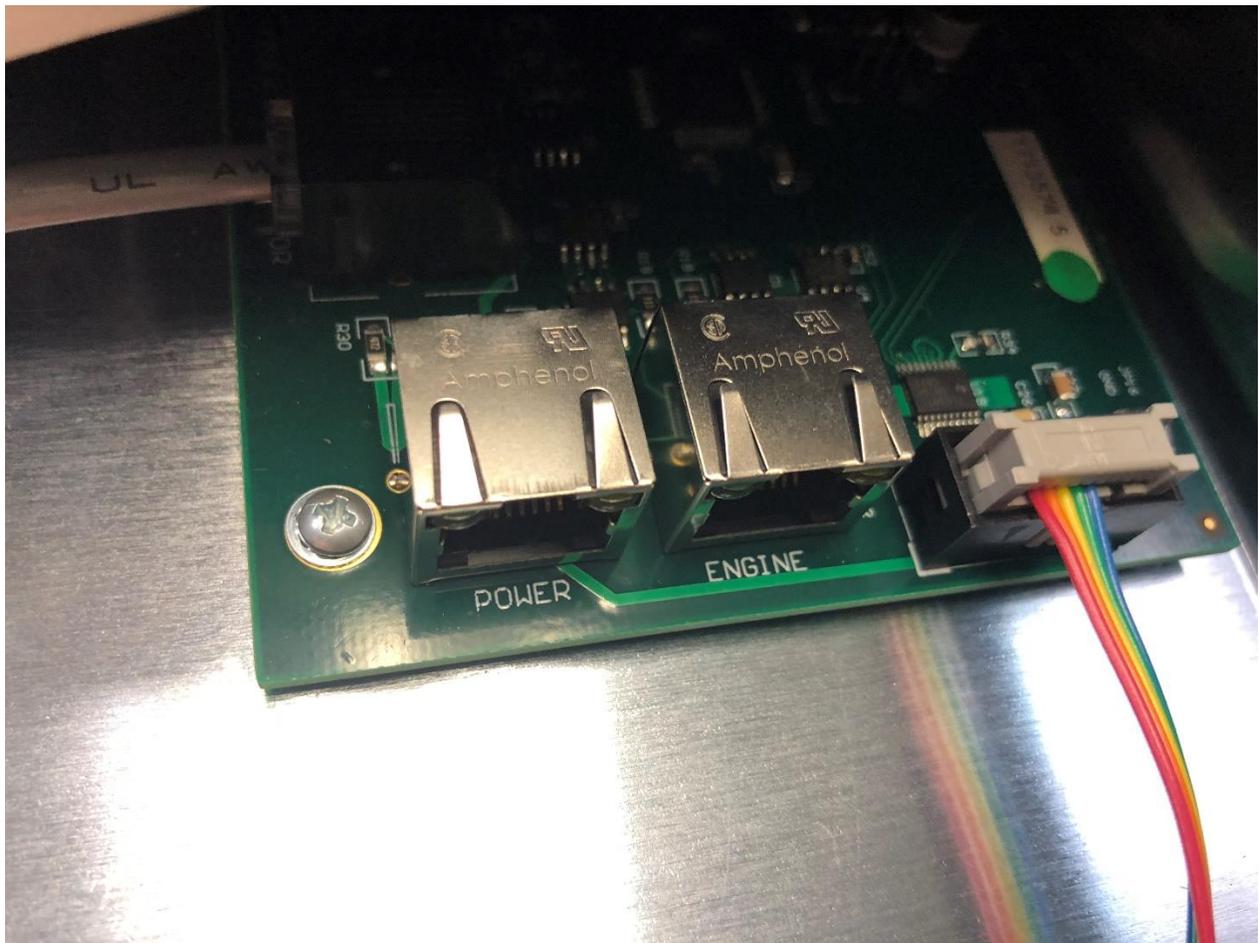
If this is a **Helix Radio** console, you will be connecting to either COM 1, COM 2, or COM3, depending upon how many consoles you are connecting to a **JetStream**. Most installations only have one console and it will go on COM 1.

Again, we suggest labeling both ends of the CAT-5 cable now so you don't get confused later.

### Connecting The COM Port Data and Power To The Console

Remove the screws from the Helix Monitor module on the far right side of the console using a Phillips-head screwdriver. There are two screws on the rear top edge of the module and four screws on the top of the module.

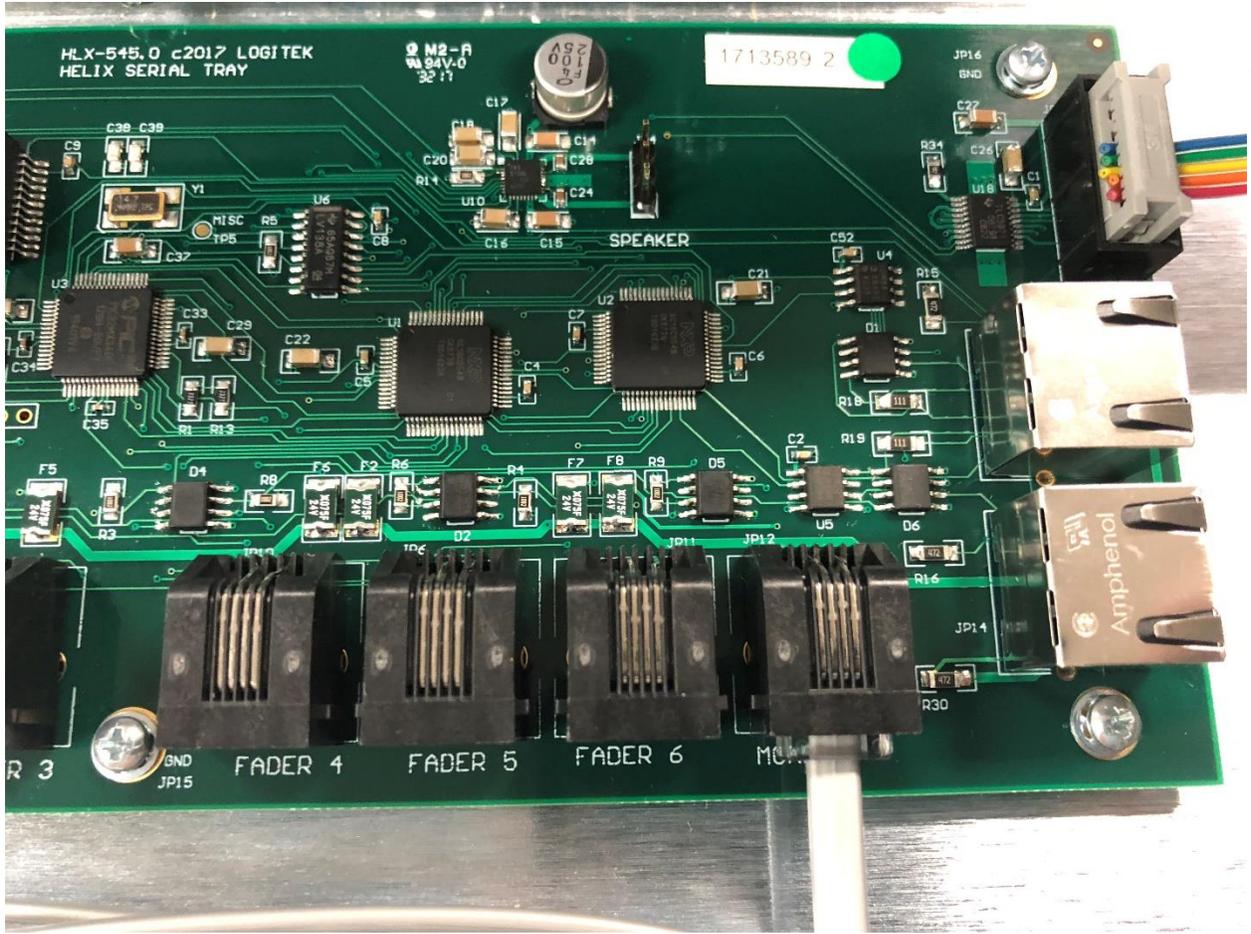
You will find an access hole drilled into the front of the tray above the wrist rest for each module. Insert a screwdriver and gently push up to pop out the module.



Plug in the cable from the power supply in the RJ-45 jack labeled "Power."

Plug in the cable from the JetStream COM port in the RJ-45 jack labeled "Engine."

- ✓ ***There's a thin wire that goes from the tray card to the cue speaker. If you pop it out by mistake, it's easy to plug back in. There's a three pin header labeled "speaker" on the tray card, but you will need to pop out the fader module next to the monitor to get to it.***



## GPIO Connections

Both radio and TV versions of the power supply have GPIO connections available for your convenience. One DB-25 is labeled GPI Inputs and the other DB-25 is labeled GPI Outputs. The DB connectors connect as follows:

### GPIO Inputs

Pin	Connection	Pin	Connection
1	GPI In 1	14	Ground
2	GPI In 2	15	Ground
3	GPI In 3	16	Ground
4	GPI In 4	17	Ground
5	GPI In 5	18	Ground
6	GPI In 6	19	Ground
7	GPI In 7	20	Ground
8	GPI In 8	21	Ground
9	GPI In 9	22	Ground
10	GPI In 10	23	Ground
11	GPI In 11	24	Ground
12	GPI In 12	25	Ground
13	No Connect		

### GPIO Outputs

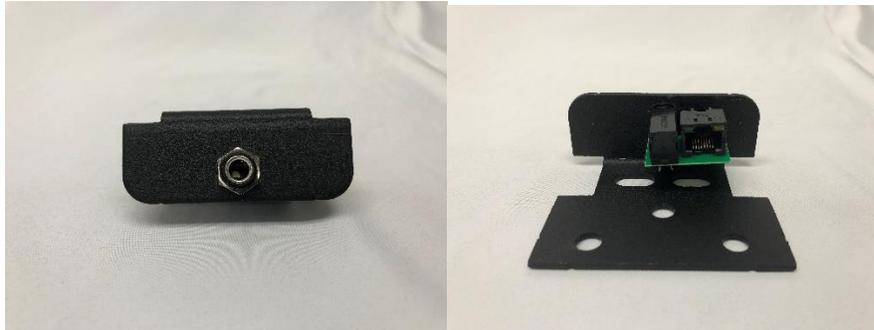
Pin	Connection	Pin	Connection
1	GPI Out 1A	14	GPI Out 1B
2	GPI Out 2A	15	GPI Out 2B
3	GPI Out 3A	16	GPI Out 3B
4	GPI Out 4A	17	GPI Out 4B
5	GPI Out 5A	18	GPI Out 5B
6	GPI Out 6A	19	GPI Out 6B
7	GPI Out 7A	20	GPI Out 7B
8	GPI Out 8A	21	GPI Out 8B
9	GPI Out 9A	22	GPI Out 9B
10	GPI Out 10A	23	GPI Out 10B
11	GPI Out 11A	24	GPI Out 11B
12	GPI Out 12A	25	GPI Out 12B
13	No Connect		

GPIO connections are also available on the JetStream. You have the flexibility to wire the GPI to whichever location is more convenient and program them in **JetSet** or **Command Builder**. To program a relay to turn an “on air” light on with a GPI output, look up Mute Groups in the JetSet manual. To associate GPI inputs and outputs with audio sources, you’ll find that in the input editor of the JetSet manual. Command Builder is used for more advanced scripting.

One key thing to remember with GPIO and JetSet: If you are hooking up your wires to the GPIO connections on the power supply, you would enter a 101 on the webpage for GPI 1 on COM 1 (102 for GPI 2 on COM 1, 103 for GPI 3 on COM 1, and so on. If the console is on COM 2 of the JetStream, GPI 1 would be 201, GPI 2 would be 202, and GPI 3 would be 203. If you wire your GPIO to the engine, you

would enter 1 for GPI 1, 2 for GPI 2, and 3 for GPI 3. If you can keep this numbering straight, it will all make sense. If you run into any questions, reach out to support and we'll be happy to help.

