



## EPM/EFX

**SOUNDCRAFT SOUND QUALITY, PERFORMANCE AND VALUE FOR MONEY IN A VERSATILE RANGE OF MULTI PURPOSE MIXERS – AVAILABLE WITH AND WITHOUT EFFECTS.**

EFX/EPM mixers bring Soundcraft sound quality, performance and value-for-money to a wide range of applications including recording, live sound, install and broadcast.

Available in 8 and 12 mono input channel configurations, the EFX mixers feature built-in Lexicon 24-bit processing, providing access to 32 world class reverb, delay and chorus effects (see previous page). For users preferring to use external processing, three EPM mixers – (6, 8 and 12 mono inputs) – replace the EFX's internal FX send with a second Aux send. All EFX/EPM mixers feature 2 stereo channels as standard.

Configured for desktop use with all audio connectors conveniently located on the top panel, EFX/EPM mixers can be easily converted for rack-mounting using an optional rack kit, with each mixer occupying just 8U of standard rack space.

EFX/EPM mixers feature professional +48V phantom power for condenser microphones and use the same GB30 microphone preamps used on Soundcraft's acclaimed, large format GB Series consoles to achieve exceptional clarity, low-noise and controlled overload characteristics.

Drawing on more than 30 years of experience manufacturing professional mixing consoles, Soundcraft has equipped the EFX/EPMs with all the appropriate features for modern mixing applications, at the same time creating an uncluttered and intuitive control surface that enhances the operator experience.

Visual feedback is further enhanced by peak LEDs on all input channels which are fed from multiple points in the signal path to ensure that nothing is overlooked. The LEDs illuminate in proportion to the signal level when approaching peaks, enabling the



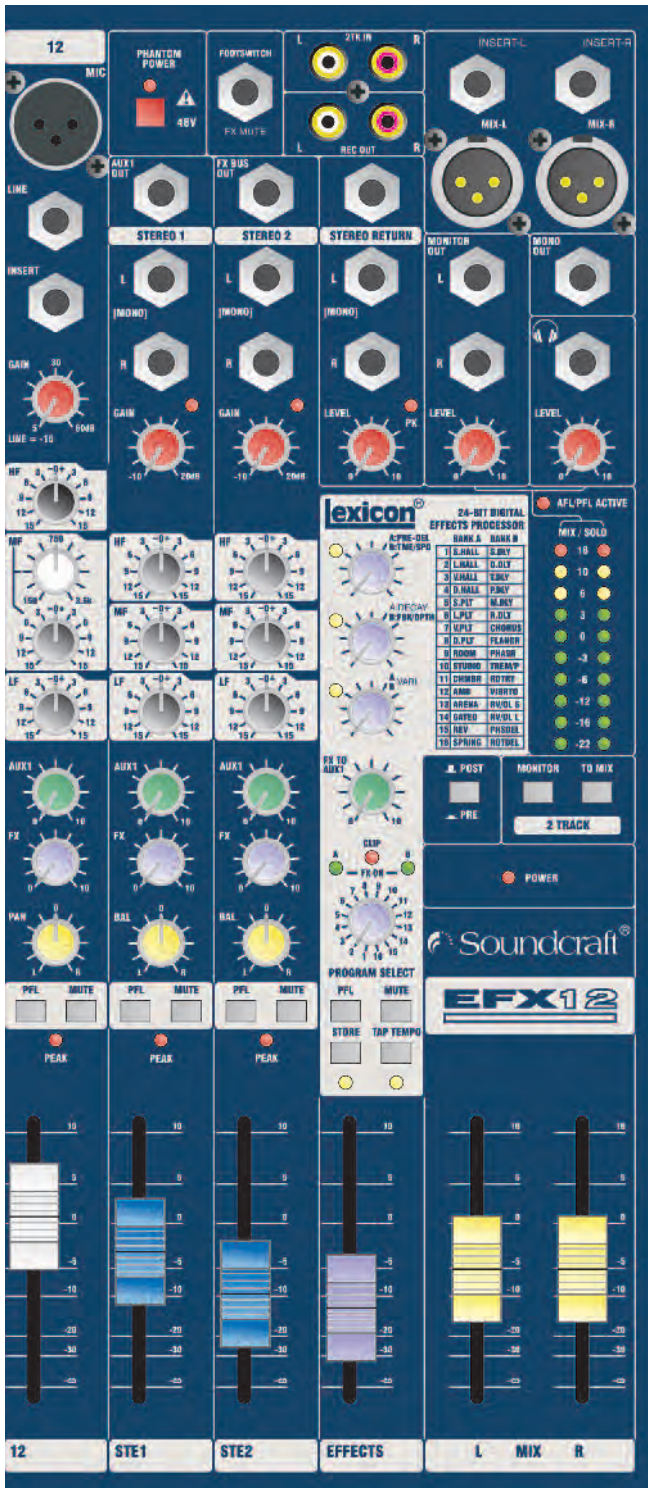
quality of the signal to be maximised through using all the available headroom.

