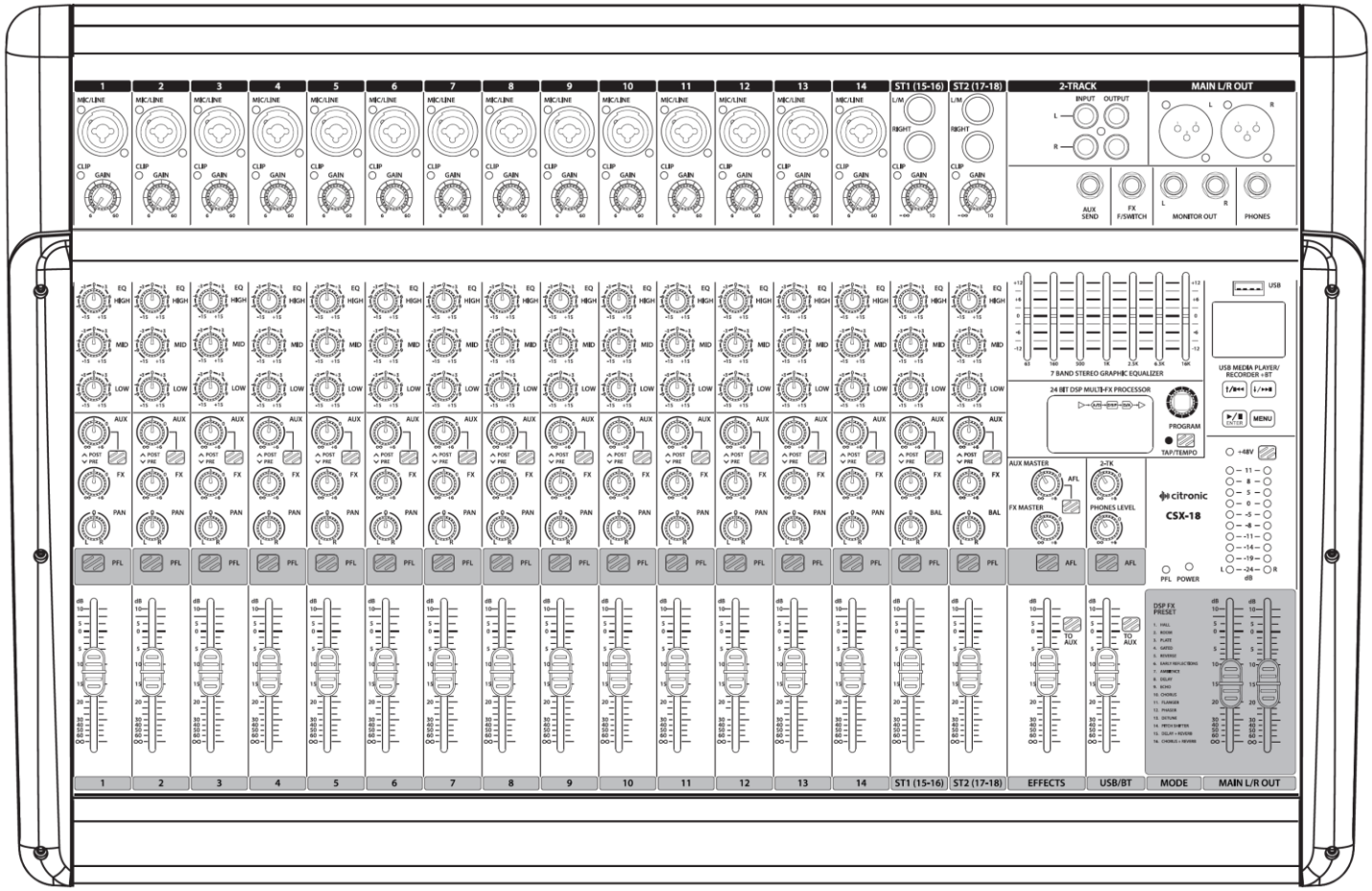
CSX-18

MIXING CONSOLE

Item ref: 170.885UK

User Manual



Version 1.0

⚠	Caution: Please read this manual carefully before operating Damage caused by misuse is not covered by the warranty

Introduction

Thank you for choosing the CSX-18 mixing console as part of your professional sound system. This product has been developed to provide comprehensive range of audio requirements with high quality, reliable results. Please read and keep this manual to achieve the best results from your purchase and avoid damage through misuse.