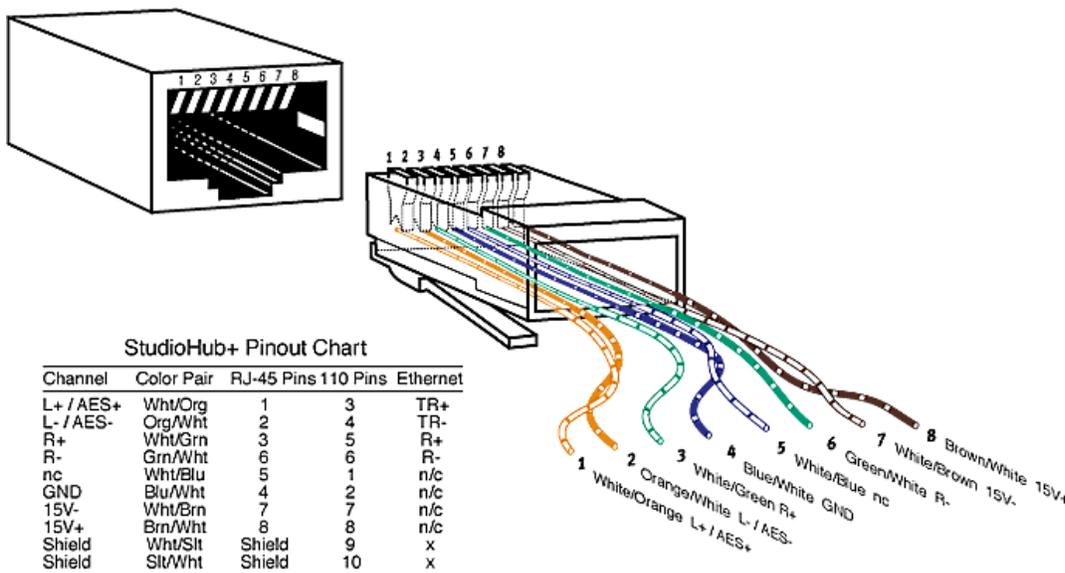
## Helix Headphone Jack



This optional accessory does not connect to the console. Rather, the RJ-45 connector on the back follows the StudioHub+® wiring standard to connect to an analog output on the JetStream. Route the output of the headphone selector in JetSet to this output. (If your Helix is connected to COM 1, you would choose “Phones Port 1” to hear the headphone selector controlled by the volume control on the monitor module. If this is in a guest position, you could choose “Studio Port 1” to hear the Guest/Studio selector controlled by the Guest/Studio volume control on the monitor module. You also have the option to route “Phones PF Port 1” (headphone selector, before volume control), program, or any other mix bus or input you desire.

If you have a JetStream Mini with RJ-45 audio cards or if you have a DB-25 to RJ breakout pabel, use a standard CAT-5 cable to connect the output on the JetStream to the back of the jack.

If you have a JetStream Plus or JetStream Mini with DB-25 connectors, you will need to wire up the RJ-45 connector on the back. Note that since the headphone jack is unbalanced and the JetStream is balanced audio, you want to hook up both + wires and the ground but do not connect the – wires. Otherwise you will have headphones out of phase.



## Chapter 4 Configuration



By now we assume that you've already done the following in **JetSet**, the web-based configuration system on the JetStream:

- Defined audio inputs on the Local IO (and if applicable, Network IO) page
- Defined audio outputs
- Checked which sources are allowed to be routed onto a fader on the Surface Settings page

Both the **JetSet Manual** available on our website (<http://logitekaudio.com/support>) and the **JetStream Quick Start Guide** that came with the JetStream will help you with these tasks. Since all of the audio lives in the JetStream, you have to program the JetStream to do these things. Helix will ask the JetStream what to do when it powers up and connects.

Note that when you change the Surface Settings in JetSet and click Upload to JetStream, the changes to the tick mark lists are immediate and you shouldn't have to click Refresh in JetStream Server to send the changes to the console. However, if you change a default route to a fader and upload it, be aware that we will NOT change the route when you upload it because we don't want to inadvertently take away the source that's currently on the air. If you change the default route, you have to go to the console and manually select it after you've uploaded.

If you need additional assistance with JetSet or you just have questions about that part of configuring the JetStream, contact us in Support.

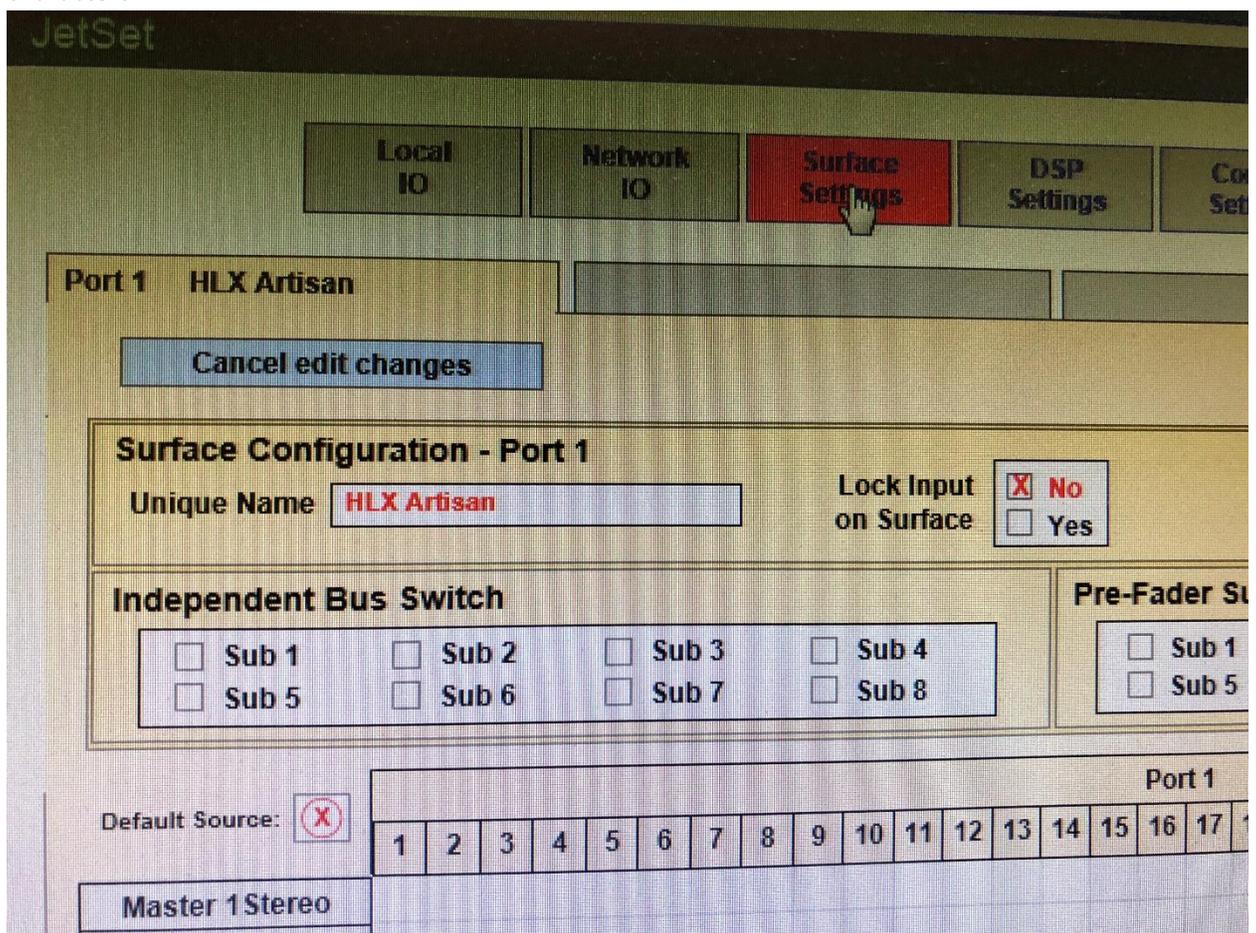
This chapter will dive into some advanced programming which mostly will use **Command Builder**. Feel free to come back later when you're ready or contact support for help with any of these functions if you're not familiar with our scripting language.

- ✓ *If you are familiar with Command Builder, be aware that Variable Select and Route Select triggers that you might have used on our other boards are not currently supported on Helix. We are building a different system to accomplish this but it's not quite ready yet.*

### IMPORTANT – YOU MUST DEFINE THE CONSOLE IN THE CONFIG

In the web browser (JetSet) the first three letters of the studio name must be HLX in order for the surface labels to be sent to the Helix. Here's how:

1. Open JetSet and log in.
2. Click on Surface Settings.
3. On the tab for the port your console is connected to, type HLX into the blank labeled "Unique Name" You can type anything you want (or nothing) after HLX, but HLX must be the first three characters.



4. Click Upload to JetStream
5. In JetStream Server, click Refresh.

After this initial setup, you will get your sources on the faders when you assign them on the Surface Settings page. When the JetStream sees the HLX for the console name, it knows to package them up in

the Helix format. Note that JetStream Server v5.2 or higher is required. New systems ship with this software. If you have an older version of JetStream Server, contact support for an update.

### Softkey Configuration

Softkeys are user-definable buttons that can be programmed for any purpose, be they changing routes, turning on relays, or firing salvos.

Each softkey has an address. To make everyone's life easier, we print the device and bus numbers on the LCD screen by default.

- ✓ **Helix Consoles use different device and bus numbers for their softkeys than previous Logitek consoles, therefore the old "softkey" and "softlamp" keywords in Command Builder no longer apply!**



Figure 2: Helix TV Monitor Panel with Softkey Addresses Displayed

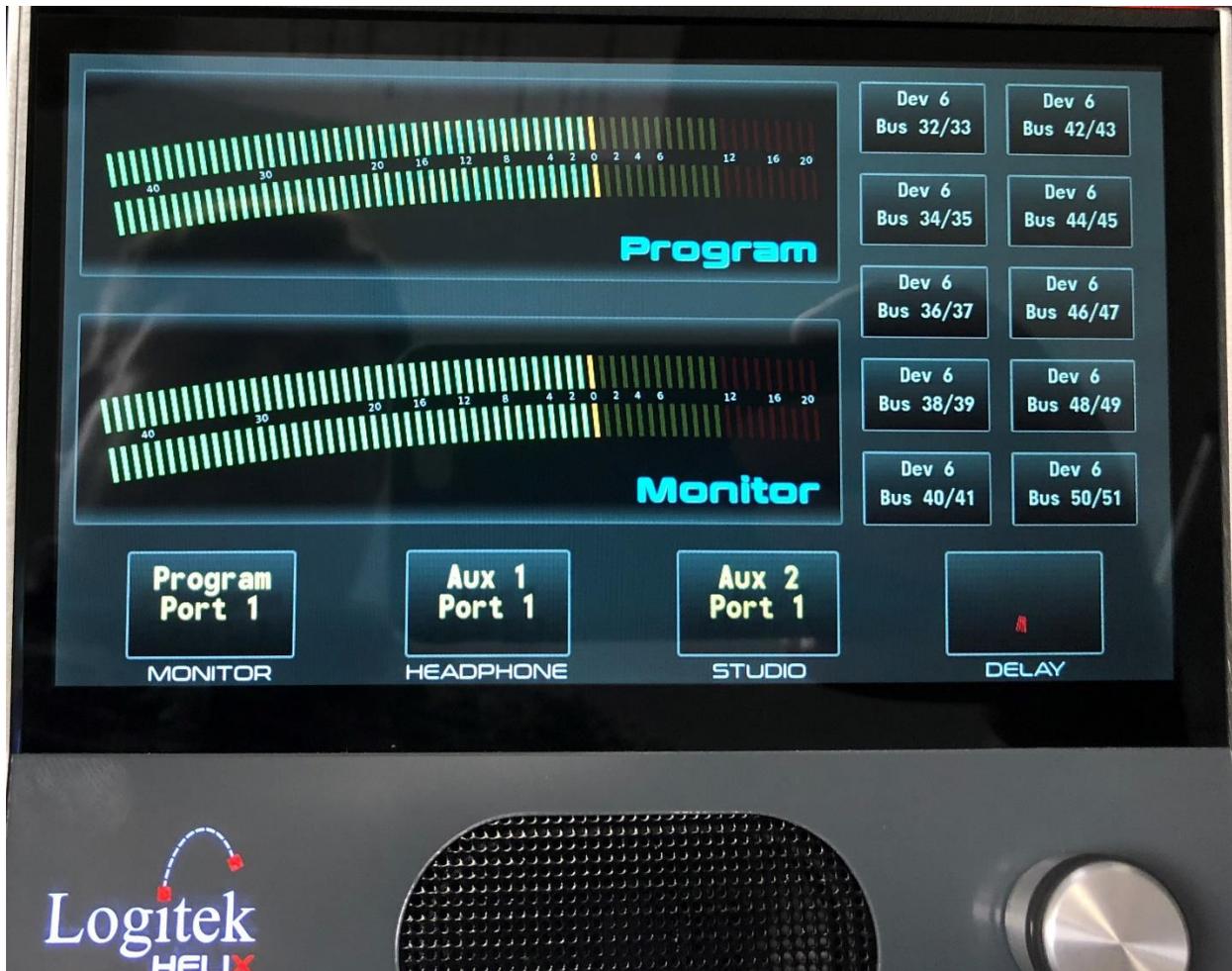


Figure 3: Helix Radio Monitor Panel with Softkey Addresses Displayed

In Command Builder, everything has a device number and bus number. On the screens above, the first bus number is the address of the button. The second bus number is the address of the “lamp” that illuminates the button. **[Note: Early version of Helix displayed incorrect device numbers. If there is a conflict between this manual and what you see on the screen, the manual is correct!]**

For the Helix TV console, the address of the softkey button in the top left corner is device 52 bus 32 and its lamp is device 52 bus 33.

