

# Mixer Configurations

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# — NETWORK CONFIGURATION —

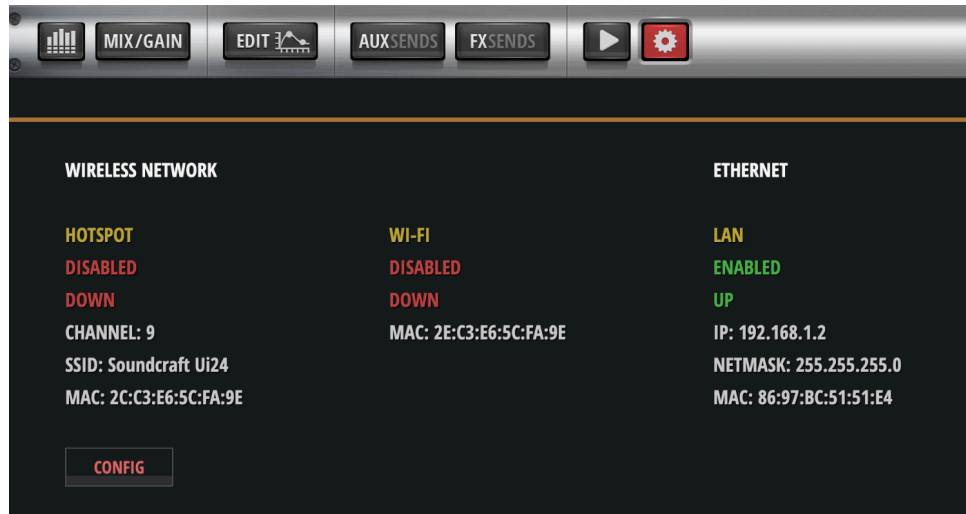
## Router Configuration

### 2.4 GHz band

Wi-Fi name: TBC\_2.4GHZ  
Wi-Fi password: bunker99  
Security type: WPA2 Personal

### 5 GHz band

Wi-Fi name: TBC\_5GHz  
Wi-Fi password: bunker99  
Security type: WPA2 Personal



**Router Admin password:** bunker99

### Soundcraft UI24 Mixer

Username: admin

**Mixer Admin password:** 1234

<b>ROUTER IP</b> 192.168.8.1	<b>Raspberry PI Ethernet WebAccess:</b> <a href="http://192.168.0.203:9999">http://192.168.0.203:9999</a>
<b>SOUNDCRAFT UI</b> <a href="http://192.168.1.2">http://192.168.1.2</a>	<b>Wifi Access.</b> <a href="http://192.168.0.232:9999">http://192.168.0.232:9999</a>

# — CHANNEL INPUTS —

Channel	CHANNEL (Player)	Input Type
1	Kick Drum (Andrew)	XLR Mic/Line Input
2	Snare Drum (Andrew)	XLR Mic/Line Input
3	Rack Tom (Andrew)	XLR Mic/Line Input
4	Floor Tom (Andrew)	XLR Mic/Line Input
5	Drum VOX (Andrew)	XLR Mic/Line Input
6	Bass Guitar (Chris)	XLR Mic/Line Input
7	Lead Guitar 1 (Claiborne)	XLR Mic/Line Input
8	Rhythm Guitar (Josh)	XLR Mic/Line Input
9	Lead Guitar 2 (Travis)	XLR Mic/Line Input
10	Keyboard (Jordan)	XLR Mic/Line Input
11	Synthesizer (Jordan)	XLR Mic/Line Input
12	Trumpet (Jordan)	XLR Mic Input
13	Jordan Vox (Jordan)	XLR Mic Input
14	Josh Vox (Josh)	XLR Mic Input
15	Travis Vox 3 (Travis)	XLR Mic Input
16	ROOM MIC	XLR Mic Input

## — AUX SENDS (IEMS) —

AUX Channel	Member
AUX 1	Andrew
AUX 2	Claiborne (L)
AUX 3	Claiborne (R)
AUX 4	Josh (L)
AUX 5	Josh (R)
AUX 6	Jordan
AUX 7	Chris
AUX 8	Travis
Headphone 1	Open
Headphone 2	Open