Package Contents

- CSX-18 mixing console
- Mains lead(s)
- User manual

If you find any accessory is missing or the product has arrived with any problems, please contact your retailer at once.

This product contains no user-serviceable parts so make no attempt to try to fix or modify this item yourself as this will invalidate the warranty. We recommend you keep the original package and proof of purchase for any possible replacement or return demand.

Warning

To prevent the risk of fire or electric shock, do not expose any of the components to rain or moisture.
If liquids are spilled on the console, stop using immediately, allow the unit to dry out and have checked by qualified personnel before further use.
Avoid impact or heavy vibration to any of the components.
No user serviceable parts inside - refer servicing to qualified service personnel.

Safety

- Ensure that the correct mains lead is used with adequate current rating and that the mains voltage is as stated on the unit
- Avoid ingress of water or particles into any part of the housing
- Do not cover or obstruct cooling vents

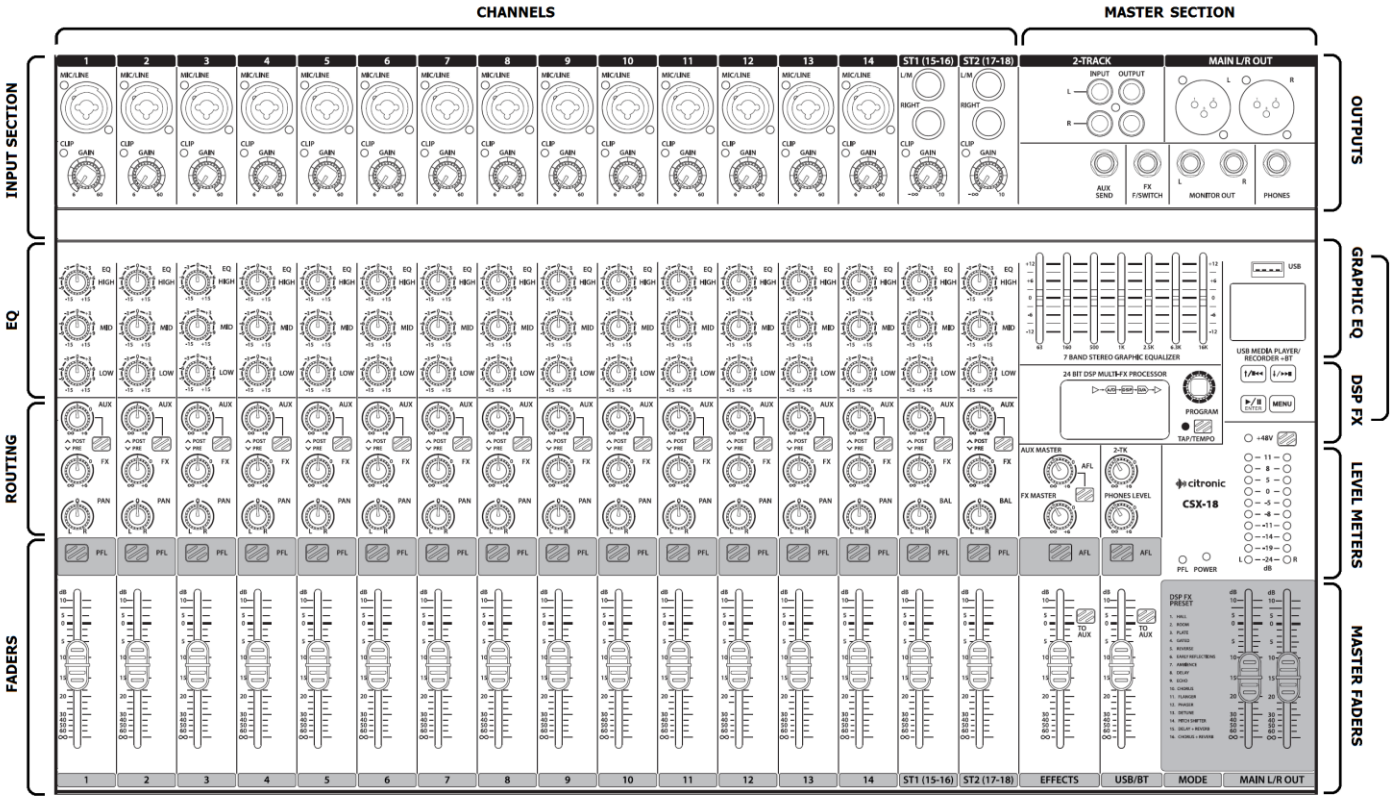
Placement

- Keep the console out of direct sunlight and away from heat sources.
- Do not place heavy objects on top of the control surface
- If rack-mounting, use the correct rack-ears and ensure adequate support for the weight of the product.
- Allow adequate space for airflow and keep the console away from damp or dusty environments.

Cleaning

- Use a soft dry or slightly damp cloth top clean surfaces of the console
- A soft brush can be used to clear debris from between controls without damaging them
- To avoid damage, do not use solvents to clean the components

Console layout

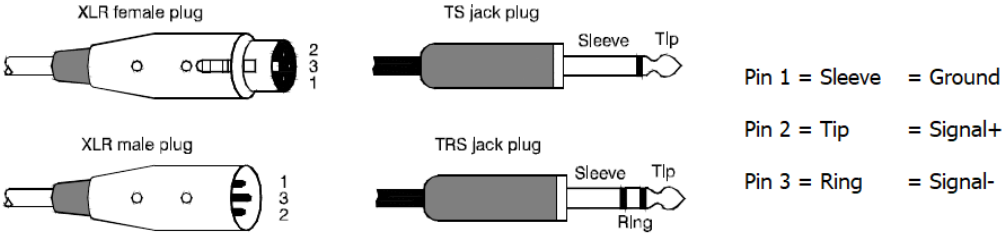


The CSX-18 has comprehensive input and output sections which can be split further into various stages of processing and routing. All preamps have studio grade, low noise architecture for the cleanest possible path throughout the signal chain.

