Soundcraft FX16ii

Key Features

- 26 inputs
- 16 mono microphone channels.
- 4 stereo returns
- 4-bus architecture, with sub-group routable to mix
- Built-in 24 bit Lexicon® digital effects processor
- 32 FX settings
- Tap Tempo
- 3 FX parameter adjust rotaries
- User FX settings store function
- Direct outputs for multi-track recording individually switch-able for pre-post-fade operation
- Inserts on all mono channels
- Inserts on stereo mix bus
- Classic Soundcraft 3-band EQ with swept mid-band
- Stereo 18dB/octave 100Hz high-pass filter
- Dual global +48V phantom power split channels 1-8 and 9-16
- Channel Mute control
- 10-segment tri-coloured metering
- Two sub-group outputs
- Separate mono sum output

Architect’s and Engineer’s Specifications

Soundcraft FX16ii Mixing Console

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 16 mono input channels, four stereo returns, an FX master control, Sub L and R as well as Mix L and R master controls. It shall be possible to have the audio mixer mounted on a desktop or rack-mounted through optional rack mounting ears, and shall be of a rugged steel panelled construction. 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 -0dBu, a 100Hz HPF, dual global 48V phantom power split channels 1-8 and 9-16, 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. Three Auxiliary sends and an FX send shall be provided, with individual level controls. Aux 1 shall be permanently sourced pre-fade. Aux 2 is individually switchable between pre-fade or post-fade operation. Aux 3 and the FX send are permanently sourced post-fade. Routing to the mix output shall be in stereo via a Pan control with –4.5dB centre-drop, Mute, SOLO (PFL or SIP), Mix and Sub routing switches will also be provided. A Peak LED shall warn of signals within 6dB of clipping. There shall be a pre-EQ insert point on a ¼” TRS jack and a direct output on each channel with pre/post fader switch. A 100mm fader shall control the overall channel gain 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 rotary controls, tap tempo function, an FX level clip LED as well as the ability to store user-defined FX settings.

The Master section shall also contain the following facilities: Mix output on XLR, Four stereo returns, a Lexicon FX bypass input, a mono output, monitor outputs, mix inserts, sub outputs, sub inserts and aux outputs (mono) all on ¼” Jacks. A 2 track input will be provided on RCA phono connectors. A ¼” jack headphone output will be provided on the front panel with output level control. A monitor output control will also be provided.

Ten-segment LED bar-graph meters shall be used to display L-R output levels, which shall be replaced by an active SOLO signal. A PFL/AFL Solo and SIP Solo LED indicator will be provided and a Solo mode switch. 2 track, mix and sub selector switches shall be provided as well as a two track to mix and two track level control. The main stereo mix and sub output shall be controlled by 100mm faders and a sub to mix switch will also be provided.

The three aux and FX output levels will be controlled by rotary controls each with an AFL switch. The FX return shall have its own level control switchable to aux one or two with a separate level control switchable to mix or/and stereo. Stereo returns one to three shall have their own level control switchable to aux one or two with a separate level control switchable to mix or sub. Stereo return four shall have its own level control switchable to aux three or FX send with a separate level control switchable to mix or sub.

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 FX16ii Console.
Block Diagram
Inputs and Outputs

Mono Input

Master Section
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) ........................................-127dBu (150Ω source)
Aux, Mix and Masters (@ 0dB, faders down) ..........................<-84dBu

Crosstalk (@ 1kHz)
Channel Mute.................................................................> 96dB
Fader Cut-off (rel +10 mark)......................................................> 96dB
Aux Send Pots Offness............................................................> 86dB

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

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 (@150 Ω) ......................................................300mW

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

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