# — GAIN STAGING —

CHANNEL (Instrument)	Gain Staging Recommendations
1. Kick Drum	Set gain so that the <b>kick peaks around -6 dB</b> . Leave <b>extra headroom</b> for dynamic peaks.
2. Snare Drum	Aim for <b>snare to hit -6 dB on peaks</b> . Snare mics tend to need <b>slightly more gain</b> .
3. Rack Tom	Set gain for <b>-10 dB average</b> with peaks around <b>-6 dB</b> for tom hits. Adjust for tom size (smaller toms need more gain).
4. Floor Tom	Like the rack tom, aim for <b>-10 dB to -6 dB</b> on peaks. The floor tom may need <b>less gain</b> than rack toms.
5. Drum Vocal	<b>Vocal mics</b> tend to require more gain. Set input gain for <b>consistent level around -12 dB</b> , with peaks no higher than -6 dB.
6. Bass Guitar (Chris)	For bass, aim for <b>-12 dB average</b> input level. DI bass typically requires less gain compared to mics.
7. Lead Guitar 1 (Claiborne)	Set gain for <b>-12 dB average</b> , with <b>peaks around -6 dB</b> . Electric guitar signals from DI usually require less gain.
8. Rhythm Guitar (Josh)	Like the lead guitar, set for <b>-12 dB average</b> , peaking around <b>-6 dB</b> . DI guitars will be naturally higher in volume.
9. Lead Guitar (Travis)	Same approach as other guitar channels: <b>-12 dB average</b> with <b>peaks around -6 dB</b> .
10. Keyboard	Keyboards have wide dynamic range, so aim for <b>-12 dB average</b> , leaving headroom for peaks (up to -6 dB).
11. Synthesizer	Like keyboard, set gain for <b>-12 dB average</b> , peaks up to <b>-6 dB</b> . Synths might need slightly less gain than keyboards.
12. Trumpet	Set gain for <b>-12 dB average</b> . Trumpets can have loud transients, so leave <b>headroom for peaks at -6 dB</b> .
13. Jordan Vox	Vocals typically need more gain. Set for <b>-12 dB average</b> , with peaks at <b>-6 dB</b> . Adjust as needed during soundcheck.
14. Josh Vox (Lead)	Same as Jordan Vox, aim for <b>-12 dB average</b> , with <b>-6 dB peaks</b> . Adjust based on vocal intensity.
15. Travis Vox 3	<b>Vocals need strong gain</b> , so aim for <b>-12 dB average</b> and watch for <b>peaks around -6 dB</b> . Adjust during soundcheck.
16. ROOM	If using a room mic for ambience, set gain lower, aiming for <b>-18 dB average</b> , with peaks around <b>-12 dB</b> .