Furthermore, the main stereo mix has 10-segment LED meters with a PFL Active LED to indicate that channels are being solo'd.



Rack ears are included with 12 channel consoles.

KEY FEATURES	EPM	EFX
• Built-in Lexicon 24-bit effects		✓
• Multi-point signal channel status monitoring with proportional illumination	✓	✓
• Precision GB30 mic pre-amps	✓	✓
• True, professional +48V phantom power for condenser microphones	✓	✓
• Insert points for external processing	✓	✓
• Choice of frame sizes, each with 2 stereo inputs	6/8/12	8/12
• Aux sends globally switchable pre or post-fade	2	1
• FX send	None	1
• Universal internal power supply	✓	✓
• Simple rack mounting options	✓	✓



EFX Mono Input Channel

EFX Stereo Input Channel

EFX Master Section

## EFX - EPM: THE DIFFERENCES

EFX input channels feature an FX send to the internal Lexicon effects processor, along with a single Aux send for use with external processors, or to create a monitor mix.

With no internal Lexicon effects, EPM input channels replace the FX send with a second Aux send.

The EFX stereo input channels feature 3-band EQ. The EPM stereo input channels features 2-band EQ.

## MONO INPUT MODULE

### Mic Input

A gold-plated balanced female XLR connector accepts balanced or unbalanced mic signals. At -127dBu EIN the mic amp is extremely quiet and transparent with excellent overload characteristics.

### Line Input

A balanced 1/4" jack for connecting balanced or unbalanced electronic instruments, such as keyboards.

### Insert

Used for patching in compressors or additional EQ or for other signal processors. It can also be used for recording to multi-track recorders if necessary.

### Gain

A rotary gain control on each input alters the gain of the input signal, from +5 to +60dB (Line Inputs have -15dB attenuation). Linear circuitry within the preamp delivers smooth gain control over the entire gain range.

### EQ Section

Equalisation is split into three bands. The shelving HF control provides 15dB of cut or boost (gain adjustment) for frequencies above 12kHz. A swept mid frequency control enables frequencies from 150Hz to 3.5kHz to be adjusted with up to 15dB of cut or boost at the selected frequency. Signals below 80Hz can be adjusted with the LF control, which features  $\pm 15$ dB of gain adjustment (cut or boost).

### Auxiliary Section

One (EFX) or two (EPM) Aux for sending separate monitor mixes in live applications, or for use with external effects. The Aux bus(es) can be globally switched to be pre or post fade on the master section.

### FX Send (EFX only)

For sending signal to the internal 24-bit Lexicon effects.

### Pan, Muting, and PFL

The Pan control positions each channel's signal across the stereo image, with a Mute button to cut the signal completely. A PFL button solos the signal for monitoring.

### Faders and Metering

Each mono channel features a smooth 60mm fader, and a peak level LED indicating signal levels in excess of +17dBu.

## STEREO INPUT CHANNEL

### Input Connectors

The stereo inputs are connected via balanced 1/4" jack inputs, delivering optimum performance with other professional audio equipment.

### EQ Section

The EFX features three fixed shelving controls, adjusting HF signals at 8kHz by  $\pm 15$ dB, MF signals at 720Hz by  $\pm 15$ dB and LF signals at 60Hz by  $\pm 15$ dB. The EPM features two fixed shelving controls, adjusting HF signals at 12kHz by  $\pm 15$ dBu and LF signals at 80Hz by  $\pm 15$ dB.

### Auxiliary Section

The signal(s) can be sent pre-fade or post-fade according to master selection, for use in a monitor mix or for effects processing.

### FX Send (EFX only)

For sending signal to the internal 24-bit Lexicon effects.

### Bal, Muting, and PFL

The Balance control adjusts the amount of the signal sent to the left and right busses. Mute and PFL buttons operate as on the mono input channels, cutting or soloing the stereo channel. With PFL pressed, the pre-fade signal is fed to the headphones, control room output and meters.

### Faders and Metering

Each stereo channel features a smooth 60mm fader, and a peak level LED indicating signal levels in excess of +17dBu.

