

Mixer Configurations



— NETWORK CONFIGURATION —	2
Router Configuration.....	3
— CHANNEL INPUTS —	3
— AUX SENDS (IEMS) —	4
— EQ CONFIGURATION —	6
— PATCHING CONFIGURATION —	7
— FX CONFIGURATION —	8
Recommended FX Parameters for Each FX Processor.....	9
FX Parameters.....	10
— COMPRESSION CONFIGS —	11
Compression Parameters.....	12
— ACCESS CONTROLS —	13
Master Password Protection:.....	13
— GLOBAL SETTINGS —	14
— FEEDBACK SUPPRESSION —	15
Recommended AFS2 Feedback Suppression Settings.....	15
— GAIN STAGING —	16

— 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

ROUTER IP 192.168.8.1	Raspberry PI Ethernet WebAccess: http://192.168.0.203:9999
SOUNDCRAFT UI http://192.168.1.2	Wifi Access. http://192.168.0.232:9999

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

General Gain Staging Tips:

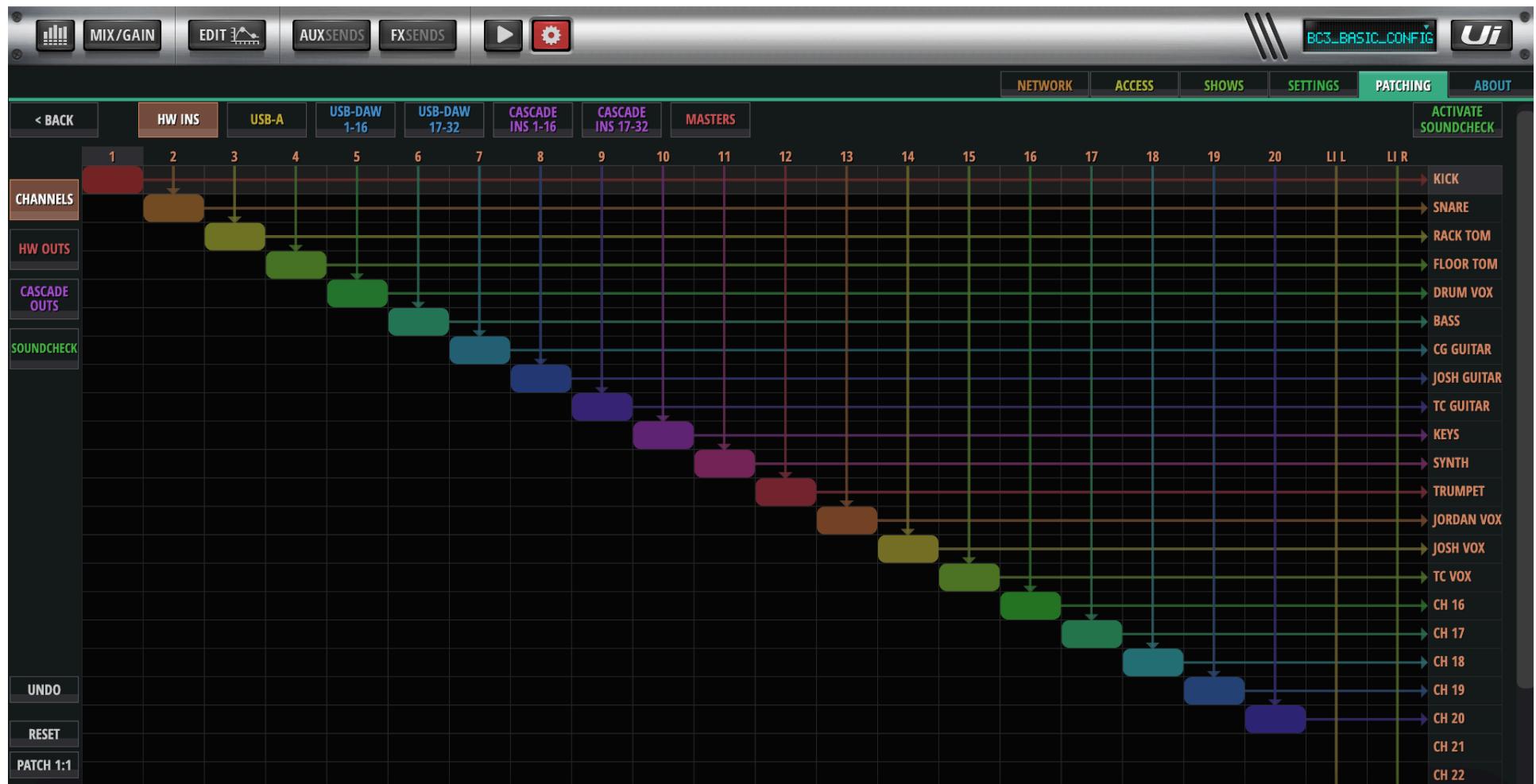
- **Faders at Unity:** Start with all channel faders at 0 dB (unity gain).
- **Line-Level Inputs:** Instruments like guitars, keyboards, or bass (when using DI) typically need less gain than microphones.
- **Metering:** Monitor signal levels to stay between -12 dB to -6 dB, ensuring no clipping.
- **Dynamic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