## General Gain Staging Tips:

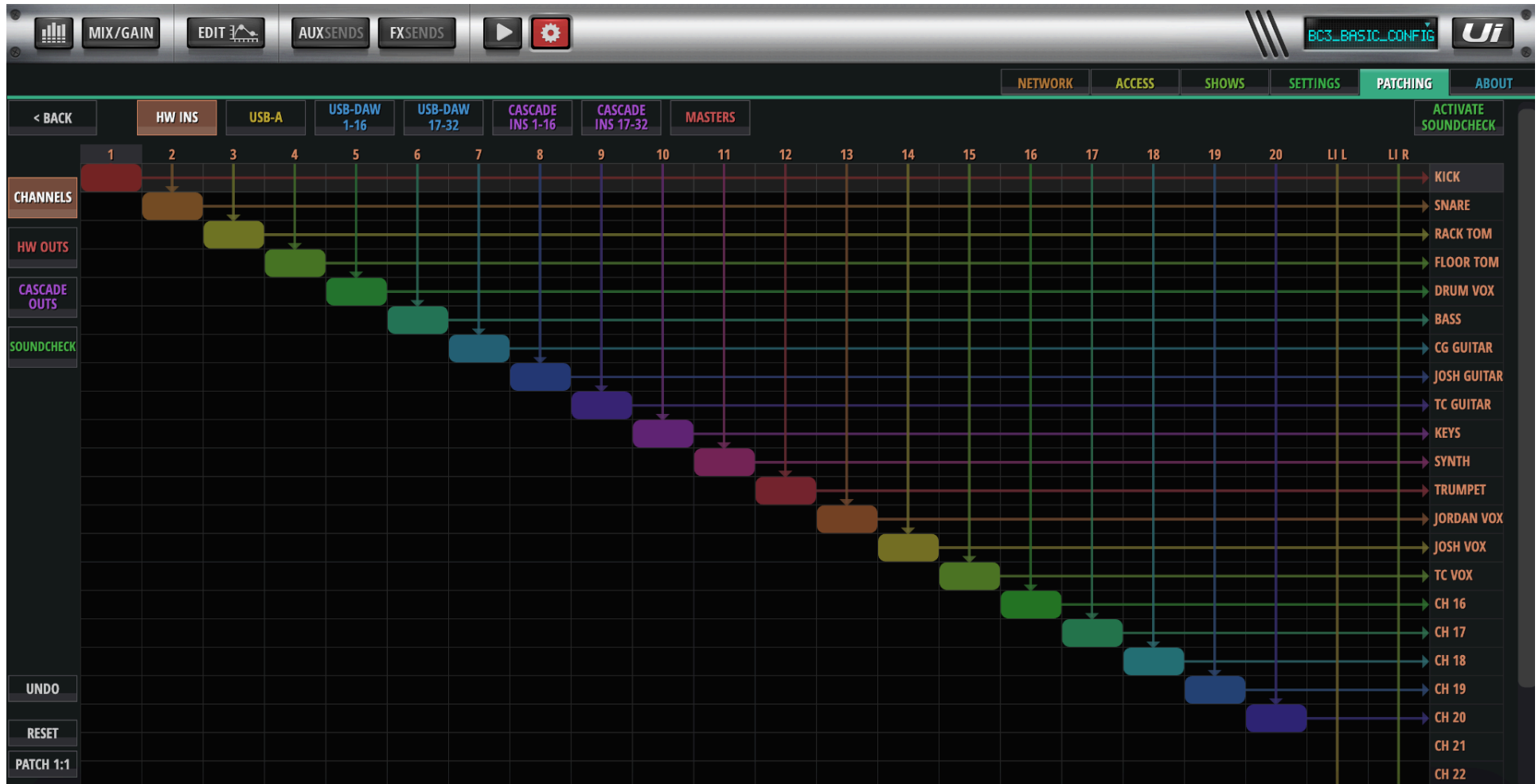
- **Faders at Unity:** Start with all channel faders at 0 dB (unity gain).
- **Line-Level Inputs:** Instruments like guitars, keyboards, or bass (when using DI) typically need less gain than microphones.
- **Metering:** Monitor signal levels to stay between -12 dB to -6 dB, ensuring no clipping.
- **Dynamic Mics:** Typically need more gain compared to condenser mics.

