Soundcraft®

MFXi

Soundcraft® MFXi

Technical Data Sheet

Key Features

- 8+2, 12+2 and 20+2 channel input frame-sizes
- Built-in 24 bit Lexicon® digital effects processor
- 32 FX settings
- Tap Tempo and FX setting store function
- 1 FX send on each channel
- 2 configurable Aux busses
- 2 Stereo Inputs
- 2 Group busses
- Stereo Mix Output
- 2-track record output
- 2-track replay input with level control
- Globally switched +48V Phantom Power
- GB30 Mic Preamps
- 100Hz HPF
- Insert point (mono channels)
- 3-band EQ with swept Mid band on mono inputs
- 3-band EQ on stereo inputs
- PFL switch
- Mix and group routing
- Signal Present LED
- Peak LED
- Second Stereo FX return input
- 60mm fader
- Headphone and Control Room outputs with level control
- Rack or furniture-mountable
- Rack-mount ears supplied with 12-channel model
- Integral universal power supply

Architect's and Engineer's Specifications

Soundcraft MFXi Mixing Console July 2009

The audio mixing console shall be a self-contained unit, complete with input, output, FX and master sections and an integral switched mode power supply capable of operating under various AC voltage inputs from 90VAC to 240V AC. The audio mixing console shall have 8/12/20 mono input channels, two stereo input channels, Sub Group L and Sub Group R master controls, an FX master control and a stereo mix master output. It shall be possible to have the audio mixer mounted on a desktop or rack-mounted through rack mounting ears, and shall be made of a rugged steel panelled construction. The circuit boards shall be mounted vertically with all potentiometers secured to the front panel by nuts. All jack sockets shall be of a metal construction.

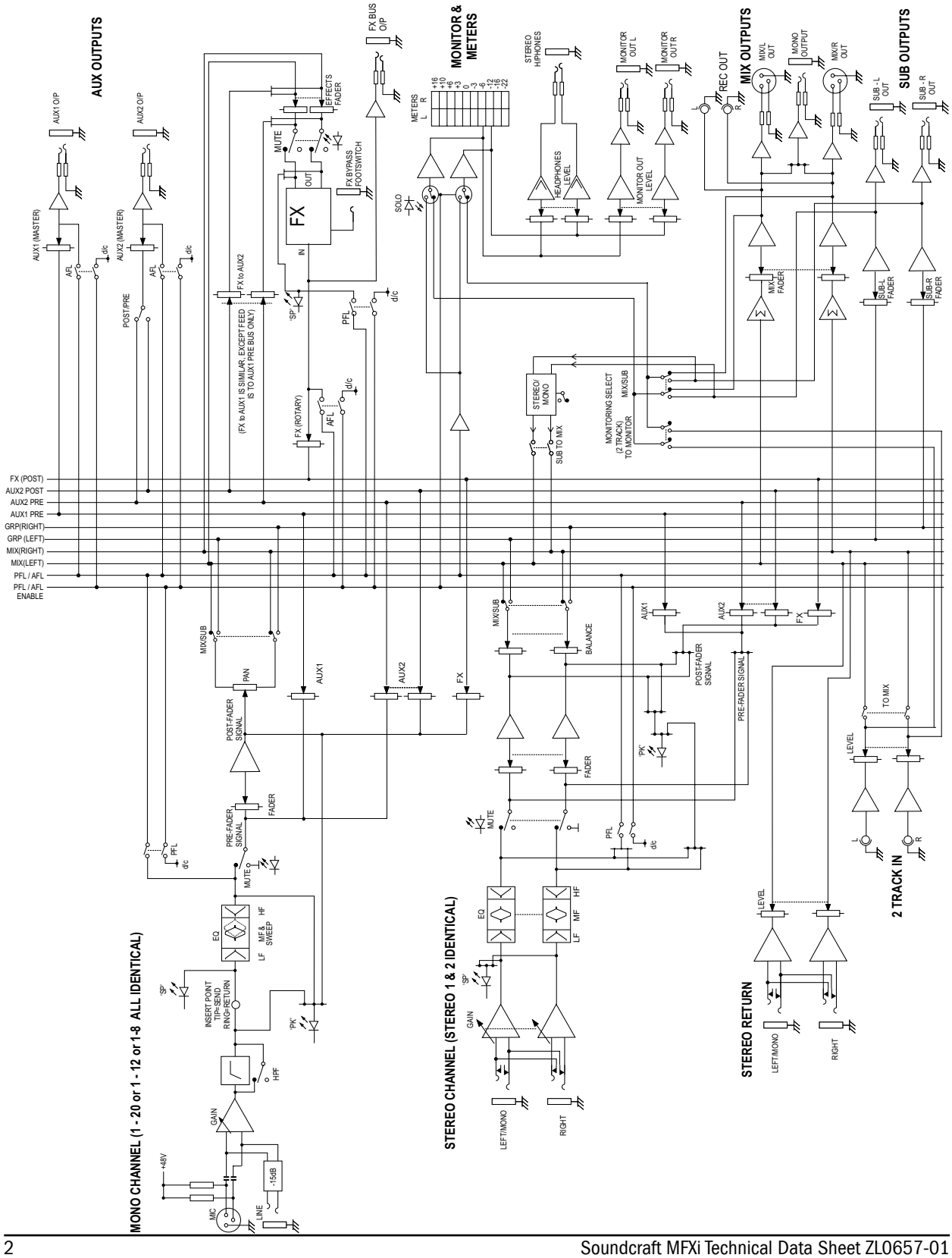
The mono input channel shall have the following features: an electronically balanced wide range mic and line input on XLR and ¼" jack connectors with continuously variable sensitivity between –60dBu and -5dBu, globally switched 48V phantom power, a 3-band equaliser with shelving HF and LF controls at 12kHz and 80Hz with 15dB of cut or boost, and an MF control continuously variable from 150Hz to 3.5kHz with a Q of 1.5 and cut or boost of 15dB. Two auxiliary sends and an FX send shall be provided, with individual level controls. One Aux bus shall be globally switch-able to be pre-fade or post-fade, the other Aux bus shall be fixed pre-fader. Routing to the mix output shall be in stereo via a Pan control with –4.5dB centre-drop, Mute, PFL Solo and a Mix/Sub Group routing switch will also be provided. A Peak LED shall warn of signals within 6dB of clipping with an led to indicate the presence of signal on the channel. There shall be a pre-EQ insert point on a ¼" TRS jack, and a 60mm fader shall control the overall channel signal level.