The input stages are repeated across each channel of the console, which simplifies operation and enables quick and easy location of various controls. The following pages of this manual are divided up into these stages to explain the details and function of each control.

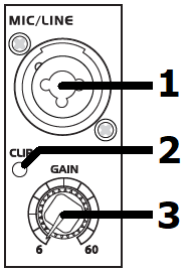
Mic/Line Input Connections

Channel inputs are provided as XLR and/or 6.3mm jack sockets.
The connections for these inputs are assigned as follows.



Channel Functions

1. MIC / Line input — Connect a balanced microphone or line input to this XLRF input. An unbalanced microphone or line signal can be connected by XLR provided that +48V phantom power is not used. Wired as follows.



Balanced	Pin 1 = Ground	Pin 2 = Signal +	Pin 3 = Signal –
Unbalanced	Pin 1 = Ground	Pin 2 = Signal +	Pin 3 = Ground

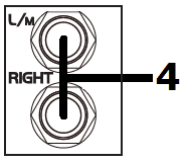
The Mic/Line input can also accept a 6.3mm balanced TRS or unbalanced TS plug (jack plug). Phantom power does not affect this connection. Wired as follows.

Balanced	Tip = Signal +	Ring = Signal –	Sleeve = Ground
Unbalanced	Tip = Signal +	Ring = Ground	Sleeve = Ground

2. Clip LED — The CLIP LED lights when the channel is being overloaded. Ideally, the Gain rotary control (described below) should be adjusted so that the loudest passages of the input signal (e.g. bass drum beats) will just momentarily trigger the CLIP LED. Anything longer than a momentary flicker of the CLIP LED means that the Gain should be reduced. Using the PFL button further down the channel strip gives a more detailed view of the channel level on the main VU LEDs.

3. GAIN control — This control trims the input signal to the optimum level for the channel strip circuitry. Too low a signal level can result in a weak signal-to-noise ratio and too high can result in overload and distortion in the signal output.