# — EQ CONFIGURATION —

CHANNEL (Instrument)	Low Frequency (FREQ / Q / GAIN)	Mid Frequency (FREQ / Q / GAIN)	High Frequency (FREQ / Q / GAIN)	Low Cut (Hz)
1. Kick Drum	50 Hz / 1.0 / +4 dB	250 Hz / 2.0 / -3 dB	5 kHz / 1.5 / +3 dB	None
2. Snare Drum	200 Hz / 1.0 / +3 dB	600 Hz / 2.0 / -3 dB	3 kHz / 2.0 / +4 dB	120 Hz / 24 dB slope
3. Rack Tom	120 Hz / 1.0 / +3 dB	400 Hz / 1.5 / -2 dB	N/A	120 Hz / 24 dB slope
4. Floor Tom	80 Hz / 1.0 / +4 dB	300 Hz / 2.0 / -2 dB	N/A	120 Hz / 24 dB slope
5. Drum VOX	N/A	N/A	4 kHz / 1.5 / +3 dB	120 Hz / 24 dB slope
6. Bass Guitar (Chris)	60 Hz / 1.0 / +4 dB	250 Hz / 1.5 / -3 dB	1.5 kHz / 2.0 / +2 dB	None
7. Lead Guitar 1 (Claiborne)	150 Hz / 1.0 / +2 dB	500 Hz / 1.5 / -2 dB	4 kHz / 2.0 / +3 dB	120 Hz / 24 dB slope
8. Rhythm Guitar (Josh)	200 Hz / 1.0 / +3 dB	500 Hz / 1.5 / -2 dB	2.5 kHz / 1.5 / +2 dB	120 Hz / 24 dB slope
9. Lead Guitar 2 (Travis)	120 Hz / 1.0 / +2 dB	400 Hz / 1.5 / -2 dB	3.5 kHz / 1.5 / +3 dB	120 Hz / 24 dB slope
10. Keyboard (Jordan)	100 Hz / 1.0 / +3 dB	500 Hz / 1.5 / -2 dB	3 kHz / 2.0 / +2 dB	120 Hz / 24 dB slope
11. Synthesizer (Jordan)	80 Hz / 1.0 / +3 dB	500 Hz / 1.5 / -2 dB	2 kHz / 2.0 / +2 dB	120 Hz / 24 dB slope
12. Trumpet (Jordan)	150 Hz / 1.0 / +2 dB	500 Hz / 1.5 / -2 dB	4 kHz / 2.0 / +3 dB	120 Hz / 24 dB slope
13. Jordan Vox	N/A	200 Hz / 1.5 / -3 dB	4 kHz / 1.5 / +3 dB	120 Hz / 24 dB slope
14. Josh Vox	N/A	250 Hz / 1.5 / +2 dB	4 kHz / 1.5 / +3 dB	120 Hz / 24 dB slope
15. Travis Vox 3	N/A	250 Hz / 1.5 / +2 dB	4 kHz / 1.5 / +3 dB	120 Hz / 24 dB slope
16. ROOM MIC	N/A	200 Hz / 1.5 / -3 dB	3.5 kHz / 1.5 / +3 dB	100 Hz

# — PATCHING CONFIGURATION —

\*\*no changes \*\*





# — FX CONFIGURATION —

CHANNEL (Instrument)	FX1 Reverb	FX2 Reverb	FX3 Delay	FX Room
1. Kick Drum				I (1/10)
2. Snare Drum		I (1/10)		II (2/10)
3. Rack Tom				II (2/10)
4. Floor Tom				III (3/10)
5. Drum VOX	II (2/10)		II (2/10)	
6. Bass Guitar				I (1/10)
7. Lead Guitar 1 (Claiborne)	III (4/10)		III (4/10)	
8. Rhythm Guitar (Josh)	II (2/10)			III (3/10)
9. Lead Guitar 2 (Travis)	III (3/10)		III (4/10)	
10. Keyboard	III (4/10)			III (3/10)
11. Synthesizer	III (3/10)		I (1/10)	I (1/10)
12. Trumpet	III (3/10)	II (2/10)		II (2/10)
13. Jordan Vox	III (4/10)		III (3/10)	
14. Josh Vox	III (4/10)		III (4/10)	
15. Travis Vox 3	III (4/10)			
16. ROOM MIC	III (3/10)			

# Recommended FX Parameters for Each FX Processor

FX Type	FX Name	Time / Decay	HF (High Frequency)	LPF (Low-Pass Filter)	HPF (High-Pass Filter)	Feedback (Delay)	Mix (Wet/Dry)
FX1	Large Reverb	2.0s	50%	18.0 kHz	80 Hz		30%
FX2	Plate Reverb	1.5s	60%	20.0 kHz	120 Hz		25%
FX3	Delay	400 ms (1/4 note)		16.0 kHz	200 Hz	30%	40%
FX4	Room Reverb	0.8s	40%	16.0 kHz	100 Hz		25%

- **FX1 Reverb:** Best for giving space to vocals, lead guitars, and synths. The large reverb tail (2.0s) and balanced high frequencies will provide a polished and expansive sound.
- **FX2 Reverb:** Perfect for a snare drum or trumpet where you need a brighter and quicker reverb. It helps instruments stand out without cluttering the mix.
- **FX3 Delay:** Used primarily for vocals and lead guitars to add depth and rhythmic space. Set at 400 ms to create echo repeats in sync with most songs.
- **FX4 Room:** Best suited for drums, bass, and rhythm guitars to keep their presence while adding just enough room reflections to make them sit well in the mix.