The stereo input channel shall have the following features: Line input connectors on electronically balanced ¼" jack connectors with input gain continuously variable from -10 to +20dB. There shall be a three-band equaliser with HF, MF and LF shelving controls at 8kHz, 720Hz and 60Hz with cut or boost of 15dB. Two auxiliary sends and an FX send shall be provided, both with individual level controls. One Aux bus shall be globally switch-able to be pre-fade or post-fade, the other Aux bus shall be fixed pre-fader. Routing to the mix output shall be in stereo via a Balance control, Mute, PFL Solo and a Mix/Sub Group routing switch will also be provided. A Peak LED shall warn of signals within 6dB of clipping with an led to indicate the presence of signal on the channel, and a 60mm fader shall control the overall channel signal level.

The Master section shall contain a built-in 24-bit digital FX processing unit with an effects master fader, 32 preset FX settings, 3 FX parameter controls and an FX level clip LED. It will have a Tap Tempo, Aux send, AFL and Mute function as well as the ability to store user defined FX settings. The Master section shall contain the following facilities: a stereo 2 Track playback input and record output, Sub Group L and Sub Group R outputs, a stereo mix output, monitor outputs with output level control, headphone output mounted on the front panel with output level control, output metering, AFL/PFL active LED, 3 Aux master outputs with AFL function and PRE/POST select on Aux 2, and a global 48V phantom power switch with LED. The 2 Track playback inputs shall be routed to the Mix outputs via a gain control when the 2 Track TO MIX button is pressed, and to the monitor outputs when the 2 TRACK button in the Monitoring section is pressed. Sub Group L-R shall be switchable between stereo or mono operation and will be routed to the Mix outputs when the TO MIX button is pressed and to the monitor outputs when the SUB button in the Monitoring section is pressed. The Mix output shall be routed to the Monitor outputs when the MIX button in the Monitoring section is pressed. Ten-segment LED bar-graph meters shall be used to display L-R output levels, which shall be replaced by an active SOLO signal. The main stereo mix output shall be controlled by 60mm faders and fed to electronically balanced XLR connectors.

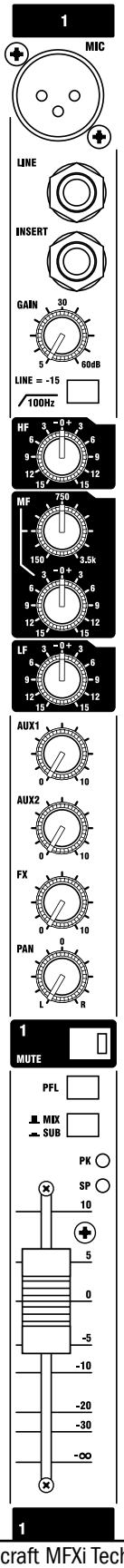
The two Auxiliary Master outputs and the FX Bus output shall be fed to electronically balanced ¼" jack connectors. The output level of the ¼" jack headphone and monitor feeds shall be variable and may be replaced automatically by any SOLO signal.
The specifications and dimensions of the console shall be as published in the Soundcraft Multi-Purpose Range brochure.
The audio mixing console shall be the Soundcraft MFXi Console.