4. Stereo inputs — The two right-most input channels on the console are stereo with Left and Right 6.3mm jack inputs. Alternatively, a mono signal can be connected to the Left input jack and the channel will effectively operate as a mono channel.

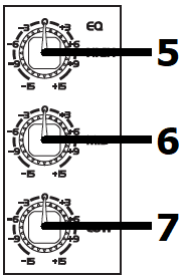


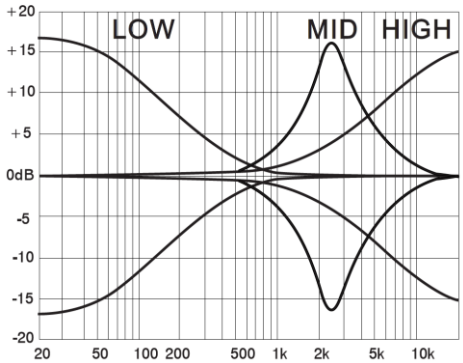
EQ Section

5. HIGH — This control can boost or cut the high frequencies (centre 12kHz) by ±15dB (12 o'clock position is zero)

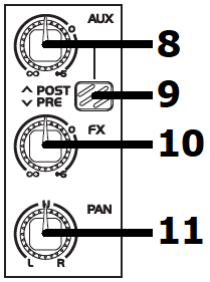
6. MID — This control can boost or cut the mid frequencies (centre 2.5kHz) by ±15dB (12 o'clock position is zero)

7. LOW — This control can boost or cut the low frequencies (centre 80Hz) by ±15dB (12 o'clock position is zero)





Channel Routing



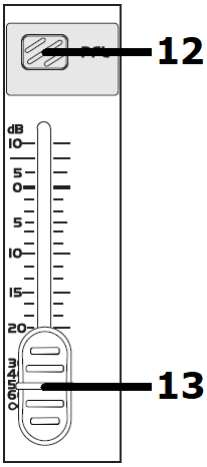
8. AUX — This control governs the amount of signal from the channel routed to the AUX SEND or auxiliary output to external equipment.

9. POST / PRE — Pressing this button in changes the AUX output from POST to PRE. POST is post-fader, meaning the signals to the AUX output are also affected by the channel fader level. PRE is pre-fader, meaning the signals to the AUX output are *not* affected by the channel fader level.

10. FX — This control governs the amount of signal from the channel routed to the effects section

11. PAN/BAL — This control adjusts the amount of signal from the channel fed to Left or Right outputs. This varies the point in the stereo field that the signal appears. For ST1 and ST2 channels, the PAN control is replaced with a BAL control for Left/Right balance.

Channel Faders



12. PFL — Pre-Fade Listen sends the channel signal direct to monitoring. This means that the channel signal is shown on the main VU LEDs. and routed directly to the headphones output. If many PFLs or AFLs are selected, all are routed to monitoring.

13. Channel fader — 60mm fader to adjust the channel level to the master output.

Output Section

14. 2-TRACK INPUT — L+R RCA line input shared with MPR

15. 2-TRACK OUT — L+R RCA line output for recording or Monitoring (pre-master-fader)

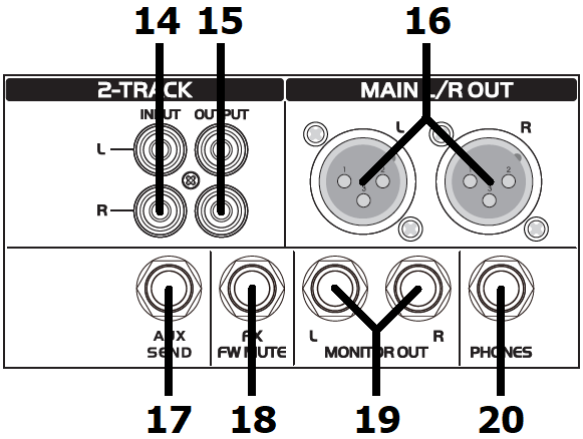
16. MAIN L/R OUT — L+R balanced XLR main outputs

17. AUX SEND — 6.3mm jack mix of all channel AUX feeds

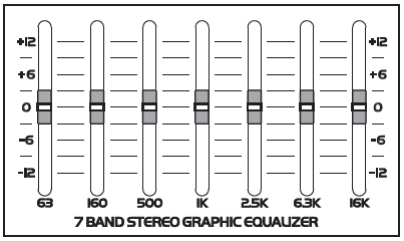
18. FX MUTE — Connect a non-latching footswitch to this 6.3mm jack to mute/unmute the output of the DSP effects when pressed.