# FX Parameters

## FX1 Reverb

- Time: Controls the length of the reverb tail.
- HF (High Frequency): Adds brightness to the reverb.
- Bass: Controls the low frequencies of the reverb.
- LPF (Low-Pass Filter): Adjusts the highest frequency passed.
- HPF (High-Pass Filter): Adjusts the lowest frequency passed.
- Pre-delay: Time before reverb starts.

## FX3 Delay

- Time: Controls delay time between repetitions.
- Feedback: Adjusts the number of delay repeats.
- LPF: Controls the highest frequency that passes through the delay.
- Subdivision: Sets the rhythmic division of the delay (e.g., quarter notes).
- BPM: Tempo sync for the delay.

## FX Room

- Time: Shorter decay times for tight spaces.
- HF (High Frequency): Adds or reduces brightness.
- Bass: Adjusts low-frequency response.
- LPF / HPF: Adjusts high and low-frequency filters.

# — COMPRESSION CONFIGS —

CHANNEL (Instrument)	Threshold (dB)	Ratio	Attack (ms)	Release (ms)	Makeup Gain (dB)	Notes
1. Kick Drum	-6 dB	4:1	20 ms	150 ms	+3 dB	Fast attack to control the kick punch, moderate release.
2. Snare Drum	-10 dB	5:1	10 ms	100 ms	+2 dB	Tight snare control, fast attack to catch transients.
3. Rack Tom	-8 dB	3:1	15 ms	200 ms	+2 dB	Moderate compression to control peaks.
4. Floor Tom	-10 dB	4:1	10 ms	250 ms	+3 dB	Slower release to let the toms breathe.
5. Drum Vocal	-6 dB	3:1	20 ms	120 ms	+2 dB	Moderate compression to control dynamics.
6. Bass Guitar (Chris)	-8 dB	4:1	25 ms	200 ms	+4 dB	Slower attack to let low-end through, smooth compression.
7. Lead Guitar 1 (Claiborne)	-8 dB	3:1	15 ms	150 ms	+3 dB	Gentle compression to even out guitar dynamics.
8. Rhythm Guitar (Josh)	-10 dB	3:1	10 ms	150 ms	+3 dB	Moderate compression to even strumming dynamics.
9. Lead Guitar (Travis)	-8 dB	3:1	15 ms	150 ms	+3 dB	Similar to Lead Guitar 1, keeps solos under control.
10. Keyboard	-12 dB	2:1	25 ms	100 ms	+2 dB	Gentle compression, keeping dynamics controlled.
11. Synthesizer	-10 dB	2:1	20 ms	120 ms	+2 dB	Gentle compression for sustained notes.
12. Trumpet	-6 dB	3:1	10 ms	150 ms	+2 dB	Fast attack to catch peaks, smooth release.
13. Jordan Vox	-10 dB	3:1	10 ms	120 ms	+3 dB	Compression for presence, fast attack for clarity.
14. Josh Vox (Lead)	-12 dB	4:1	5 ms	100 ms	+4 dB	Lead vocals need tighter control to sit well in the mix.
15. Travis Vox 3	-10 dB	3:1	10 ms	120 ms	+3 dB	Similar to Jordan Vox for consistent vocal dynamics.
16. ROOM	-10 dB	3:1	10 ms	120 ms	+3 dB	Similar to other vocals for balance.

# Compression Parameters

**Threshold:** The lower the threshold, the more compression is applied. Adjust the threshold so the compressor engages only when the signal exceeds the desired level. Lower thresholds (-12 dB) are ideal for instruments that need more control (e.g., vocals), while higher thresholds (-6 to -8 dB) work well for kick and snare.