— EQ CONFIGURATION —

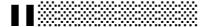
CHANNEL (Instrument)	Low Frequency (FREQ / Q / GAIN)	Mid Frequency (FREQ / Q / GAIN)	High Frequency (FREQ / Q / GAIN)	Low Cut (Hz)
1. Kick Drum	50 Hz / 1.0 / +4 dB	250 Hz / 2.0 / -3 dB	5 kHz / 1.5 / +3 dB	None
2. Snare Drum	200 Hz / 1.0 / +3 dB	600 Hz / 2.0 / -3 dB	3 kHz / 2.0 / +4 dB	120 Hz / 24 dB 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				 (1/10)
2. Snare Drum		 (1/10)		 (2/10)
3. Rack Tom				 (2/10)
4. Floor Tom				 (3/10)
5. Drum VOX	 (2/10)		 (2/10)	
6. Bass Guitar				 (1/10)
7. Lead Guitar 1 (Claiborne)	 (4/10)		 (4/10)	
8. Rhythm Guitar (Josh)	 (2/10)			 (3/10)
9. Lead Guitar 2 (Travis)	 (3/10)		 (4/10)	
10. Keyboard	 (4/10)			 (3/10)
11. Synthesizer	 (3/10)		 (1/10)	 (1/10)
12. Trumpet	 (3/10)	 (2/10)		 (2/10)
13. Jordan Vox	 (4/10)		 (3/10)	
14. Josh Vox	 (4/10)		 (4/10)	
15. Travis Vox 3	 (4/10)			
16. ROOM MIC	 (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
Solo Routing	Master + HP	Keep as is (or Headphones)	If you prefer to hear only the soloed channel, switch to Headphones .
HP Channels	L/R	Keep as is	If using stereo headphones/IEMs, L/R is good. Change to R/L for mono setups.
Solo Mode	Single	Consider Multiple	Use Multiple if you need to solo more than one channel at a time.
Solo Type	PFL	Consider AFL	Use AFL to hear post-fader (actual mix levels) during performances. Use PFL for gain troubleshooting.
2CH Record Format	16 bit	Consider 24 bit	For higher quality live recordings, 24 bit provides better dynamic range.
Multitrack Format	FLAC 24	WAV 24 for best quality	FLAC 24 is fine for space-saving, but WAV 24 is more compatible and higher quality for mixing.
Aux Send Mute Inheritance	ON	Keep ON	Ensures when a channel is muted, it's also muted in the monitor mix (recommended for live shows).
Master MTX Send Point	POST	Keep as is	Keeps the matrix post-fader and post-processing, ideal for live performance.
Reset +48V on Boot	OFF	Keep OFF	Safe default to avoid phantom power issues when rebooting.
HDMI Underscan	ON	Keep as is	Useful when using an external monitor to avoid screen cropping.
Solo Level, Headphone 1/2 Volume	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
Mode	Fixed during soundcheck	Notches out feedback-prone frequencies before the show.
Mode	Live during the performance	Automatically suppresses unexpected feedback in real time.
Sensitivity	Medium (default)	Balances catching feedback while preserving sound quality.
Fixed Filters	5–7 filters	Use during soundcheck to target major feedback frequencies.
Live Filters	3–5 filters	Allows for real-time feedback adjustments during the performance.
Lock Mode	Enable after soundcheck (optional)	Prevents further adjustments once you're confident in the setup.