19. MONITOR OUT — L+R 6.3mm jack outputs for monitoring. Volume is controlled by PHONES LEVEL.

20. PHONES — Stereo 6.3mm jack headphones output. Volume is controlled by PHONES LEVEL.



Graphic Equalizer

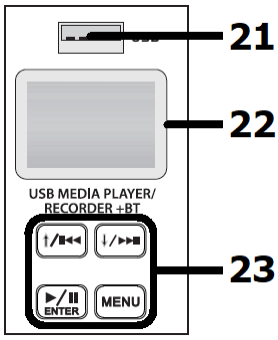


The main EQ is a stereo 7-band graphic equalizer to give overall tone shaping and can be used to help avoid feedback in live microphone setups.

Each slider controls a boost or cut of up to 12dB centred at the specified frequency.

USB Media Player/Recorder

21. USB — USB type A socket for connecting a USB stick or pen drive
22. Display — Backlit LCD display showing playback or BT status
23. Controls — Menu and navigation controls for media player/recorder



Main Menu

To step through the player options, press the MENU button. Use the ⏮ and ⏭ buttons to navigate options: BT (Bluetooth), MSC (Music), REC (Record), PC and SYS (System).

(PC is not currently functional on the CSX mixers – this is for future development)

BT - Bluetooth Mode

To connect a smart phone or tablet to the CSX mixer via Bluetooth, firstly make sure no USB device is connected (USB takes priority over Bluetooth) and press the MENU button. Use the ⏮ and ⏭ buttons to navigate to BT (Bluetooth) and press ⏵/⏸ to select. The display (22) will show Bluetooth mode.

Enable Bluetooth on the sending device and select to pair with a device called "Citronic".

Once paired and connected, the display will state "BLUETOOTH CONNECT" and "BT PAUSE" if a track is stopped or "BT PLAY" if a track is playing. The transport buttons ⏵/⏸, ⏮ and ⏭ will control tracks on the sending device as they would for a USB track.

MSC - USB Playback

If no USB device is inserted, the display will state "NO DEVICE"
To initiate playback of audio files from a USB pen drive, insert the pen drive into the USB port (21).

Playback should start automatically. If not, press the ⏵/⏸ button or remove the USB drive and check that the files stored are either .mp3, .wma, .ape or .flac format before re-inserting the drive. During playback, the display will show the file name, elapsed time, playback mode and track number.

To navigate through the tracks stored on the device, press the Previous ⏮ and Next ⏭ buttons.

Press and hold the Previous or Next button to decrease or increase the media player volume.

Press the Play/Pause button ⏵/⏸ to temporarily stop or resume the current track.

Press the MENU button to see playback options for USB and use ⏮ and ⏭ buttons to select an option.

Play Mode: Select All Play, One Device, One Play or Random and press ⏵/⏸ to confirm.

- All Play will play through all tracks stored on the USB drive and repeat.
- One Device will play all tracks stored in the current folder and repeat.
- One Play will repeat the current track.
- Random Play will play through all tracks on the USB drive in a random order.

EQ Mode: Select Normal, Rock, Pop, Classic, Jazz or Country tone profile and press ⏵/⏸ to confirm.
Disk Root: Select root of device or individual folders stored on the device for playback
Delete File: Press ⏵/⏸ to delete the current file from the device.
Press and hold the ⏵/⏸ button during playback to exit to the main menu.

REC - Record Function

Insert a USB pen drive which is formatted to FAT32 in order to record the main output onto it.
If there are any audio files already stored on the USB device, they will begin to play automatically.
Press and hold the MENU button and this will enter the recording mode in a paused state.
Press ⏵/⏸ to begin recording and ⏵/⏸ to pause or continue. Hold ⏵/⏸ to stop and store the file.
The recording will be stored as an mp3 file named "FILE****.mp3" where **** is the track number.
Each recorded file will be stored onto the USB media in a folder named "JL_REC".