**Ratio:** A ratio of 3:1 is common for most instruments, as it gives gentle control. For vocals or more dynamic sources, you may increase the ratio to 4:1 or even 5:1 for tighter control.

**Attack:** Faster attacks (5-20 ms) are ideal for catching transients, especially for instruments like snare or vocals. Slower attacks (20-25 ms) are better for bass and other instruments that need some initial transients to pass through for a natural sound.

**Release:** The release time determines how long the compressor holds on after the signal drops below the threshold. Faster releases (100-150 ms) keep the compression responsive, while slower releases (200-250 ms) are useful for instruments like toms and bass where you want to preserve sustain.

**Makeup Gain:** After compression, use the makeup gain to bring the signal back to its original level, or slightly above, compensating for the reduction in dynamic range caused by compression.

# — ACCESS CONTROLS —

This configuration ensures you retain full control over global settings and the main mix, while allowing each band member to manage their own AUX SENDS for In-Ear Monitoring (IEM).

## Master Password Protection:

**Enable:** Set a master password to protect access to the global settings, mix levels, and processing.

You will be the only one with access to:

- Mix Levels
- Mix Processing
- Load/Modify Shows
- Global Settings
- Master Levels and Processing

# — GLOBAL SETTINGS —

Setting	Current	Recommendation	Notes
<b>Solo Routing</b>	Master + HP	Keep as is (or Headphones)	If you prefer to hear only the soloed channel, switch to <b>Headphones</b> .
<b>HP Channels</b>	L/R	Keep as is	If using stereo headphones/IEMs, L/R is good. Change to <b>R/L</b> for mono setups.
<b>Solo Mode</b>	Single	Consider <b>Multiple</b>	Use <b>Multiple</b> if you need to solo more than one channel at a time.
<b>Solo Type</b>	PFL	Consider <b>AFL</b>	Use <b>AFL</b> to hear post-fader (actual mix levels) during performances. Use <b>PFL</b> for gain troubleshooting.
<b>2CH Record Format</b>	16 bit	Consider <b>24 bit</b>	For higher quality live recordings, <b>24 bit</b> provides better dynamic range.
<b>Multitrack Format</b>	FLAC 24	<b>WAV 24</b> for best quality	<b>FLAC 24</b> is fine for space-saving, but <b>WAV 24</b> is more compatible and higher quality for mixing.
<b>Aux Send Mute Inheritance</b>	ON	Keep <b>ON</b>	Ensures when a channel is muted, it's also muted in the monitor mix (recommended for live shows).
<b>Master MTX Send Point</b>	POST	Keep as is	Keeps the matrix post-fader and post-processing, ideal for live performance.
<b>Reset +48V on Boot</b>	OFF	Keep <b>OFF</b>	Safe default to avoid phantom power issues when rebooting.
<b>HDMI Underscan</b>	ON	Keep as is	Useful when using an external monitor to avoid screen cropping.
<b>Solo Level, Headphone 1/2 Volume</b>	Default	Adjust as needed	Adjust these for comfortable monitoring levels depending on your IEM or headphone use.

# — FEEDBACK SUPPRESSION —

## Recommended AFS2 Feedback Suppression Settings

Setup AFS2 on the master stereo output channel by navigating to the channels edit screen and selecting EQ tab.

Parameter	Recommended Setting	Notes
<b>Mode</b>	<b>Fixed</b> during soundcheck	Notches out feedback-prone frequencies before the show.
<b>Mode</b>	<b>Live</b> during the performance	Automatically suppresses unexpected feedback in real time.
<b>Sensitivity</b>	<b>Medium</b> (default)	Balances catching feedback while preserving sound quality.
<b>Fixed Filters</b>	<b>5–7 filters</b>	Use during soundcheck to target major feedback frequencies.
<b>Live Filters</b>	<b>3–5 filters</b>	Allows for real-time feedback adjustments during the performance.
<b>Lock Mode</b>	Enable after soundcheck (optional)	Prevents further adjustments once you're confident in the setup.