

Audio Console

Sometimes called an Audio board, Audio mixer, or Audio console, these are all words to describe the same thing. A station where audio is brought in, mixed, monitored, and sent back to a destination.

Console Layout

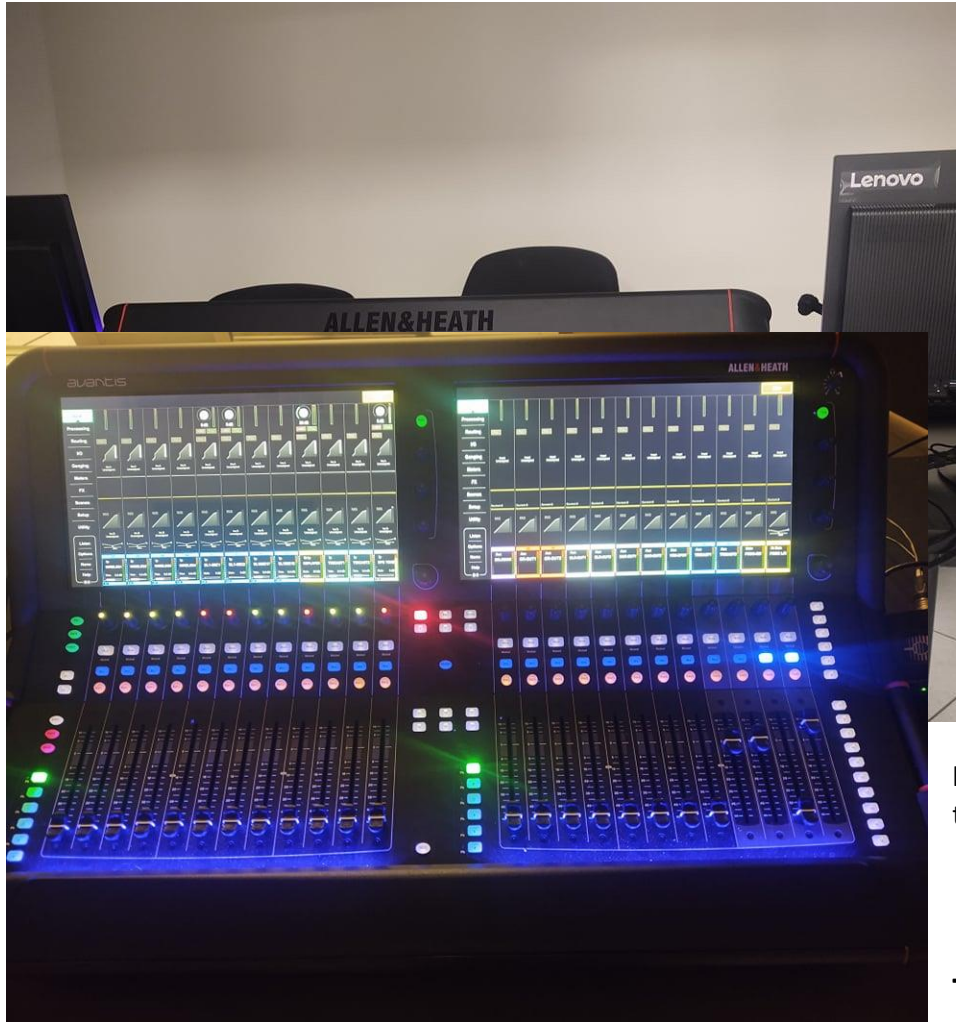


1. Touch screens
2. Touch screen control
3. Pre / Safes / Freeze Toggle channel status:
 - a. C Pre/Post - Hold down Pre, and touch a channel Name Block to toggle the sends to the active Mix between pre or post fade. Toggle all channels pre/post by touching a master mix Name

Block. Assignments and pre/post settings for the selected channel or Mix are also available in the Routing screen. •

- b. Safes - Hold down Safes and press a Name Block to make the channel safe from Scene recall. To make only a selection of parameters safe, use the Scenes / Global Safes screen.
 - c. Freeze in Layers - Hold down Freeze in Layers and press a Name Block to lock a channel in place across all layers.
4. Soft Keys
 5. Copy/Paste/Reset
 6. Layers
 7. Fader Banks
 8. Strip Rotary Mode

Powering the audio board



Turn on and off the Allen & Heath Audio Board by locating the switch on the back of the machine. The switch can be located on the back side all the way to the right.