Block Diagram

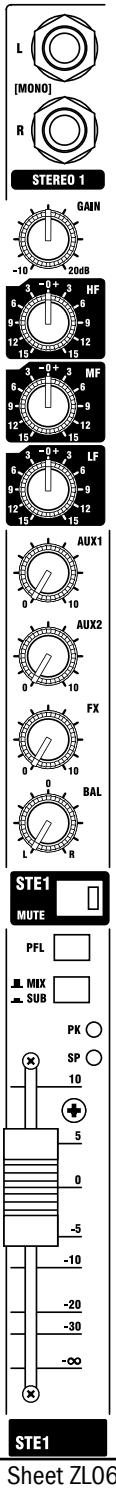


Inputs and Outputs

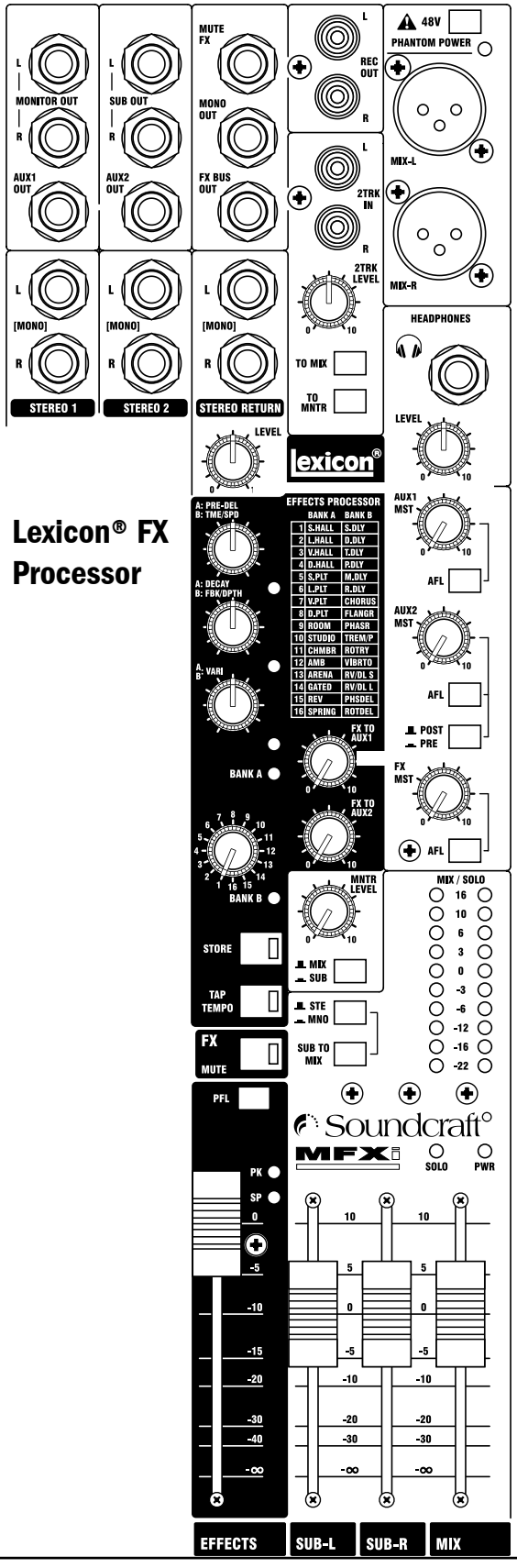
Mono Input



Stereo Input



Master Section



Lexicon® FX Processor

MFXi TYPICAL SPECIFICATIONS

Frequency Response
- Mic / Line Input to any Output .....+/-1.5dB, 20Hz – 20kHz

T.H.D.
- Mic Sensitivity -30dBu, +14dBu @ Mix output .....< 0.05% @ 1kHz

Noise
- Mic Input E.I.N. (maximum gain) .....-126.5dBu (150Ω source)
- Aux, Mix and Masters (@ 0dB, faders down).....< -85dBu

Crosstalk (@ 1kHz)
- Channel Mute.....> 90dB
- Aux Send Pots Offness.....> 82dB

EQ (Mono inputs)
- HF .....12kHz, +/-15dB
- MF (swept).....150Hz – 3.5kHz, +/-15dB
- LF.....80Hz, +/-15dB
- Q.....1.5

EQ (Stereo inputs)
- HF .....12kHz, +/-15dB
- MF.....720Hz, +/-15dB
- LF .....80Hz, +/-15dB

Power Consumption.....Less than 40W

Operating Conditions
- Temperature Range.....5°C to 40°C

Input & Output Levels
- Mic Input .....+15dBu max
- Line Input.....+30dBu max
- Stereo Input .....+30dBu max
- Mix Output .....+20dBu max
- Headphones (@150Ω) 300mW

Input & Output Impedances
- Mic Input 2kΩ
- Line Input 10kΩ
- Stereo Input .....65kΩ (stereo), 35kΩ (mono)
- Outputs .....150Ω (balanced), 75Ω (unbalanced)

E & OE.
Soundcraft reserves the right to change specifications without notice.

Soundcraft

A Harman International Company

www.soundcraft.com

SOUNDCRAFT
Harman International Industries Ltd.,
Cranborne House, Cranborne Road,
Potters Bar, Herts., EN6 3JN U.K.
Tel: +44 (0) 1707 665000
Fax: +44 (0) 1707 660742
EMAIL: soundcraft@harman.com

SOUNDCRAFT USA,
8500 Balboa Blvd
Northridge
CA 91329
Tel: +1-818- 920-3212
Fax: 1-818- 920-3208
Toll Free: 888 251 8352
EMAIL: soundcraft-usa@harman.com