## MASTER SECTION

### Effects (EFX only)

A rotary control selects the effect program, with three rotary controls for effect parameters and one to control the effects level sent to Aux 1. Buttons for PFL, Mute, Store (user effect set-up) and Tap Tempo (for time/speed-based effects such as delays). Footswitch input for FX on/off.

### +48V Phantom Power

Global control over professional +48V phantom power is offered via a push button. When active, an LED will illuminate.

### 2-Track Inputs and Outputs

2-track recorder playback inputs and record sends are on unbalanced RCA phono connectors. Monitor Playback routes the playback input to your monitoring system or to the headphones, replacing any existing monitoring signals. Playback to Mix routes the playback signal directly to the main mix, replacing any signal that may be present, perfect for intermission music or as a master mute.

### Monitor Output and Mix Insert

Available on balanced 1/4" jacks.

### Stereo Return (EFX only)

Available on 1/4" jacks with level control for use with external processors.

### Mix Outputs

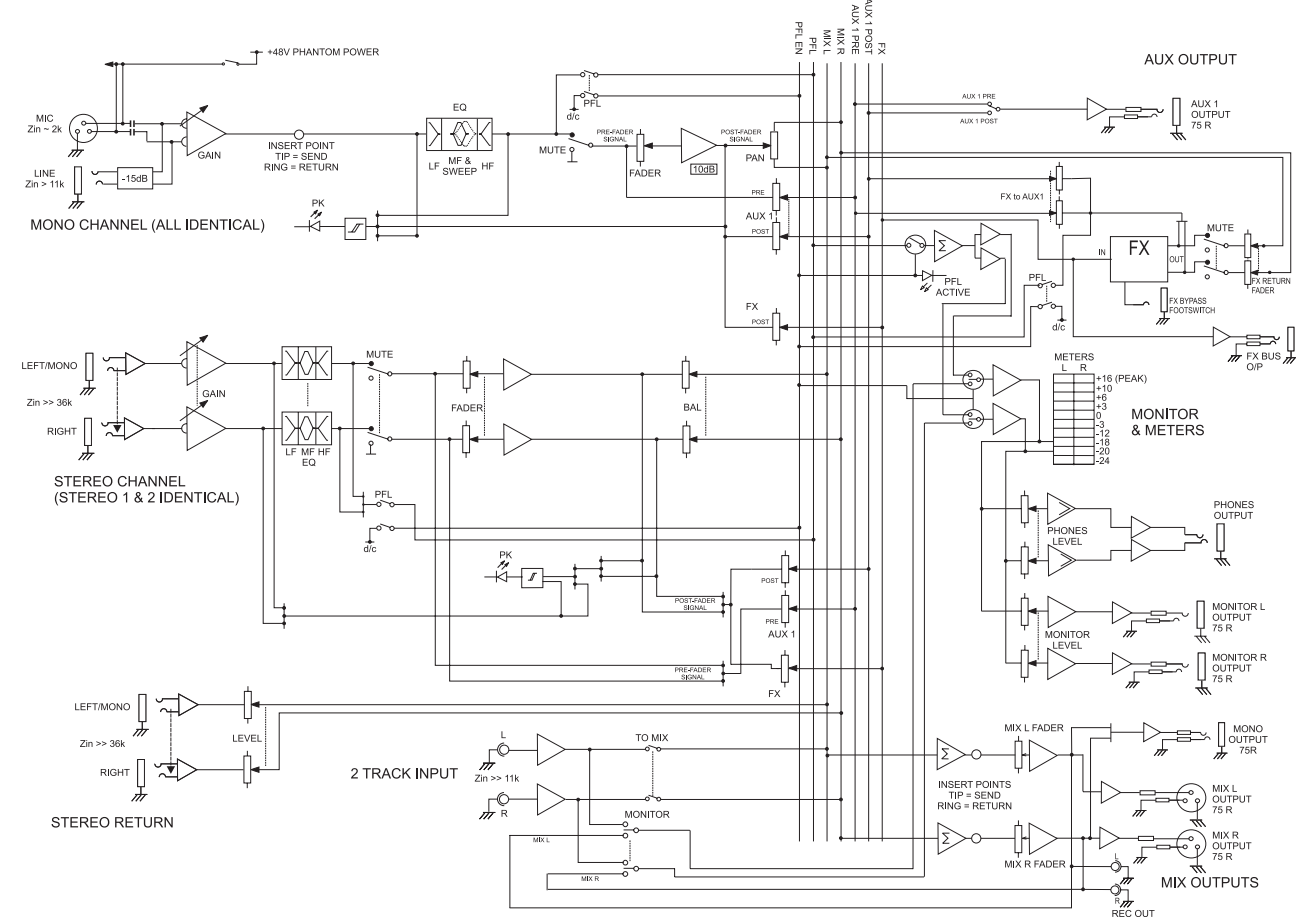
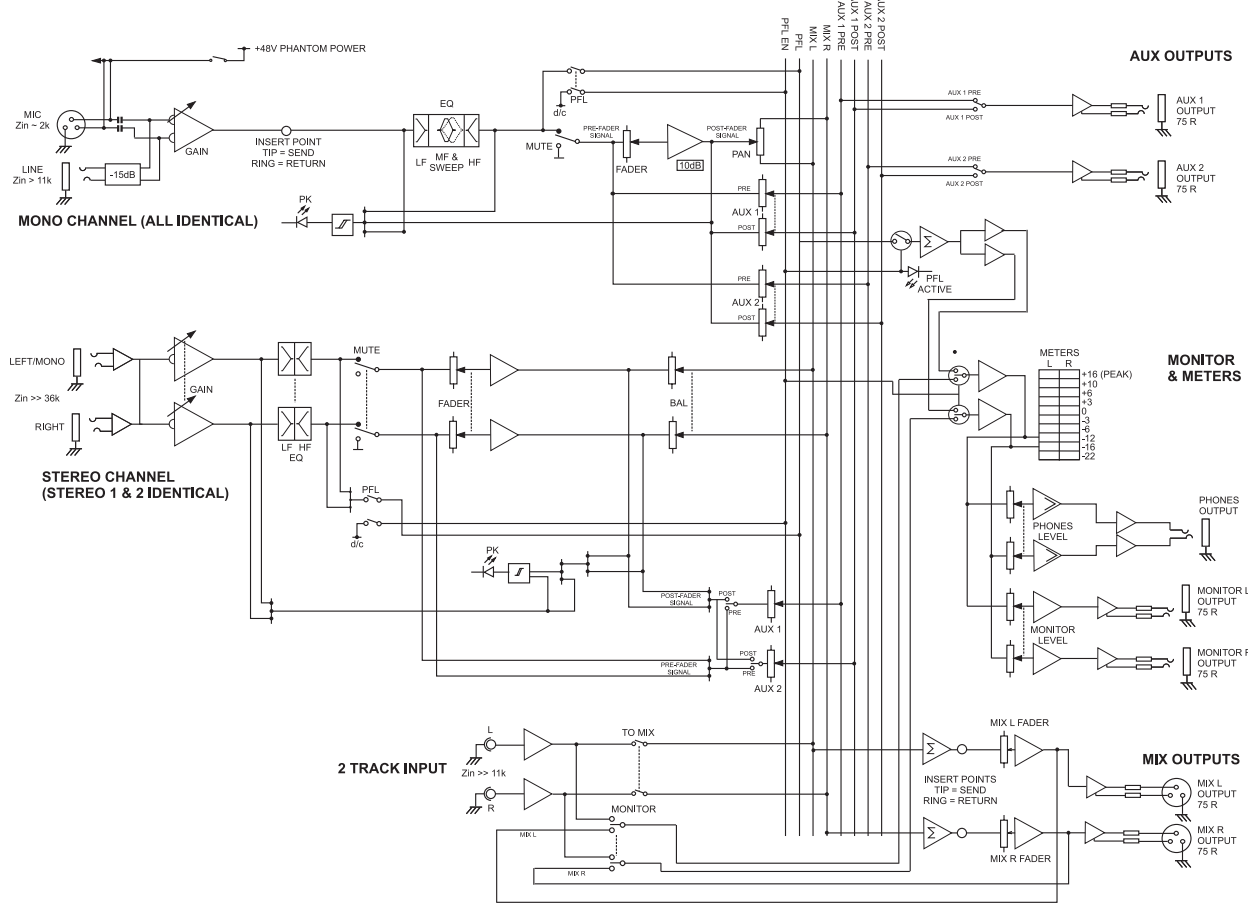
The main left and right mix outputs are provided on balanced XLR connectors.

### Monitor & Phones Level

Levels sent to the monitor output and headphones can be independently adjusted using these two rotary controls. And when a pair of headphones are plugged into the phones socket at the bottom right of the mixer, the monitor outputs are still operational for simultaneous listening by a performer and engineer.