For the Helix Radio console, the top left softkey button address is device 28 bus 32 and its lamp is device 28 bus 33.

Let’s write a sample trigger that turns on the lamp for the top left softkey on a Helix TV on JetStream 1:

```
trigger ae1 device 52 bus 32 on
    cmd ae1 device 52 bus 33 on
```

Now let's write a sample trigger that turns the lamp off for that softkey when the button turns off on the same console on the same engine:

```
trigger ae1 device 52 bus 32 off
  cmd ae1 device 52 bus 33 off
```

Here's the same sample actions for the Helix Radio, top left softkey, JetStream 1:

```
trigger ae1 device 28 bus 32 on
  cmd ae1 device 28 bus 33 on
trigger ae1 device 28 bus 32 off
  cmd ae1 device 28 bus 33 off
```

The default action of the softkey button is to be momentary. To create a toggle, you must write a toggle trigger in Command Builder.

```
trigger ae1 device 52 bus 32 on toggle
  if toggle = 1
    cmd ae1 device 52 bus 33 on
  endif
  if toggle = 2
    cmd ae1 device 52 bus 33 off
  endif
```

Besides turning the lamp on and off, other commands can be hung on triggers to do many functions. Contact us in Support if you have questions or need ideas on how to make things happen.

## Softkey Colors

Each softkey “lamp” can be set to a different color. Using the device and bus of the lamp, add a SET COLOR command to the trigger before turning the lamp on in this format:

```
cmd ae1 device 52 bus 33 set color RGBrrggbb
```

where rr = a two digit decimal number from 01-15 for red intensity, gg = a two digit decimal number from 01-15 for green intensity, and bb = a two digit decimal number from 01-15 for blue intensity.

<b>Red</b>	RGB150000
<b>Green</b>	RGB001500
<b>Blue</b>	RGB000015
<b>White</b>	RGB151515
<b>Crimson</b>	RGB040000
<b>Blue White</b>	RGB041215
<b>Purple</b>	RGB030015
<b>Light Aqua</b>	RGB021411
<b>Dark Aqua</b>	RGB000915
<b>Orange</b>	RGB151200
<b>Yellow</b>	RGB091500
<b>Magenta</b>	RGB150015

Thus, to turn the top left softkey on a Helix Radio on JetStream 1 blue, you would use

```
cmd ae1 device 28 bus 33 set color RGB000015
```

On a Helix TV, it’s the same, just device 52.

## Softkey Labeling

Text commands to label the buttons should be placed inside the INIT trigger (`trigger init` which runs when JetStream Server starts) and on the trigger that runs when the JetStream resets (`trigger ae1 device 2 bus 255 on`).

Use the device number of the button and the button’s bus number as the line number. An underscore separates the lines.

```
cmd ae1 text device 28 line 32 pos 1 "Line 1_Line2"
```

For the Helix Studio Virtual Console: Write the text to one line higher than on the physical console. Due to an offset, you will need to write the same text to different lines to show the same text on the physical console and the virtual one:

```
cmd ae1 text device 28 line 32 pos 1 "btn 1_text"
```

```
cmd ae1 text device 28 line 33 pos 1 "btn 1_text"
```

This offset will be corrected in future releases.

## Glow Strip

Each Helix console has a glow strip of Lucite backlit by LEDs above the wrist rest that can be set to any color. This may be used to signal to the operator when the console is live or a microphone on or it can just be set to a color that compliments the décor of the room. It's up to you and your imagination.

They are addressed as follows:

**Helix Radio:** device 27 on port 1 (device 4F on port 2, device 63 on port 3); the background color is turned on with bus 19 and foreground color is turned on with bus 20. If the background color bus and foreground color bus are turned on at the same time, the foreground color will show.

**Helix TV:** device 51; the background color is turned on with bus 19 and foreground color is turned on with bus 20. If the background color bus and foreground color bus are turned on at the same time, the foreground color will show.

The glow strip can be set to change with the microphone state. We suggest turning on device 27 for radio/device51 TV bus 19 in the init or engine reset trigger in Command Builder and then entering 120 into the mute tally box in the config software. [For radio port 2, use device 4f bus 19 and 220 in the mute tally box; for radio port 3 use device 63 bus 19 and 320 in the mute tally box.]

To turn the lamps off, turn off both bus 19 and 20.

To set the foreground color, put this command in the init triggers in Command Builder:

```
cmd ae1 device27 chon set color mosaic RGB00015
```

To set the background color, put this command in the init triggers in Command Builder:

```
cmd ae1 device27 choff set color mosaic RGB001500
```

Adjust device numbers based on the port the console is connected to/console model. RGB values listed below. These commands could also be placed in different triggers outside of the init/reset as desired.

<b>Red</b>	RGB150000	<b>Purple</b>	RGB030015
<b>Green</b>	RGB001500	<b>Light Aqua</b>	RGB021411
<b>Blue</b>	RGB000015	<b>Dark Aqua</b>	RGB000915
<b>White</b>	RGB151515	<b>Orange</b>	RGB151200
<b>Crimson</b>	RGB040000	<b>Yellow</b>	RGB091500
<b>Blue White</b>	RGB041215	<b>Magenta</b>	RGB150015

## Profanity Delay (Helix Radio Only)

Every JetStream has a built in profanity delay. There are dedicated buttons on the Helix Radio to control the delay and a display on the monitor screen to show the delay time. These buttons are hard coded to their function.

It is not necessary to write triggers to enter, exit, or dump the delay. However, you must route the program audio into the delay and out to air in JetSet if you intend to use it.

The profanity delay is located at Router 1 in the DSP. Here is how to route the audio into the delay:

In the JetSet web page, go to Surface Settings. Click on the tab for the engine port your console is connected to.

Scroll to the right and locate Router 1 In.

Right click in the Router 1 In column on Program Out for your console port. This puts a circle-X in the box showing that it is the default route.

Upload to JetStream.

Now go to JetStream Server and click on the JetStream State tab.

Scroll down to the line for Router 1 in for your console port. (If this is port 1, this is line 0030.)

Verify that Program Out is routed to Router 1. If a previous route is still there, force Program Out into the crosspoint by clicking to highlight the line. Then mouse over the blue arrow for Available Source Devices on the far right. Locate Program Out in that list (hint: port 1 program out is the very top of the list). Double click it to route it to the crosspoint.

Now we have the audio feeding into Router 1. When you turn on the delay from the console, it will begin to buffer the audio in Router 1.

However, we now need to get the delayed audio from Router 1 to air. If the output to air is local on this JetStream, you will go to the Local IO page. If the output to air is on another JetStream you will go to the Network IO page. Locate the output to air. Change the default route from Program Port 1 to Router 1 Port 1. Upload. Then go to JetStream Server, JetStream State page, locate your output and manually change the route.

- ✓ ***If you don't want to manually change the route to get the audio in and out of the delay, you can hit the "Defaults" button in JetStream Server to send everything to their default route. Just remember that sending everything to default will interrupt audio if the studio is on air, so unless the room isn't on air yet or you've patched around the studio, manually changing the route will be less disruptive.***

## Helix Radio Monitor Presets

The Helix Radio has four monitor preset buttons that can be programmed to instantly recall routes.

On the radio console, these buttons are located between the monitor and headphone volume controls. You might consider programming them to switch the same source into both headphones and monitors.

The buttons are labeled SEL1, SEL2, SEL3, and SEL4.

SEL 1 is bus 16. SEL 2 is bus 17. SEL 3 is bus 18, and SEL4 is bus 19.

The device numbers are as follows:

### Port Number

<b>1</b>	Device 24
<b>2</b>	Device 4C
<b>3</b>	Device 62

Note that when you turn on one of the preset buttons, the console will turn off the lamps of the other presets automatically, so your triggers need only perform the routes.

For example, if you wanted SEL 1 to route program to the monitors and headphones on port 1, it would look like this:

```
trigger ae1 device 24 bus 16 on
  cmd ae1 route s[Program Port 1] to d[Mon In Port 1]
  cmd ae1 route s[Program Port 1] to d[PhonesIn Port 1]
```

## Helix Radio Guest/Studio Presets

The Helix Radio console has two guest/studio preset buttons that can be programmed to instantly recall routes.

The buttons are labeled SEL1 and SEL2.

SEL1 is Bus 16. SEL2 is Bus 17.

The device numbers are as follows:

### Port Number

<b>1</b>	Device 23
<b>2</b>	Device 4B
<b>3</b>	Device 61

Note that when you turn on one of the preset buttons, the console will turn off the lamps of the other presets automatically, so your triggers need only perform the routes.

For example, if you wanted SEL 1 to route program to the guest/studio monitor on port 1, it would look like this:

```
trigger ae1 device 23 bus 16 on
  cmd ae1 route s[Program Port 1] to d[StudioIn Port 1]
```

### Helix TV Monitor Preset Buttons

The Helix TV has two monitor preset buttons that can be programmed to instantly recall routes. These buttons are located above the monitor select on the touchscreen.

Preset 1 is device 44 bus 16.

Preset 2 is device 44 bus 17.

For example, to send Master 1 to the monitors when Preset 1 is tapped:

```
trigger ae1 device 44 bus 16 on
  cmd ae1 route s[Master 1 Stereo] to d[CR Mon In]
```

### Helix TV Studio Preset Buttons

The Helix TV has two studio preset buttons that can be programmed to instantly recall routes. These buttons are located above the studio select on the touchscreen.

Preset 1 is device 42 bus 16.

Preset 2 is device 42 bus 17.

For example, to send Master 1 to the studio when Preset 1 is tapped:

```
trigger ae1 device 42 bus 16 on
  cmd ae1 route s[Master 1 Stereo] to d[Studio 1 Mon In]
```

### Helix Radio Talkback Microphone

No triggers are necessary for the talkback system to work, but you need to define a talkback microphone in JetSet.

The talkback microphone is used in two places on Logitek radio consoles:

1. When talkback is turned on over a fader that is tied to a mix minus bus, the JetStream replaces the mix minus with the talkback mic so the control room can talk to someone on remote. When talkback turns off, the JetStream returns the mix minus feed to the remote.
2. When a mix minus bus is set to "Add Mic When Off" (usually on a mix minus feeding a phone hybrid), when the fader associated with that mix minus (the "phone pot") is off we send the talkback mic to the caller and when the fader turns on we send mix minus, or program minus telephone. The end result is you can put the phone pot in cue and talk to the caller through the microphone without potting anything up like a speakerphone when off the air, but if you put the caller on live the caller hears everything on the air but themselves.

To define the talkback mic: Open the JetSet web page. Click on Surface Settings. Scroll to the right and look for the TlkBack Mic column. Find the line for your microphone and right click the box in the column. This makes a circle X, or default route. Upload to JetStream.

If you want more than one microphone to be mixed together as the “talkback mic” there are two options:

1. Assign Mic 1 to Mixer A1, Mic 2 to Mixer A2, and Mic 3 to Mixer A3 in the JetSet Surface Settings page. Assign Mixer A Out to be the talkback mic. This sums the three mics together and sends them to the talkback input.
2. On the Surface Settings page in JetSet, choose an aux bus you want to use as your “offline” mix and check the box for both Independent Bus Switching and Pre-Fader Aux Bus for the bus you chose. Assign the output of that aux bus to be the talkback mic. Teach the operators to turn on the aux bus you chose to feed the caller and talkback. With Independent Bus Switching and Pre-Fader Aux Bus enabled for that bus, only the aux bus needs to be turned on to feed the audio out the bus; the engine will ignore the fader position and the on/off button for that aux bus only.