When the board is on, monitors and buttons will light up. The left side of the board controls the channel Stripes for input audio sources. The right-side of the board controls all the output sources.

Each Channel strip is labeled on the bottom of the LCD screen

Touch Screen Monitors



Above the sliders are two interactive touch-screen monitors.

The column layout of the monitors is arranged to fall into the same row as its associated slider.

At the bottom of each column on these monitors is a colored square that labels what channel each



slider's input/output is.

When a channel has an audio source coming in, the Levels bars in the LCD input will appear next to the name.

In this example "SPG TONE" is an input that emits a constant tone to the audio board.

Because this is a constant tone the audio levels in the column next to the label should hold their position rather than bouncing up and down.

Channel strips



On the left portion of the console, you will see a bank of channel strips.

Each vertical column of knobs, buttons, and faders represents an individual input channel. That set of controls simply repeats itself for each Channel Strip.

Each Slider or "Pot" represents the volume of the channel on the board. Bringing this knob up or down results the raising or lowering of the volume

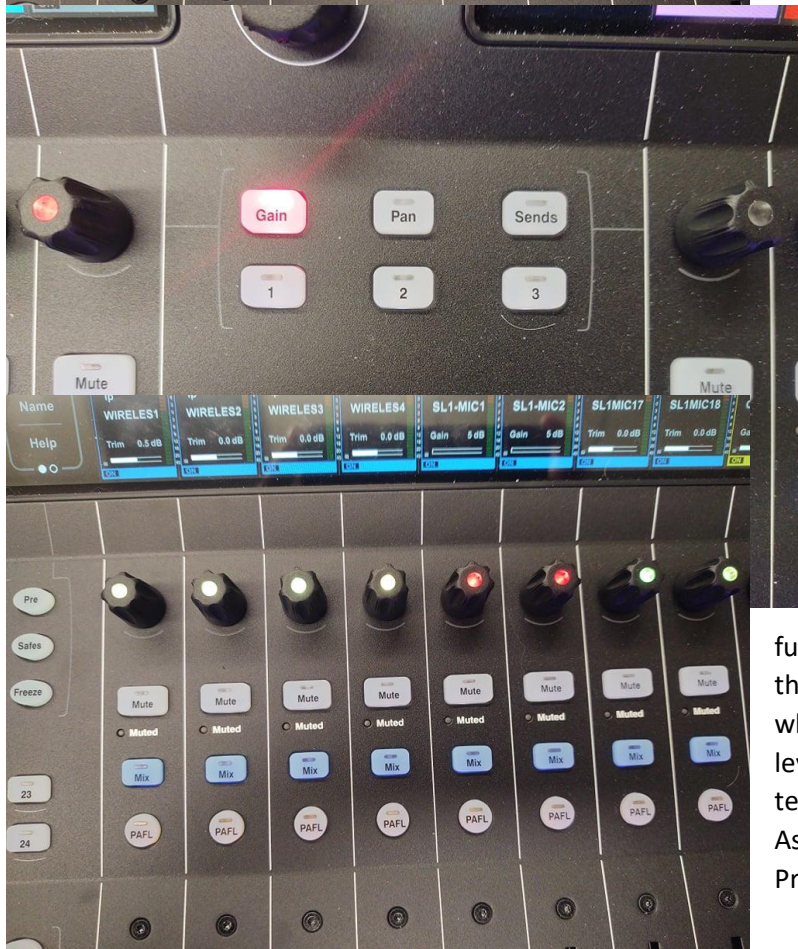
Strip Rotaries



The strip Rotaries are the knobs at the top of the Channel Strip. These Rotaries can control the preamp Gain/Trim, Pan, Sends to the active Mix.