SYS - System Menu

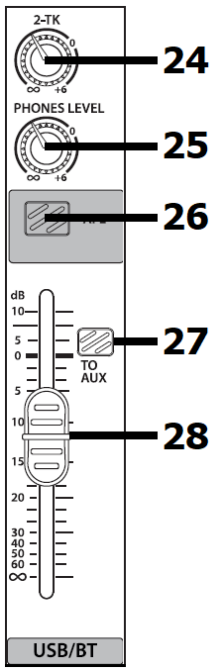
Backlight: Press ⏵/⏸ to select "Backlight" and use ⏮ and ⏭ to choose the time-out value for the display backlight

10sec, 30sec, 1min, 5min, 10min or never.

This is the time of no activity before the display backlight automatically switches off and then will switch on again when any button is pressed.

Contrast: Press ⏵/⏸ to select "Contrast" and use ⏮ and ⏭ to choose the balance of LCD to backlight. This helps to set the optimum clarity of the display for reading.

2-TK/USB/BT Channel



24. 2-TK — Adjusts the level of the 2-TK input (L+R RCA input) to the Main L/R outputs

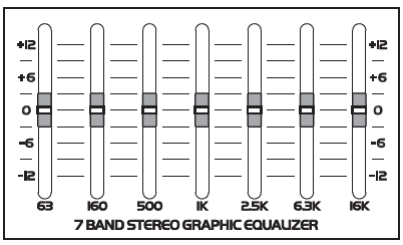
25. PHONES LEVEL — Adjusts the volume of the headphones and monitor outputs

26. AFL — After Fade Listen: routes USB player/recorder or BT wireless receiver output to the headphones and monitor outputs and LED VU meters.

27. TO AUX — When pressed in, this will route the USB player/recorder or BT wireless receiver to the AUX output. Ideal for sending guide tracks or prompts to stage monitors.

28. USB/BT Fader — Controls the playback output volume of the USB Media Player/Recorder or BT wireless receiver for playback

Graphic EQ



The main EQ is a stereo 7-band graphic equalizer to give overall tone shaping and can be used to help avoid feedback in live microphone setups.

Each band controls a boost or cut of up to 12dB centred at the specified frequency indicated at the bottom of each slider.

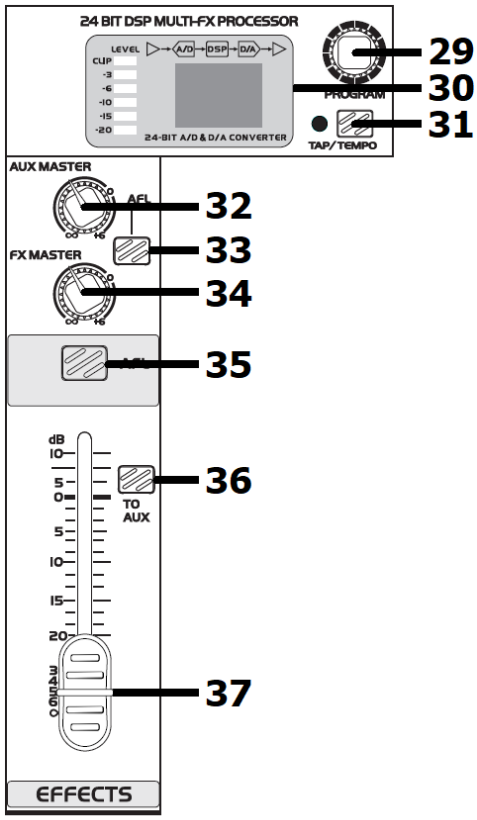
Running from bass to treble, these are 63Hz, 160Hz, 500Hz, 1kHz, 2.5kHz, 6.3kHz and 16kHz

DSP Effects (FX)

29. PROGRAM — Rotate to select a preset and push to select. Push again to select parameter 1. A single red dot will flash in the display. Rotate to set value and push to accept value.