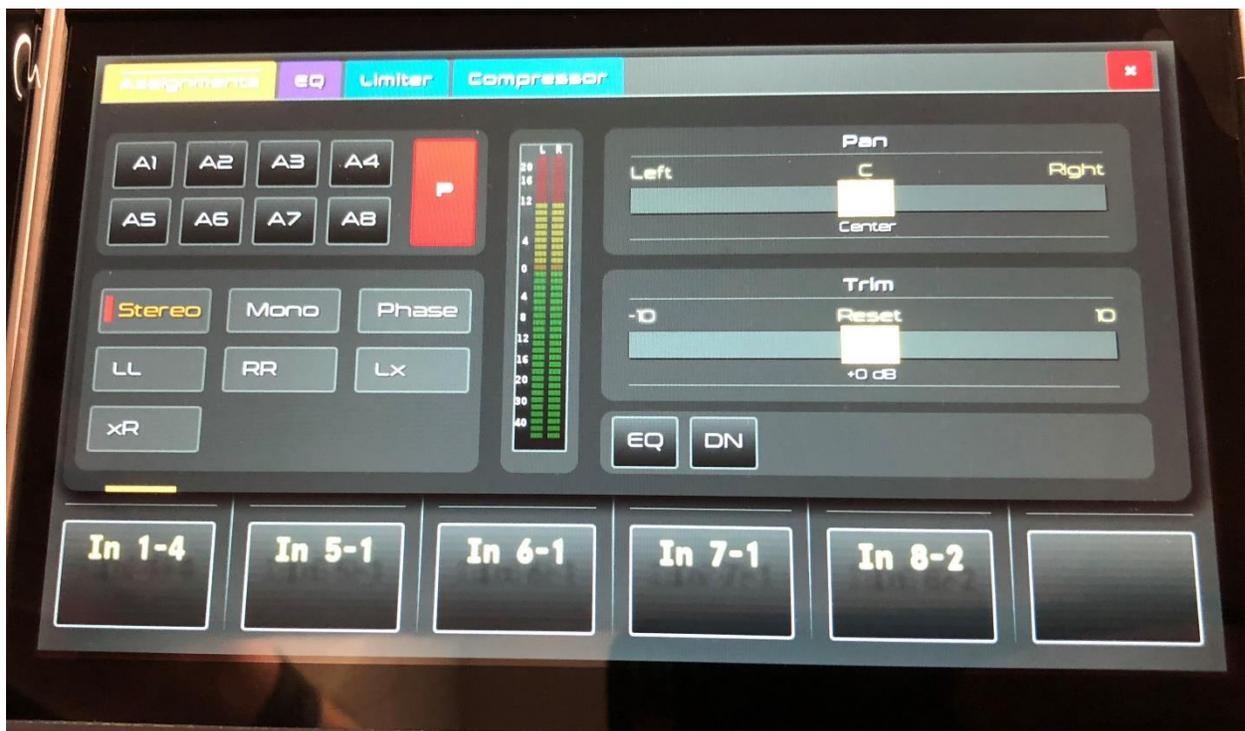
Contact support if you want to talk this over or to go through the steps to enable either option in more detail. There’s no right or wrong way to do this. It’s a matter of determining which method will be easiest for your operators to use, and we’re happy to help you think it through.

## Chapter 5 Helix Radio Fader Module Operation



### Bus and Mode Assignment

To change the bus assignment for a fader, tap anywhere above the TALK button (except for the meter) to open the Bus Assignment window.



Tap the following buttons to assign the fader to a mixing bus:

P – assigns the fader to the Program Bus

A1 – assigns the fader to Aux 1

A2 – assigns the fader to Aux 2

A3 – assigns the fader to Aux 3

A4 – assigns the fader to Aux 4

A5 – assigns the fader to Aux 5

A6 – assigns the fader to Aux 6

A7 – assigns the fader to Aux 7

A8 – assigns the fader to Aux 8

To change the mode of the fader, tap the appropriate button

Stereo – 2 channels of audio

Mono – 2 channels summed

Phase – phase invert a stereo source

LL – left channel plays out of both left and right

RR – right channel plays out of both left and right

Lx – Left channel with silence on right

xR – Right channel with silence on left

### Source Selection



Tap the name of the source you wish to change. A pick list appears. Swipe up and down through the list and find the desired source. Tap on the source to take it and change the route.

### Fader Operation

Like every audio console you've ever used, push up on the fader to make it loud and push down to make it soft. Keep an eye on your program meter. The idea is to make the green average bar just touch the 0

marker, leaving plenty of room for the peak dot to dance between the 0 mark (-20 dBFS) and the end of the scale, which is clipping.

The faders are motorized, so if your automation moves the faders while the station is unattended, you'll know exactly where things are later. Or, if you have the Helix Studio virtual console set up, if someone moves the fader remotely, you'll know.

### Channel On/Off

Two buttons below the fader. The top is on and the bottom is off. The default colors are green is on and red is off. Your engineer can customize the colors based on source in the **JetSet** configuration software to make source types easier to find.

### Cue Bus



Tap the cue button over the fader to listen to your source through the cue speaker. Adjust the cue volume with the knob next to the speaker.

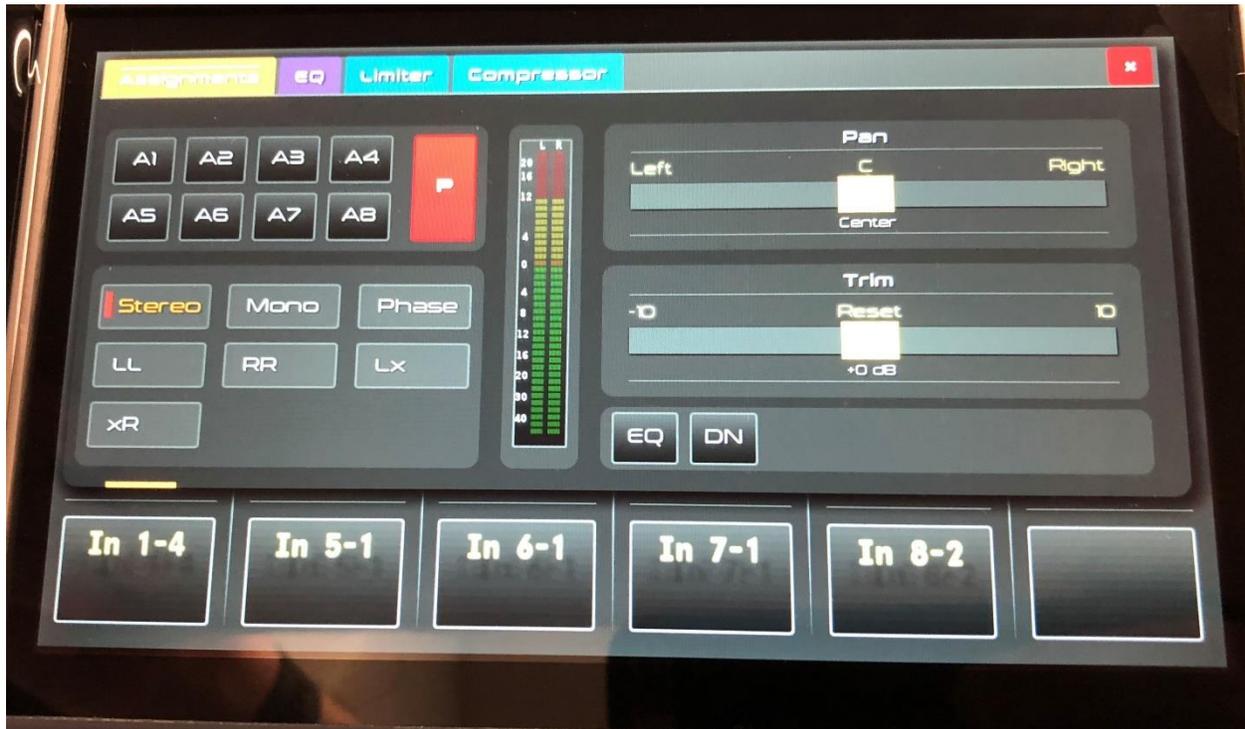
### Talkback Function

If the source routed to that fader is tied to a mix minus bus, when you tap the TALK button, the mix minus will be interrupted by the talkback microphone. Tap it again to turn it off and return feeding the mix minus to the remote source.

If you hold the TALK button longer than half a second, it will become momentary and turn off when you lift your finger.

## Pan Control

Tap anywhere above the TALK button (except for the meter) to open the Bus Assignment window.



Drag your finger to move the pan control as needed. The pan control is before the pre-fader meter, so you'll be able to see the meter change as you make adjustments.

## Trim Control

Tap anywhere above the TALK button (except for the meter) to open the Bus Assignment window.

Drag your finger to move the pan control as needed. The pan control is before the pre-fader meter, so you'll be able to see the meter change as you make adjustments.

## Pre-Fader Meter

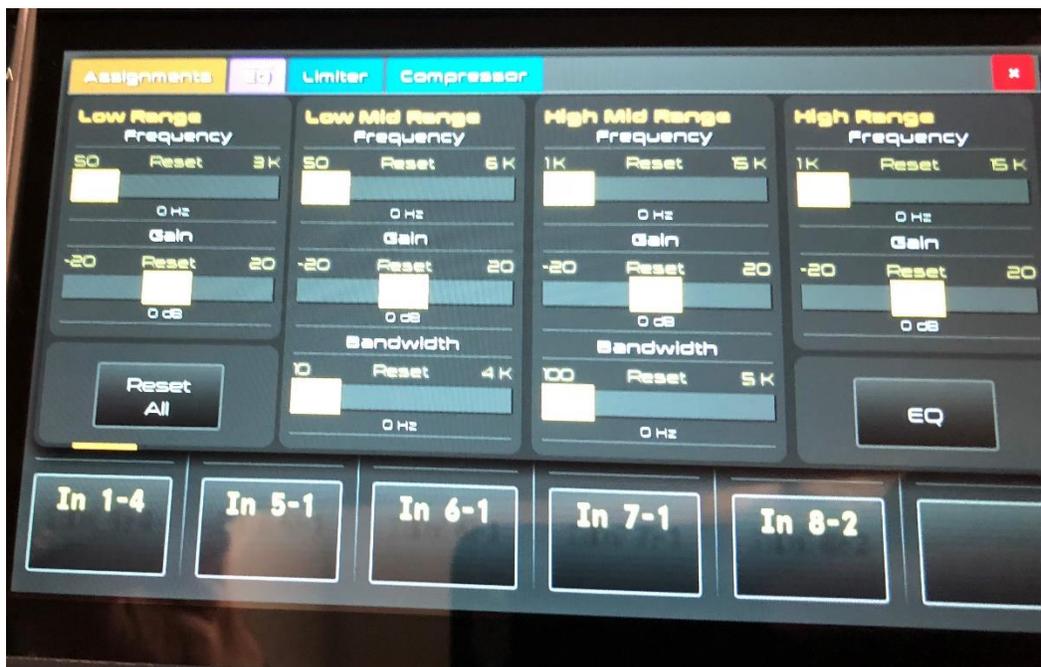
This meter is to show you the level of what's coming into the board. If you see that something is too hot, too low, or out of balance, you'll see it here.

## Equalization

Tap anywhere above the TALK button (except for the meter) to open the Bus Assignment window.



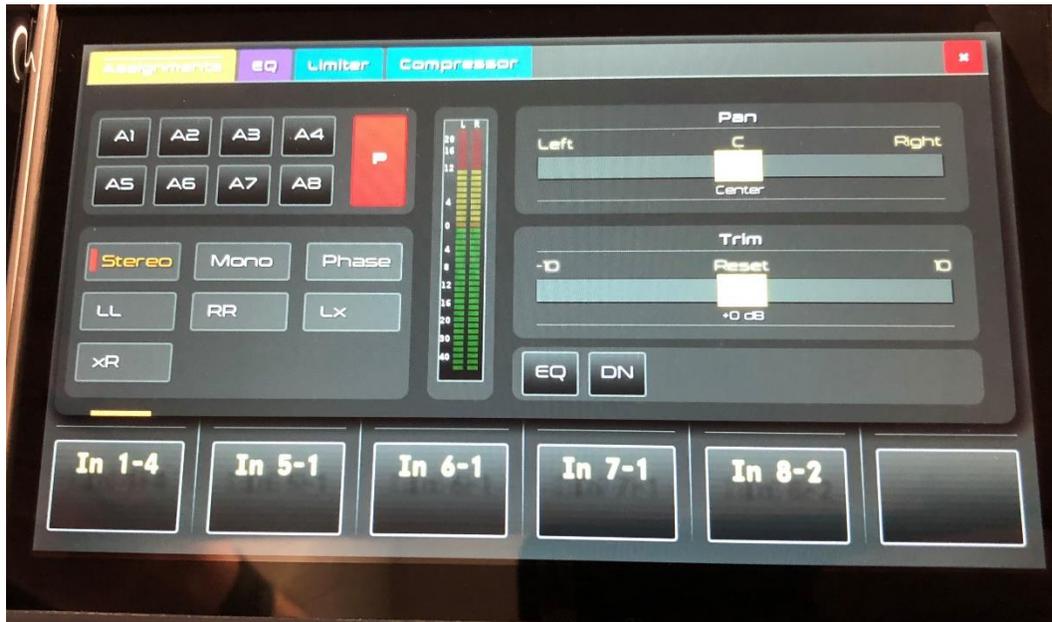
Note that there is an EQ button under the trim control. If you just want to turn on the EQ, you can tap this to turn it on. To adjust the EQ, tap on the EQ tab up top.