### Faders and Metering

Controlling the overall stereo mix level are two 60mm faders, with two 10-segment 3-colour LED peak-reading bargraph meters monitoring the mix left and right outputs. These meters normally follow the current monitor selection, so if any PFL button is pressed, the meters will switch to monitor this and the PFL Active LED will light.



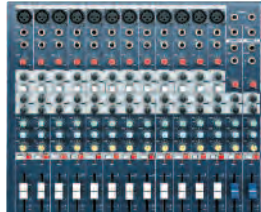
# DIMENSIONS & WEIGHTS

**FX16ii**



	Width	Height	Depth	Weight
FX16ii	442mm (17.4")	148mm (5.8")	442mm (17.4")	8.5 kg (19.0 lbs)
FX16ii with rack ears (10U)	481mm (19")	148mm (5.8")	442mm (17.4")	8.5 kg (19.0 lbs)

**EPM**



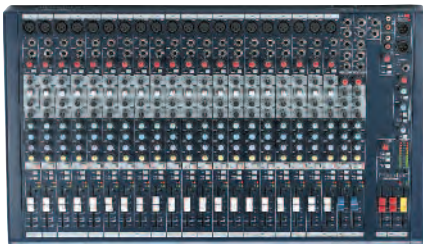
	Width	Height	Depth	Weight
EPM6	280mm (11.0")	91mm (3.6")	362mm (14.3")	4.0 kg (8.8 lbs)
EPM8	330mm (13.0")	91mm (3.6")	362mm (14.3")	4.6 kg (10.1 lbs)
EPM12	432mm (17.0")	91mm (3.6")	362mm (14.3")	5.8 kg (12.8 lbs)

**EFX**



	Width	Height	Depth	Weight
EFX8	330mm (13.0")	91mm (3.6")	362mm (14.3")	4.6 kg (10.1 lbs)
EFX12	432mm (17.0")	91mm (3.6")	362mm (14.3")	5.8 kg (12.8 lbs)

**MPM**



	Width	Height	Depth	Weight
MPMi12/2	482mm (19.0")	94mm (3.7")	405mm (16.0")	6.7 kg (14.8 lbs)
MPMi20/2	688mm (27.0")	94mm (3.7")	405mm (16.0")	9.3 kg (20.4 lbs)

**MFxi**



	Width	Height	Depth	Weight
MFxi8/2	383mm (15")	94mm (3.7")	405mm (16.0")	4.0 kg (8.8 lbs)
MFxi12/2	482mm (19.0")	94mm (3.7")	405mm (16.0")	6.7 kg (14.8 lbs)
MFxi20/2	688mm (27.0")	94mm (3.7")	405mm (16.0")	9.3 kg (20.4 lbs)

**Notepad**



	Width	Height	Depth	Weight
102	215mm (8.5")	45mm (1.8")	220mm (8.7")	1.2 kg (2.6 lbs)
124	242mm (9.5")	45mm (1.8")	220mm (8.7")	1.6 kg (3.5 lbs)
124FX	242mm (9.5")	45mm (1.8")	220mm (8.7")	1.6 kg (3.5 lbs)

# SPECIFICATIONS

## FX16ii TYPICAL SPECIFICATIONS

Frequency Response	Mic/Line Input to any Output.....	+/-1dB, 20Hz - 20kHz
T.H.D.	Mic Sensitivity -30dBu, +14dBu @ Mix output.....	< 0.09% @ 1kHz
Noise	Mic Input E.I.N. (maximum gain)..... Aux, Mix and Masters (@ 0dB, faders down).....	-127dBu (150Ω source) < -84dBu
Crosstalk (@ 1kHz)	Channel Mute..... Aux Send Pots Offness.....	> 96dB > 86dB
EQ (Mono inputs)	HF..... MF (swept)..... LF..... Q.....	12kHz, +/-15dB 150Hz - 3.5kHz, +/-15dB 80Hz, +/-15dB 1.5
Power Consumption		Less than 40W
Operating Conditions	Temperature Range.....	5°C to +40°C
Input & Output Levels	Mic Input..... Line Input..... Stereo Input..... Mix Output..... Headphones (@150Ω).....	+15dBu max. +30dBu max. +30dBu max. +20dBu max. 300mW
Input & Output Impedances	Mic Input..... Line Input..... Stereo Input..... Outputs.....	2kΩ 10kΩ 65kΩ (stereo), 35kΩ (mono) 150Ω (balanced), 75Ω (unbalanced)