30. Display — LED numeric display to show effect status Includes an LED VU meter to show effects bus level.

31. TAP/TEMPO — Tap button 3 or more times in time with music to set repeats of delay effects or press this button to access parameter 2 on other effect patches (see DSP Effects Table section). The tempo will be indicated by the adjacent flashing LED.



32. AUX MASTER — Master volume control for mix of all AUX signals.

33. AFL — After Fade Listen: routes AUX output to the headphones and monitor outputs and VU meters.

34. FX MASTER — Master volume control for output of DSP FX

35. AFL — After Fade Listen: routes DSP FX output to the headphones and monitor outputs and VU meters

36. TO AUX — Press in to send DSP FX output to the AUX bus

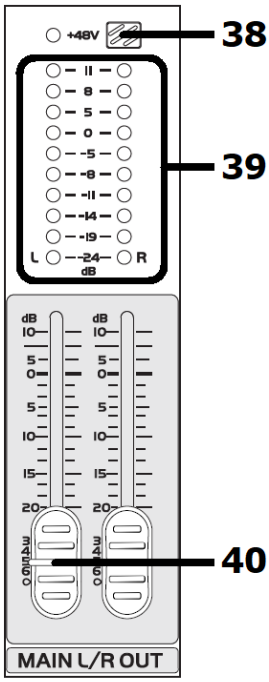
37. EFFECTS Fader — Controls the output of the DSP FX to the main mix

Main Output

38. +48V — Phantom power switch. Press in to enable +48V to all XLR channel inputs to power condenser microphones or DI boxes.

39. VU Meters — LED level meters for main output or PFL/AFL monitoring

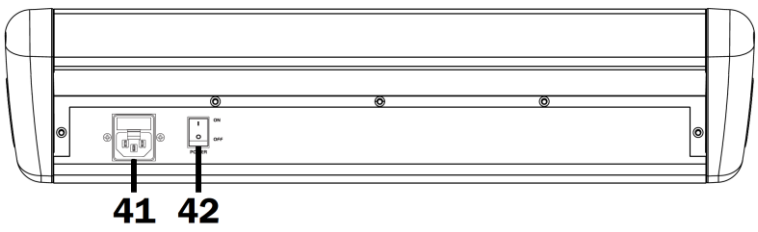
40. MAIN Faders — Left + Right faders for main output level



Rear Panel

41. IEC mains inlet and fuse holder
Connect the supplied power lead here.

42. Power on/off switch
Turn down main level controls before powering up or powering down.



DSP EFFECTS TABLE

PROGRAM	EFFECT	PARAMETER 1	MIN	MAX	PARAMETER 2	MIN	MAX	TAP
01	Hall	Reverb time	01 (approx 1 second)	10 (approx 8 seconds)	Brilliance	OFF	ON	LED on/off
02	Room	Reverb time	01 (approx 0.5 second)	10 (approx 4 seconds)	Brilliance	OFF	ON	LED on/off
03	Plate	Reverb time	01 (approx 0.5 second)	10 (approx 5 seconds)	Brilliance	OFF	ON	LED on/off
04	Gated	Reverb time	01 (approx 0.1 second)	10 (approx 1 second)	Brilliance	OFF	ON	LED on/off
05	Reverse	Reverb time	01 (approx 0.1 second)	10 (approx 1 second)	Brilliance	OFF	ON	LED on/off
06	Early Reflections	Room size	01 (small)	10 (very large)	Brilliance	OFF	ON	LED on/off
07	Ambience	Area size	01 (small)	10 (very large)	Brilliance	OFF	ON	LED on/off
08	Delay	Repeats	01 (no regeneration)	20 (max regeneration)	Delay Time (bpm)	07 (72bpm)	60 (600bpm)	Blinking BPM Tempo
09	Echo	Repeats	01 (no regeneration)	40 (max regeneration)	Delay Time (bpm)	07 (72bpm)	60 (600bpm)	Blinking BPM Tempo
10	Chorus	Depth	01 (1%)	99 (99%)	Mod Speed bpm	02 (24bpm)	48 (480bpm)	Blinking Mod Speed
11	Flanger	Depth	01 (1%)	99 (99%)	Mod Speed bpm	02 (24bpm)	48 (480bpm)	Blinking Mod Speed
12	Phaser	Depth	01 (1%)	99 (99%)	Mod Speed bpm	02 (24bpm)	48 (480bpm)	Blinking Mod Speed
13	Detune	Depth	01 (1%)	99 (99%)	2nd voice delay	05 (5ms)	50 (50ms)	LED on/off
14	Pitch Shift	Semitone steps	-12 (1 octave down)	+12 (1 octave up)	Detune	OFF (0%)	ON (25%)	LED on/off
15	Delay + Rev	Ratio	-9 (90% Dly / 10% Rev)	9 (10% Dly / 90% Rev)	Delay time (bpm)	11 (116bpm)	60 (600bpm)	Blinking BPM Tempo
16	Chorus + Rev	Ratio	-9 (90% Cho / 10% Rev)	9 (10% Cho / 90% Rev)	Reverb time	12 (1.2sec)	24 (2.4secs)	LED on/off