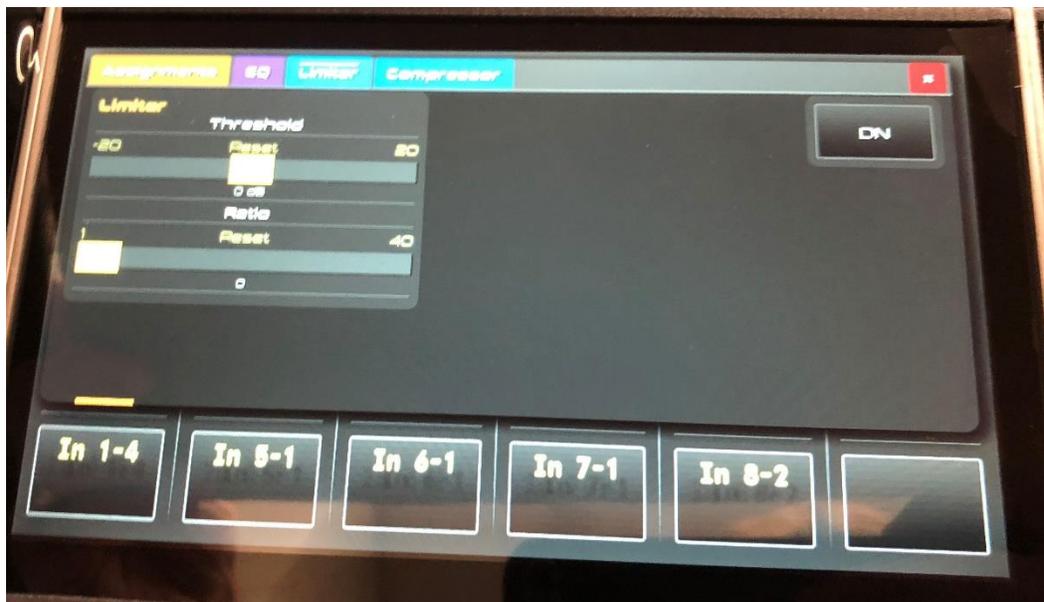
Use your finger to drag the slider to make adjustments. Reset All will send everything back to default. The EQ button turns the EQ on and off.

## Dynamics

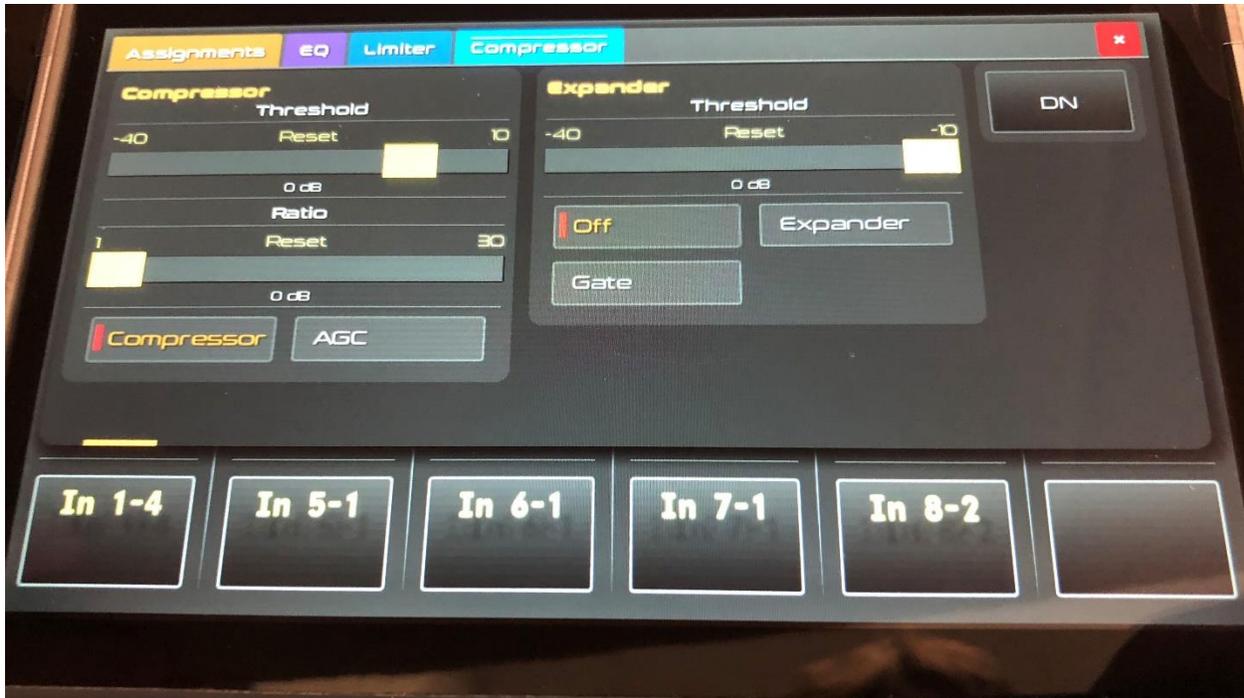
Tap anywhere above the TALK button (except for the meter) to open the Bus Assignment window.



Note that there is an DN button under the trim control. If you just want to turn on the compressor and limiter, you can tap this to turn it on. To adjust the compressor or limiter, tap on the appropriate tab.



This is the limiter tab. You can adjust the threshold and ratio by dragging your finger. The DN button turns the compressor/limiter on and off.



This is the compressor tab. Drag your finger to adjust the threshold and ratio. Tap to switch between compressor and AGC or expander and gate. Again, the DN button turns the entire compressor/limiter function on and off.

## Chapter 6 Helix Radio Monitor Module Operation

The Helix Radio monitor module controls the headphones and studio monitors. It also contains the program and monitor meter.

The program meter will always show you the program bus.

The monitor meter will show you what has been selected in the monitor selector. If you normally monitor air or a processed sidechain that simulates an air monitor, you should be looking at the program meter to make level decisions.

A note on our meters: Logitek meters show both average and peak. The solid bar is an average, similar to an analog VU meter. There is a peak dot that will ride above the average and follow peak program material. The first yellow segment in the bargraph is 0, or -20 dB from full scale (clipping).

The object is to have your average just touch that 0 mark, leaving 20 dB of room for the peak to ride without clipping. It's okay for the peak dot to dance in the yellows and reds, but you want your average bar to stay out of the red zone. If the average just touches that 0 marker, you should be just about perfect. If the average is peaking below 0 and the peak dot is riding around 0, you're too low. Follow the bar and not the dot.



## Monitor Source Selection

Tap the source name in the monitor box. You will get a pick list.



Swipe up and down as necessary to see your sources. Tap on the one you want to select it.

## Monitor Level Control

This is a non-motorized fader. Move it up and down to adjust the control room monitor level.

## Monitor Mute Button

This button will mute the monitors until you press it again to turn it off. It operates independently of monitor mute groups assigned to microphones to automatically mute the speakers.

## Monitor Mono Button

This button will set the control room monitors to mono. Use it to quickly check if something is in phase. If it drops out when you set it to mono, it's out of phase.

- ✓ ***If you catch something on the air that's out of phase, you can quickly fix it by setting the fader to phase invert. Just don't forget to set it back to stereo after that cut has finished. Also, make sure to tell production to fix it right away.***

### Headphone Source Selection

Just like with the monitors, tap the source to get a pick list. Swipe through the pick list and tap on the source you want in your headphones.

### Headphone Level Control

This is a non-motorized fader that controls your headphone level. Push it up and down to adjust the level. Just don't crank it up so high you go deaf. Of course, it may be too late for some disc jockeys...

### Headphone Split Button

Press this button to split your headphones so one side is the audio selected in the headphone source selector and the other side is cue.

### Headphone Follow Mon Button

When this is pressed, the headphone source selection will follow whatever has been chosen for Monitor. The levels will remain independent of each other.

### Headphone/Monitor Quick Route Buttons

SEL1, SEL2, SEL3, and SEL4 can be programmed to quickly change the route for the headphones or monitors. Depending upon how your engineer sets this up, this will either change the monitor selector only or it will change both headphones and monitors.

### Guest/Studio Source Selection

This monitor feed can be used to send audio to guest headphones or it can be used to feed a separate voice booth. As with headphones and monitors, tap the source name to change, swipe to view the sources, tap on your selection to take it.

### Guest/Studio Level Control

This is a knob in the lower right corner. Turn it up and down to adjust the level.

### Guest/Studio Quick Route Buttons

SEL1 and SEL2 can be programmed to quickly route a source to the Guest/Studio monitor.

### Guest/Studio Follow Mon Button

The guest/studio monitor source will follow the control room monitor selection.

### Guest/Studio TB Button

This button is reserved for a talkback function so the control room operator can interrupt the studio monitor to tell the people in the talk studio to put their headphones on. 😊 This feature will be enabled by a future update to the JetStream DSP card. This is a latching button. Contact support if you need to use this function.

## Profanity Delay Controls



There is a profanity delay built into the JetStream with a 6 second delay.

When the program bus is configured to feed through the delay system, these buttons will control it and the display will show the status of the delay.

**IN Button:** begins to buffer audio into memory. If program material is dense (ie music) it may take several minutes for the delay to fully build. If programming is mainly talk, the delay will catch up faster during any pauses between words.

**OUT Button:** slowly ramps out of delay to live.

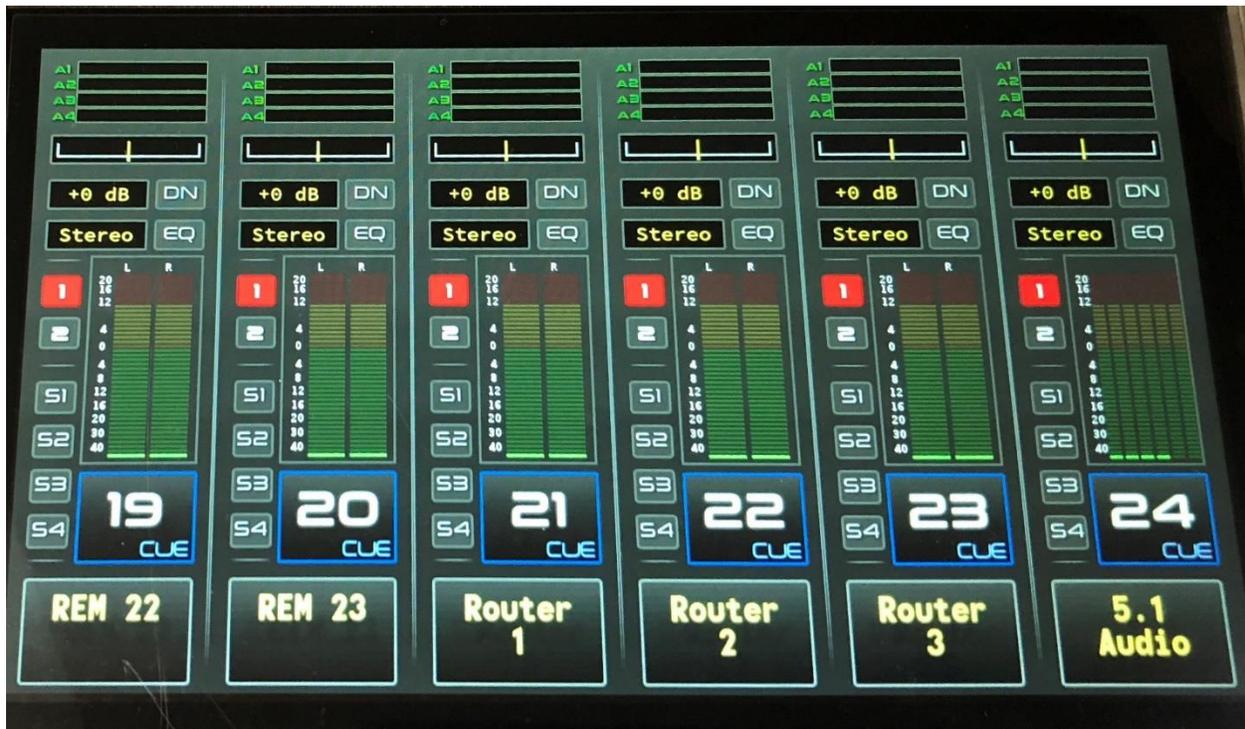
**DUMP Button:** Dumps half of the buffer and immediately begins to rebuild.