The knobs also have 3 user-assignable functions. The color of the LED on the rotaries matches the active function.

These colors are red for Gain, yellow for Pan; and the console follows the color of the active Mix when in Sends mode.



The buttons on the center of the Board select the function of the fader strip rotary encoders.

The fader strip rotaries can control preamp Gain, Pan, Sends to the active Mix, and 3 assignable functions.

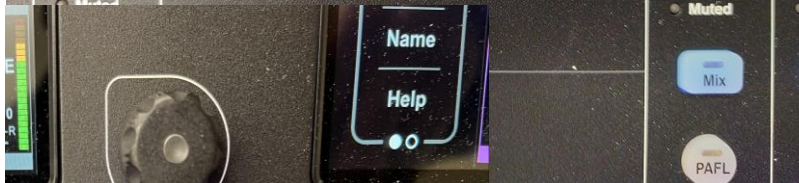
The color of the rotary LED matches the active function e.g., red for Gain, yellow for Pan; it follows the color of the active Mix when in Sends mode. The Sends function puts control of send levels to the active Mix on the strip rotaries, while the faders control the channel levels to the main mix (i.e., it temporarily disables 'sends on faders') Assign these using the Setup / Control / Preferences screen.

Gain

Adjusting the gain of a mic will boost the volume of the mic, but will also add noise in the background. Add gain if the audio input source is too quiet despite the slider potted all the way up.



To adjust the gain of an input source, make sure the Gain selection is clicked. This will change the colors of the LEDs on the Strip Rotaries to show Gain is active. Turn the Rotary clockwise to turn the gain up. Turn counterclockwise to turn the gain down.



PAN

The pan function on the console distributes sound across the stereo create balance or a special effect.

Panning is usually done on a left/right spectrum. When the pan knob is turned left or right the audio will move to the side and will only be heard, or predominantly heard through one speaker.



Mute

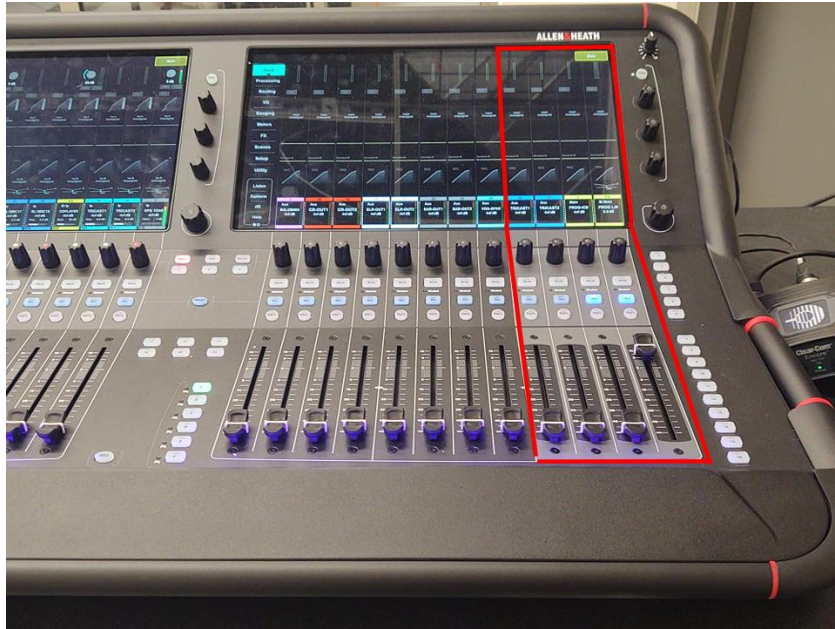


The "Mute" button can be found above the "Mix" button, and below the Rotaries.

Pressing the "Mute" button silence any audio output of the signal, regardless of the sliders level.

The button on the audio console will light up to show the Mute is active

Main Mix



The main output for the board is adjusted on the right of the board. The main mixes are easily identifiable as the color of the console around these stripes are different.