## MPMi/MFXi TYPICAL SPECIFICATIONS

Frequency Response	Mic/Line Input to any Output.....	+/-1.5dB, 20Hz - 20kHz
T.H.D.	Mic Sensitivity -30dBu, +14dBu @ Mix output.....	< 0.01% @ 1kHz
Noise	Mic Input E.I.N. (maximum gain)..... Aux, Mix and Masters (@ 0dB, faders down).....	-126.5dBu (150Ω source) < -82dBu
Crosstalk (@ 1kHz)	Channel Mute..... Aux Send Pots Offness.....	> 90dB > 82dB
EQ (Mono inputs)	HF..... MF (swept)..... LF..... Q.....	12kHz, +/-15dB 150Hz - 3.5kHz, +/-15dB 80Hz, +/-15dB 1.5
EQ (Stereo inputs)	HF..... MF..... LF..... Q (MF).....	12kHz, +/-15dB 720Hz, +/-15dB 80Hz, +/-15dB 0.8
Power Consumption		Less than 40W
Operating Conditions	Temperature Range.....	5°C to +40°C
Input & Output Levels	Mic Input..... Line Input..... Stereo Input..... Mix Output..... Headphones (@150Ω)..... Recommended headphones impedance.....	+15dBu max. +30dBu max. +30dBu max. +20dBu max. 300mW 32 - 200Ω
Input & Output Impedances	Mic Input..... Line Input..... Stereo Input..... Outputs.....	2kΩ 10kΩ 45kΩ 150Ω (balanced), 75Ω (unbalanced)

## EPM/EFX TYPICAL SPECIFICATIONS

Frequency Response	Mic/Line Input to any Output.....	+/-1.5dB, 20Hz - 20kHz
T.H.D.	Mic Sensitivity -30dBu, +14dBu @ Mix output.....	< 0.02% @ 1kHz
Noise	Mic Input E.I.N. (maximum gain)..... Aux, Mix and Masters (@ 0dB, faders down).....	-127dBu (150Ω source) < -85dBu
Crosstalk (@ 1kHz)	Channel Mute..... Aux Send Pots Offness.....	> 96dB > 86dB
EQ (Mono inputs)	HF..... MF (swept)..... LF..... Q.....	12kHz, +/-15dB 150Hz - 3.5kHz, +/-15dB 80Hz, +/-15dB 1.5
EQ (Stereo inputs)	HF..... MF (EFX Only)..... LF..... Q (MF).....	12kHz, +/-15dB 720Hz, +/-15dB 80Hz, +/-15dB 0.8
Power Consumption		Less than 35W
Operating Conditions	Temperature Range.....	5°C to +40°C
Input & Output Levels	Mic Input..... Line Input..... Stereo Input..... Mix Output..... Headphones (@150Ω).....	+15dBu max. +30dBu max. +30dBu max. +20dBu max. 300mW
Input & Output Impedances	Mic Input..... Line Input..... Stereo Input..... Outputs.....	2kΩ 10kΩ 65kΩ (stereo), 35kΩ (mono) 150Ω (balanced), 75Ω (unbalanced)

## NOTEPAD TYPICAL SPECIFICATIONS

Frequency Response	Mic/Line Input to any Output.....	+/-1.5dB, 20Hz - 20kHz
T.H.D.	Mic Sensitivity -30dBu, +10dBu @ Mix output.....	< 0.005% @ 1kHz
Noise	Mic Input E.I.N. (maximum gain)..... Aux, Mix and Masters (@ 0dB, at unity).....	-128.5dBm (150Ω source) < -85dBu
Crosstalk (@ 1kHz)	Channel Faders..... Master Faders.....	> 87dB > 100dB
CMRR (@ 1kHz)	Master Faders.....	> 90dB
EQ	High Pass Filter..... HF..... MF..... LF..... Q.....	100Hz @ 12dB/Octave 12kHz, +/-15dB 1kHz, +/-15dB 80Hz, +/-15dB 0.7
Power Consumption		Less than 40W
Operating Conditions	Temperature Range.....	5°C to 40°C
Input & Output Levels	Mic Input..... Line Input..... Stereo Input..... Mix Output..... Headphones (@32Ω).....	+10dBu max. +22dBu max. +20dBu max. +25dBu max. 300mW
Input & Output Impedances	Mic Input..... Line Input..... Stereo Input..... Outputs.....	2kΩ 18kΩ 20kΩ 150Ω

Note: These figures are typical of performance in a normal electromagnetic environment and are often exceeded. Performance may be degraded in severe conditions. All measurements refer to electronically balanced inputs and outputs.