## Softkeys

These user-definable buttons are on the monitor touchscreen and can be programmed for a variety of purposes.

Instructions on programming basics are in the configuration section of this manual. Our support department will be happy to help.

## Chapter 7 Helix TV Fader Module Operation



The Helix TV Console packs a lot of audio console into a very small space.

The controls most commonly used when your eyes are elsewhere are physical: the fader and the fader on/off switches.

The controls you use when you're looking at the console have been moved to the touchscreen.

Motorized faders ensure that when automation is controlling the board you know where the levels are set.

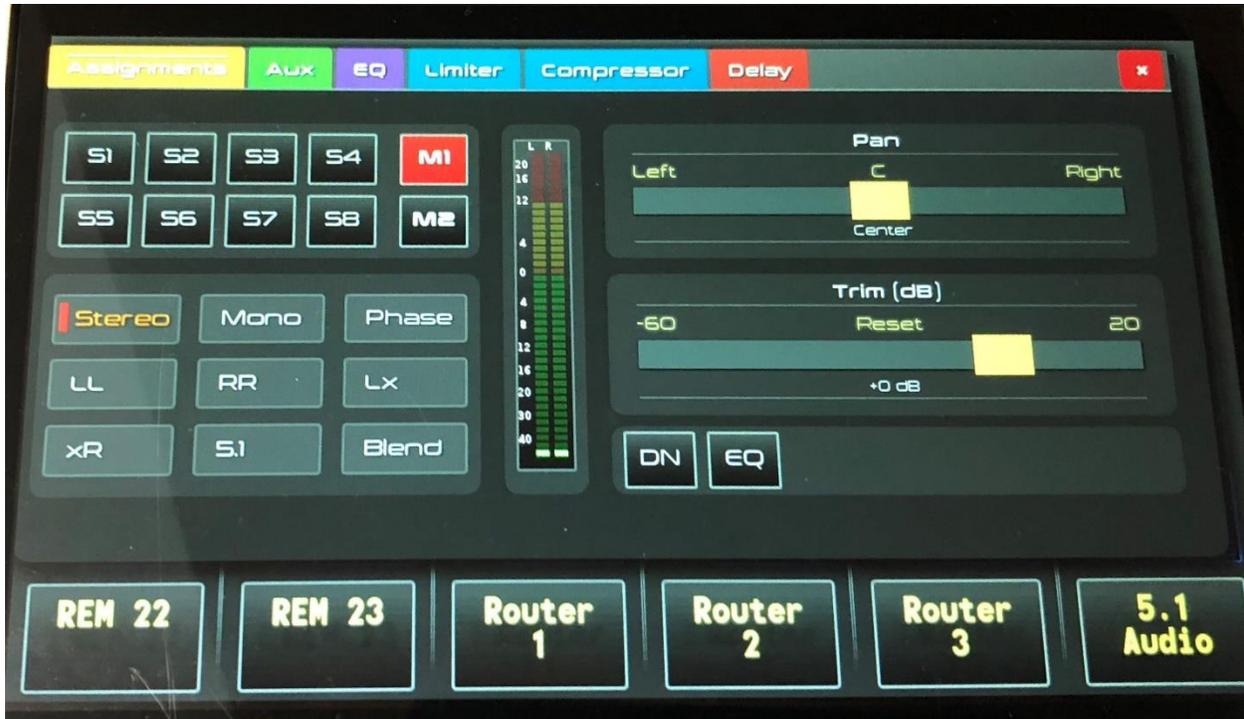
### Bus and Mode Assignment



The bus indicators on the main fader screen are as follows:

- 1 – Master 1
- 2 – Master 2
- S1 – Submaster 1
- S2 – Submaster 2
- S3 – Submaster 3
- S4 – Submaster 4

The indicator lights up when the bus is assigned. To turn a bus on or off, tap anywhere over this area, or any area above it (except for the meter) to pop up the edit screen.



From here, you can tap on the M1, M2, S1, S2, S3, or S4 buttons to turn the buses on and off.

Note that while this photo shows submasters 5-8, those buttons will be removed in future software releases. A Helix TV console only has 4 submasters.

You can select the following modes:

Stereo (2 channels of audio)

Mono (2 channels summed)

Phase (phase inverse stereo only)

LL (left channel reproduced in both left and right channels)

RR (right channel reproduced in both left and right channels)

Lx (left channel only with silence on right)

xR (right channel only with silence on left)

5.1 (5.1 pass through)

Blend (sum to mono but keep pan control active; operator can weight the mix by moving pan control)

Tap the red X in the upper right corner to exit this screen.

## Source Selection

Tap on the source name over the fader you wish to change. You will be presented with a pick list.



Swipe up and down through the list to locate your source. Tap to take it.

## Fader Operation

Move the fader up and down to increase and decrease volume. When your finger is resting on the knob, the motor is disabled. When you are not touching the knob, if the level is changed by automation or the Helix Studio virtual console, the fader will move.

## Channel On/Off

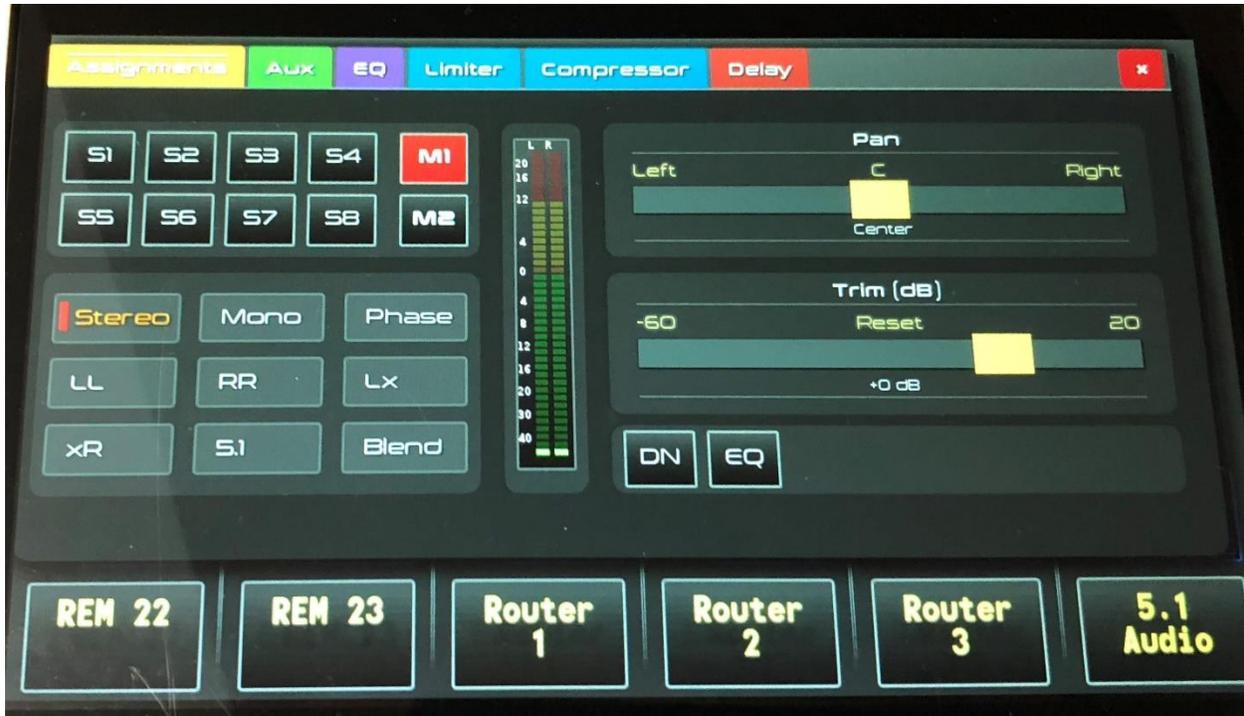
These buttons are directly below the faders. The top button turns the channel on and the bottom one turns it off. The default colors for these buttons are green = on and red = off. The colors of these lamps can be changed by source in **JetSet**.

## Cue Bus

Tap the cue button over the fader on the touchscreen to turn cue on and off. Adjust the cue volume on the monitor module.

## Pan Control

Weights the stereo mix. Default is center. To access this control, tap anywhere over the fader between the aus level indicators and the trim/mode indicators, or the bus assignment indicators to open the editor.



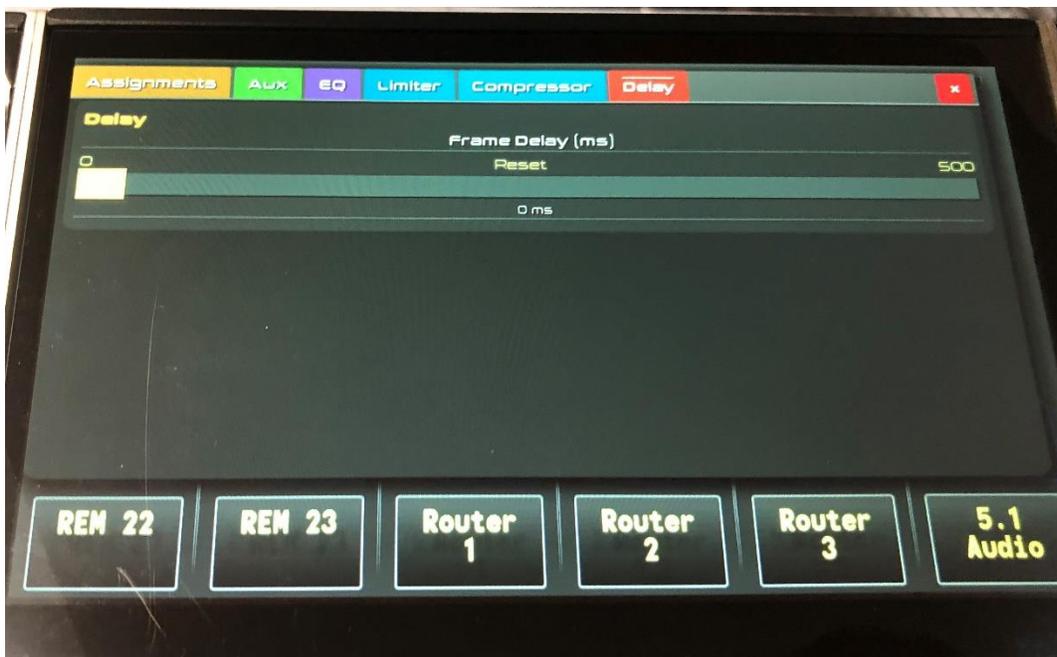
Drag the slider as needed. Tap the red X in the upper right corner to exit.

## Frame Delay

Delays the audio to sync up with video equipment. To access this control, tap anywhere over the fader between the aux level indicator and the trim/mode indicators, or the bus assignment indicators to open the editor.