These levels control the level of the final mix as it is broadcast to its corresponding source.

For example, adjusting the slider labeled “PROG L/R” will adjust the volume of the audio going out to Program Record. The Pot for “TRICAST1” and “TRICAST2” will correspond to

the left and right sides of the Tricaster mix.

Using the main mix, pot up the slider from the infinity symbol to the “0”. Once this is set adjust the audio as needed on the input channels to make them louder or softer.

Mix settings



Below the Mute button is a blue button labeled “Mix.” This button is used to adjust the send level to a bus.

Press the mix button, and the sliders will move to their programmed configuration associated with each output.

For example, pressing the “Mix” button above an output slider such as “TRICAST1” will bring up the sub-mix that has been programmed for that output.

Once the mix has been pressed adjusting the send is done by moving sliders to their desired level and then hitting the “Mix” button again.



This will return the board to the main mix.

Powering Off

To power off the audio board, press the switch on the back of the board to the off position.

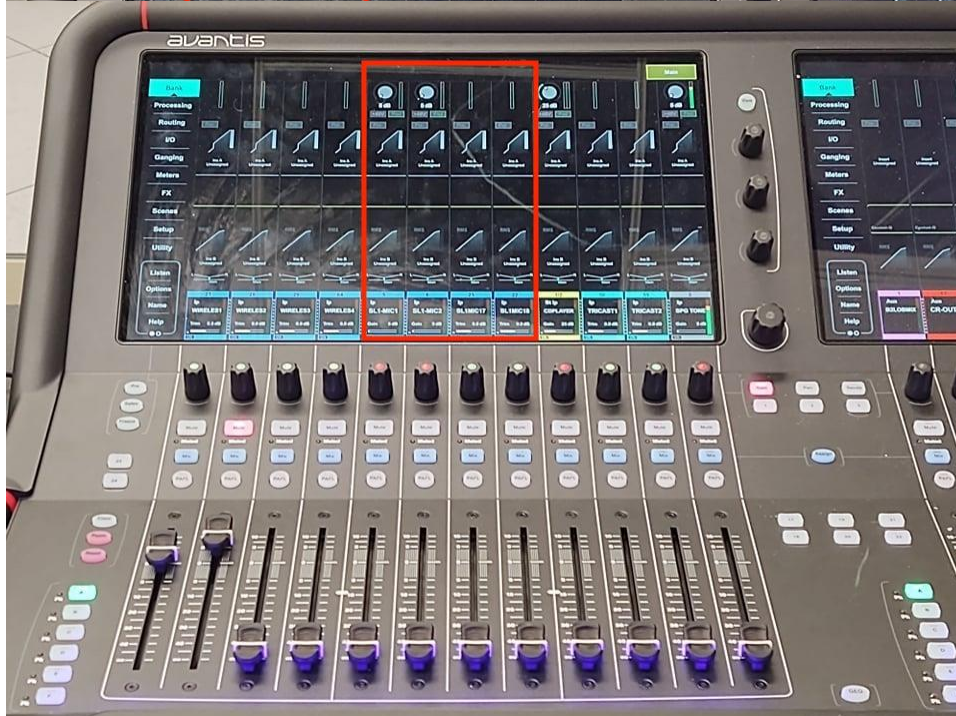


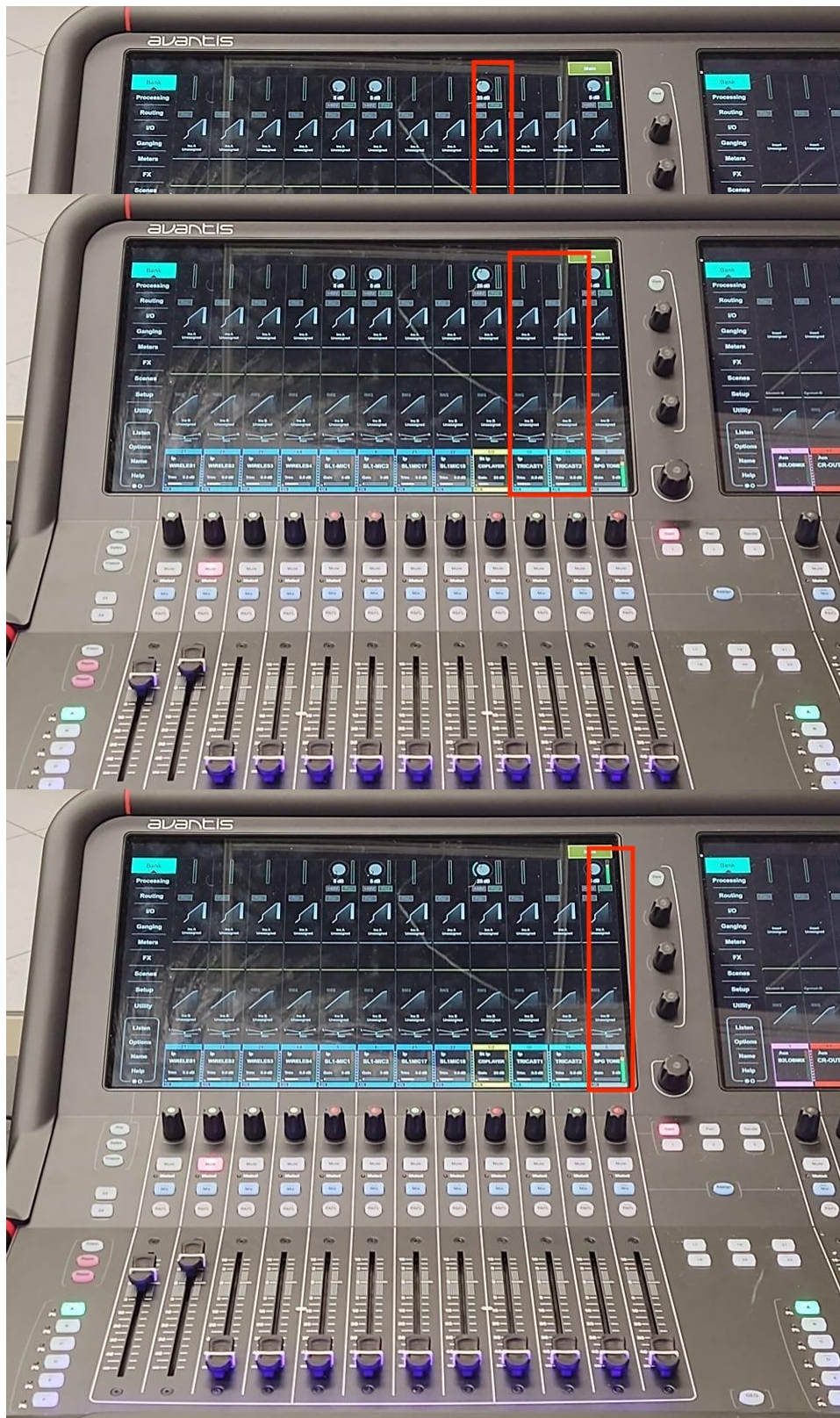
Commonly Used Sources

The input sources labeled “WIRELESS1-4” are the studio mics and will be the most commonly used for studio work.



(Photo of Dante box) “SL1-MIC1”, “SL1-MIC2”, “SL1MIC17”, and “SL1MIC18” are inputs associated with the Dante I/O Box in the studio.





“CDPLAYER” adjusts the audio coming in from the CD player located next to the TriCaster.

“TRICAST1” & “TRICAST2” adjust the input from the TriCaster. These are the Left and right Channels, respectively. If audio is only coming through one side of the mix, checking the “mix” of both these sources is recommended. This source is also used for Packages and audio payout through the Tricaster DDRs.

“SPG TONE” stands for SYNC Pulse Generator, the audio tone used for synchronizing and troubleshooting audio in a broadcast environment.