Specifications

Power supply	100-240Vac, 50/60Hz (IEC)
Fuse	T3AL @ 230V / T6AL @ 115V
Power consumption max.	30W
Input level	+24dBu (mic/line), +20dBu (stereo line) max.
Phantom power	+48V globally switched to XLR inputs
EQ: high	12kHz ±15dB (shelving)
EQ: mid	2.5kHz ±15dB (band pass)
EQ: low	80Hz ±15dB (shelving)
2-track	L+R RCA, 4k Ohm, -2dBu
EQ master bands	63, 160, 500, 1k, 2.5k, 6.3k, 16k (all in Hz)
Output level	+26dBu (XLR), +20dBu (TRS jack) max.
Output: master	XLR balanced, ＜75 ohm, +4 dBu, Max.+22 dBu
REC output	L+R RCA, <75 Ohm, -2dBu
Headphone impedance	30-600 Ohms
DSP effects processor	24-bit sigma-delta, 64/128 times over-sampling, 40kHz
Frequency response	20Hz - 30kHz (-0.5dB)
Channel crosstalk	>82dB
CMRR	>75dB (Mic @ 1kHz)
THD +N	<0.01% (Channel to mix out)
Noise rms : 22Hz-22kHz	EIN -122dBu, Residual output ＜-90dBu, Main/Aux mix ＜-82dBu
Dimensions	622 x 402 x 108mm
Weight	6.3kg

Troubleshooting

No power LED on control panel	Ensure mains outlet voltage is correct for the unit
	Check power is switched on at the rear panel
	Check IEC fuse – if blowing fuses, refer to qualified service personnel
Power LED is on but no other LEDs and no output	Check input signals and condition of connection leads
	Check GAIN is not too low on channel input
	Check Gain/Level controls and EQ controls are not turned fully down
	When using condenser microphones, check that +48V phantom is on.
	Check that PFL/AFL buttons are all switched out
	Check that all Graphic EQ sliders are not fully down
	For MPR digital audio inputs, check signal routing
Power light and VU LEDs lighting but no speaker output	Check output connections to speakers
	Check that speakers are in good working order
	Check MASTER faders are not fully down
No playback from USB or SD media	Check that files are standard compressed audio format
	Check routing option for MPR section, switch to main L/R
	Check MPR level and/or ST2 level controls
VU LEDs do not show MAIN output levels	Check that PFL/AFL buttons are all switched out
Output is very loud or distorted	Check level of input signal is not too high
	Reduce Gain/Level controls and EQ settings
	Ensure Hi-Z line level input(s) not connected via XLR
	Check AUX and DSP level controls and reduce if necessary
Output is working but at very low level	Check input audio source level is not too low
	Ensure low impedance line or mic signal is not connected via jack
	Increase Gain/Level controls and EQ settings if turned down

Disposal: The "Crossed Wheelie Bin" symbol on the product means that the product is classed as Electrical or Electronic equipment and should not be disposed with other household or commercial waste at the end of its useful life. The goods must be disposed of according to your local council guidelines.

Errors and omissions excepted.