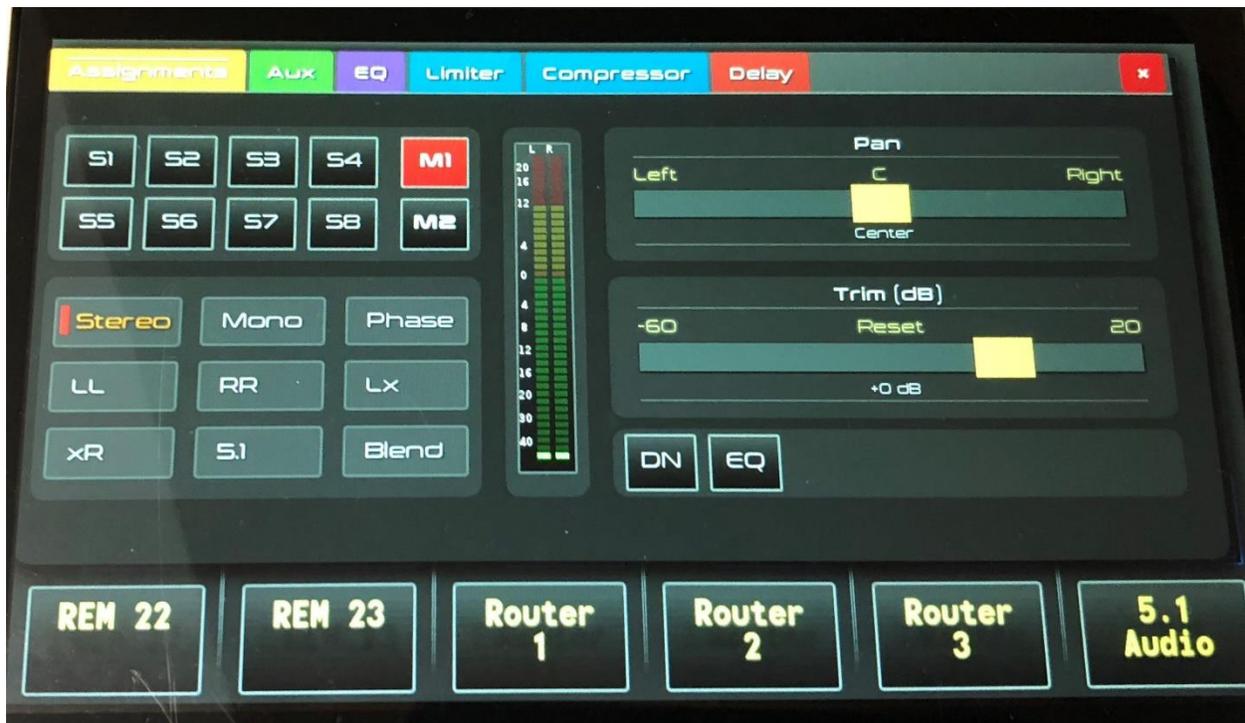
Then tap the Delay tab at the top.



Drag the bar with your finger to set the delay in milliseconds. Tap the red X in the upper right corner to exit.

## Trim Control

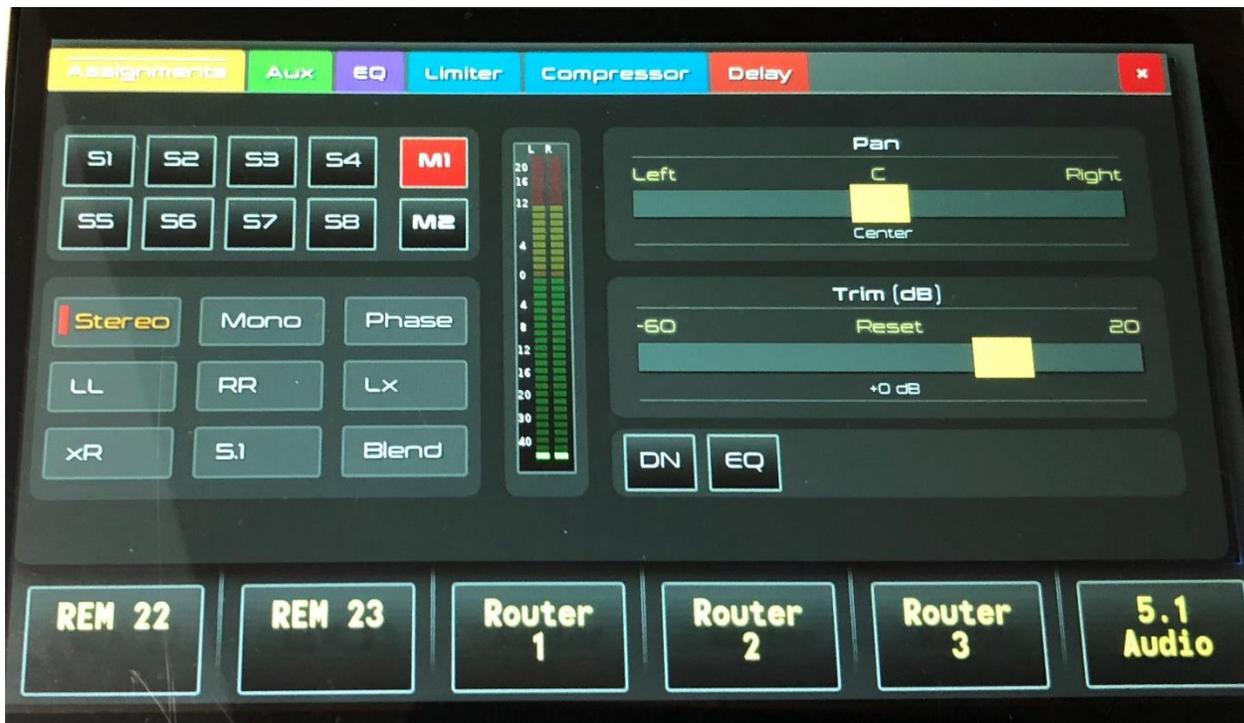
Adjusts or reduces gain ahead of the fader. To access this control, tap anywhere between the fader aux level indicators and the trim/mode indicators, or the bus assignment indicators to open the editor.



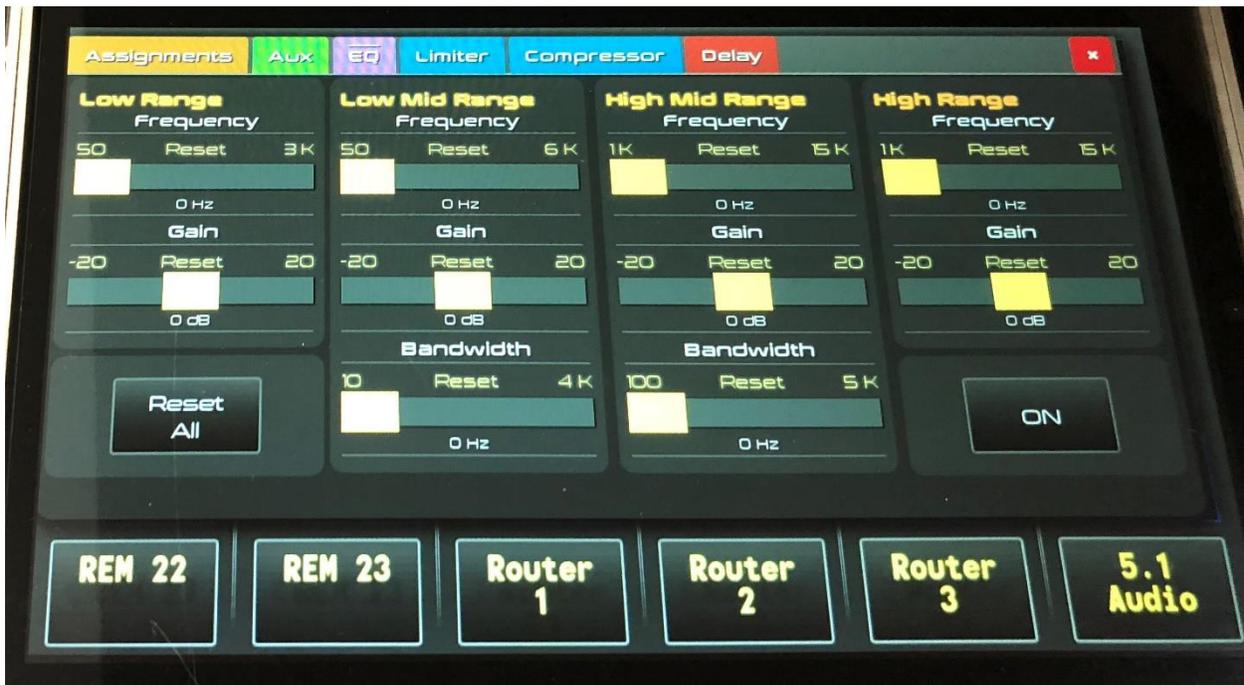
Drag the bar with your finger to set the trim. Note that this control is before the pre-fader meter, so you can see the results of your adjustment on the adjacent pre-fader meter. Tap the red X in the upper right corner to exit.

## Equalization

Adjusts the tone of the audio. To access this control, tap anywhere over the fader between the aux level indicators and the trim/mode indicators, or the bus assignment indicators to open the editor.



Note that from this screen you can turn on the EQ by tapping the EQ button below the trim control. To access the full EQ menu, tap the EQ tab at the top.



The Reset All button will take all settings back to their default. The ON button will engage the EQ.

Tap the red X in the upper right corner to exit this screen.

### Dynamics

Adjusts compression, limiting, gate, and AGC functions. To access this control, tap anywhere over the fader between the aux level indicators and the trim/mode indicators, or the bus assignment indicators to open the editor.



Note that you can toggle dynamics on and off by tapping the DN button below the trim control.

To access the limiter, tap the limiter tab at the top.



Adjust the threshold and ratio from this screen. The ON button engages all of the dynamics (compressor/limiter) for the fader.

To access the compressor menu, tap the compressor tab at the top of the screen.



Adjust the threshold of the compressor and expander. Toggle between Compressor and AGC mode. A Gate/Expander may be engaged. Tap the ON button to engage all dynamics controls (compressor and limiter).

Tap the red X in the upper right corner to exit.

## Aux Assignment

From the main fader screen, access the menu by tapping at the aux indicator bars at the top of the fader strip, anywhere down to the bus indicators.



Note that the bar graph will glow to show how high the aux fader is set from the main fader screen. Tap anywhere within that bar graph to go directly to the aux menu.

Once on the editor screen, tap on the Aux tab to reach the fader controls.



Drag your finger to move the bar to set the aux fader. Tap the red X in the upper right corner to close.

## Chapter 8 Helix TV Monitor Module Operation

A note on our meters: Logitek meters show both average and peak. The solid bar is an average, similar to an analog VU meter. There is a peak dot that will ride above the average and follow peak program material. The first yellow segment in the bargraph is 0, or -20 dB from full scale (clipping).

The object is to have your average just touch that 0 mark, leaving 20 dB of room for the peak to ride without clipping. It's okay for the peak dot to dance in the yellows and reds, but you want your average bar to stay out of the red zone. If the average just touches that 0 marker, you should be just about perfect. If the average is peaking below 0 and the peak dot is riding around 0, you're too low. Follow the bar and not the dot.



### Submaster Levels

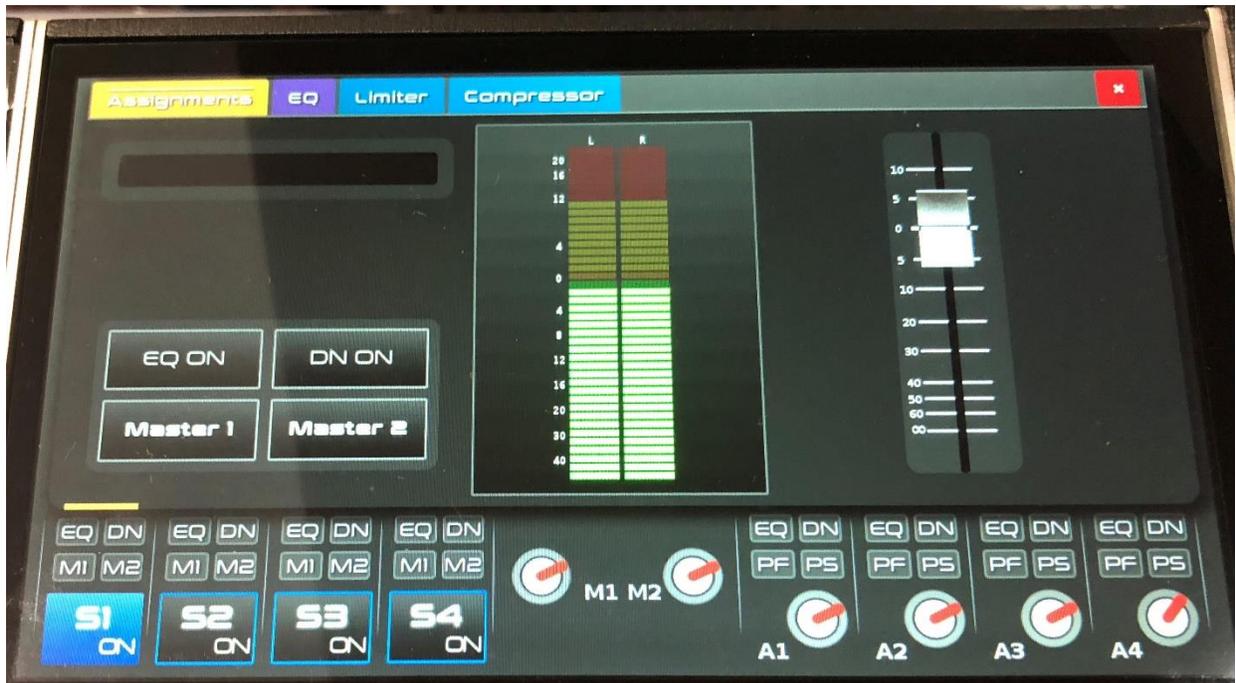
The submaster faders are motorized and are below the submaster control buttons on the screen. A post-fader meter is displayed on the touchscreen. Adjust the submaster volume by moving the fader up and down.

### Submaster On/Off

Tap the S1 On, S2 On, S3 On, or S4 On boxes on the screen to turn on the appropriate submaster bus.

## Submaster Assign To Master, EQ, Dynamics

Tap the square area above the Submaster On button that contains the indicators for EQ/DN/M1/M2 to access the menu.



Tap the Master 1 button to assign the submaster to Master 1.

Tap the Master 2 button to assign the submaster to Master 2.

(Note: make sure that on the faders that feed the submaster that you're not double-assigning master and submaster!)

Tap the EQ on button to engage EQ on the submaster mix. Tap the EQ tab to adjust the equalizer.

Tap the DN on button to engage compression and limiting. Tap on the Limiter and Compressor tab to adjust those settings.

A virtual fader is drawn on the submaster screen; it follows the physical fader and the motorized fader will follow the virtual one.

## Master 1 Level, EQ, Dynamics

Tap on the drawing of the M1 knob below the master meter to open the Master 1 menu.



Use the fader on the screen to adjust the level.

Turn on the Equalizer by tapping EQ ON.

Turn on the Compressor/Limiter by tapping DN ON.

Adjust the EQ, Compressor, and Limiter functions by tapping on their tabs and adjusting them.

The Master fader will remain at the level it was last set, even after a power failure.

## Master 2 Level

Tap on the drawing of the M2 knob below the master meter to open the Master 2 menu.



Use the fader on the screen to adjust the level.

Turn on the Equalizer by tapping EQ ON.

Turn on the Compressor/Limiter by tapping DN ON.

Adjust the EQ, Compressor, and Limiter functions by tapping on their tabs and adjusting them.

The Master fader will remain at the level it was last set, even after a power failure.

## Studio Level

This non-motorized fader controls the level of the studio monitors. It is a slider in the lower right corner of the monitor module.

## Monitor Level

This non-motorized fader controls the level of the control room monitor. It is a slider next to the studio fader.

## Cue Level

The round knob next to the cue speaker controls the cue volume.

## Softkeys

These user-definable buttons are on the monitor touchscreen and can be programmed for a variety of purposes.

## Chapter 9 Maintenance



### Opening The Console

Each module has two screws along the top rear edge and four screws on top that hold it into the frame.

Remove all of the screws for each module you need to take out.

There is an access hole drilled on the bottom of the frame above the wrist rest under each module. Using a screwdriver, gently push up the front of the module through the access hole to pop it out of the frame.

After you have popped up the first module, you can easily lift out the others from the frame.

### How the Modules Connect

There is a RJ connector on the module that leads to the circuit card in the frame.

Each fader gets its address from the tray when it connects; the module connected to Fader 1 is faders 1-6; fader 2 is faders 7-12, fader 3 is faders 13 – 18, fader 4 is 19-24, and so on. There is also a connector marked “monitor” to connect the monitor module.

Note that there are two RJ connectors on each module. One is an ethernet connector on the mini computer and one is the communications cable going to the tray.

If you plug the communications cable into the mini computer, you won't damage anything, but you won't get power and data to the module.

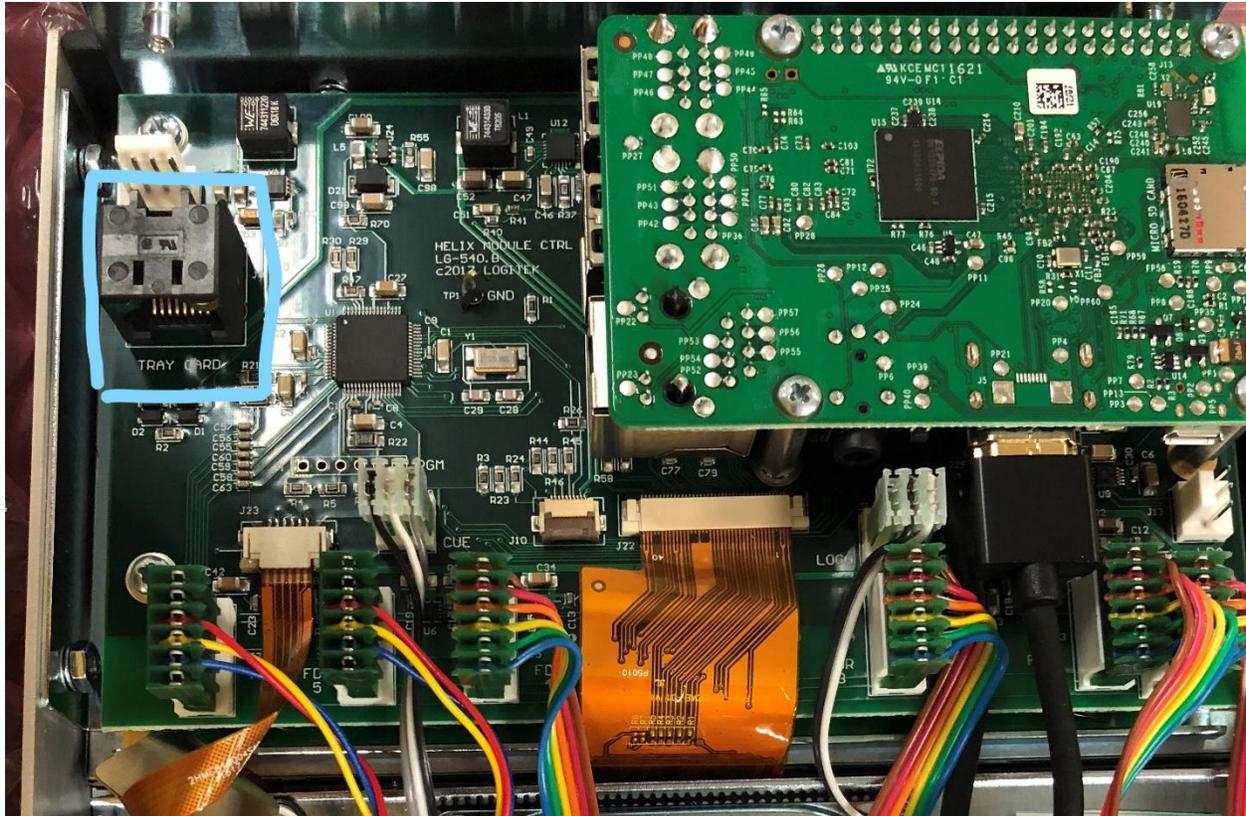


Figure 4: The tray card plugs into the connector marked above. The mini computer is the card to the right that's bolted on top of the module control card.

## Replacing The Mini Computer

The touchscreen is driven by a commonly available mini computer running a custom build of Linux.

There is one in each module.

If the mini computer needs to be replaced, support will advise you to remove the screws and HDMI cable and swap it.

A Micro SD card contains the operating system. If the card needs to be replaced, support will advise you to change the card.

The first time the card boots up, it follows this sequence:

1. Static Logitek Logo
2. A couple of lines of commands as the file system sets up
3. A white screen
4. An animated Logitek Logo for 3 seconds
5. The module setup screen

Subsequent boots before the module type has been selected:

1. White screen for a couple of seconds.
2. An animated Logitek logo for 3 seconds.

### 3. The module setup screen

After the module type is selected and saved:

1. White screen for a couple of seconds.
2. Animated Logitek logo for 3 seconds
3. The fader or monitor screen for your console

#### Setting The Module Type



Tap the button for the type of module you have installed the SD card/mini computer into. Then tap Go! It will then load the proper screen and remember this setting.

If you tap the wrong box, or if you are moving a micro SD card from a previously booted system and need to change what it is set for, you can easily recover. Reboot the module. While the animated Logitek logo is displayed, quickly tap the screen three times. The selection menu will reappear. Make your choice and it will be saved automatically.

## Fader Replacement

Each fader is held into the module with two screws accessible from the top.

Remove the fader module and unplug it from the tray. The audio will continue to play while the module is disconnected. (You can power down the entire console if you wish and the audio will still continue to play; the audio is in the JetStream, not the Helix.)

Unplug the fader from the module.

Remove the knob.

Remove the two screws holding the fader module.

Replace the fader, screw it in, plug in the cables, plug in the module, and place the module back into the frame.

## UNAVAILABLE Error Message

If the Helix is unable to communicate with the JetStream when it boots, it will display this message on all screens:



Check the COM data cable connection going to the JetStream and reboot the console.

## Chapter 10 Two Year Limited Warranty

Logitek Electronic Systems, Inc. warrants its professional equipment (excluding Logitek Software, which is covered by a separate warranty) against defects in materials and workmanship for two years pursuant to the following terms and conditions. The warranty extends to the original purchaser only.

LOGITEK will repair or replace, at its option, at its factory without charge professional equipment if a

defect in materials or workmanship develops during the first two years following purchase, when the equipment is returned to the factory or LOGITEK authorized service centers freight prepaid with a description of the nature of the failure. No reimbursements can be made for repair charges that are not factory authorized. After repair or replacement, LOGITEK will return the equipment to the purchaser freight prepaid.

In the event that any part of this professional equipment becomes defective during the first two years following purchase, and purchaser wishes to attempt repair, purchaser may obtain a replacement part by notifying LOGITEK of the part of the equipment which has failed. LOGITEK will thereafter ship a replacement part, freight prepaid. LOGITEK may require the purchaser to return the defective part to LOGITEK freight prepaid as a condition of such replacement, either before or after LOGITEK ships the replacement part.

LOGITEK shall not be responsible for any other charges or liabilities associated with purchaser-made repairs.

No part or equipment shall be considered defective if it fails to operate due to exposure to extreme temperatures or excessive moisture in the atmosphere.

Light bulbs, batteries, potentiometers or other equipment not manufactured by Seller shall carry only the warranty, if any, of the original equipment manufacturer in effect at the time of shipment of this order; and Seller's obligation under this warranty shall be limited to such adjustment as Seller may obtain from the original manufacturer.

This limited warranty is void if equipment is modified or repaired without authorization; subjected to misuse, abuse, accident, water damage or other neglect; or has had its serial number defaced or removed. No obligation is assumed by LOGITEK to update previously manufactured equipment. Specifications are subject to change without notice. **EXCEPT AS SPECIFICALLY PROVIDED HEREIN, LOGITEK MAKES NO WARRANTY, REPRESENTATION, PROMISE, OR GUARANTEE, EITHER EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, WITH RESPECT TO THE EQUIPMENT, USER DOCUMENTATION OR RELATED TECHNICAL SUPPORT, INCLUDING THEIR QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL LOGITEK BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL, TORT, ECONOMIC, COVER, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF OR INABILITY TO USE LOGITEK PRODUCTS, EQUIPMENT, OR SERVICES, INCLUDING, WITHOUT LIMITATION, DAMAGES OR COSTS RELATING TO THE LOSS OF PROFITS, BUSINESS, GOODWILL, DATA OR COMPUTER PROGRAMS, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO CASE SHALL LOGITEK'S LIABILITY FOR MONEY DAMAGES EXCEED THE AMOUNT PAID BY YOU FOR THE LOGITEK EQUIPMENT OUT OF WHICH SUCH CLAIM AROSE. THE FOREGOING LIMITATIONS SHALL NOT APPLY TO CLAIMS RELATING TO DEATH OR PERSONAL INJURY WHICH ARISE OUT OF PRODUCTS DEEMED TO BE CONSUMER GOODS UNDER APPLICABLE LAW.**

Some states or provinces do not allow the exclusion or limitation of implied warranties or limitation of liability for incidental or consequential damages, so the above exclusion or limitation may not apply to you.

The warranty and remedies set forth herein are exclusive and in lieu of all others, oral or written, express or implied. No Logitek dealer, distributor, agent, or employee is authorized to make any modification or addition to this warranty.

Logitek Electronic Systems, Inc.  
5622 Edgemoor Dr.  
Houston, TX 77081  
USA