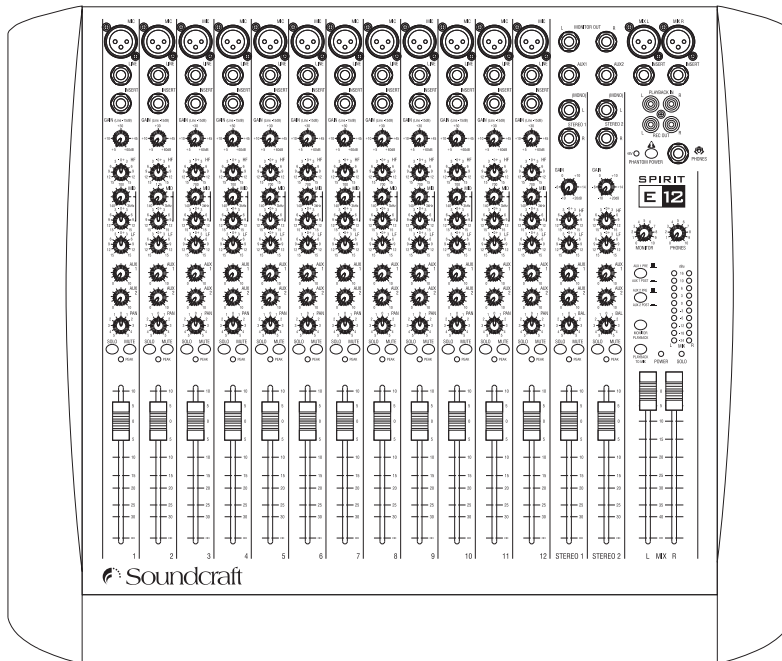


# TECHNICAL DATA

## INTRODUCTION

## SPIRIT E SERIES



### E6, E8, E12

6/8/12 mono inputs with 3-band EQ (swept mid)

2 stereo inputs with 2-band EQ

Rugged chassis design, with rack-mount capability

2 auxiliary sends, switchable pre or post-fade

Peak LED on all input channels

Global +48V phantom power

100mm faders throughout

### ES

4 mono inputs with 3-band EQ (swept mid)

10 stereo inputs with 3-band EQ (2 with RIAA Turntable Equalisation)

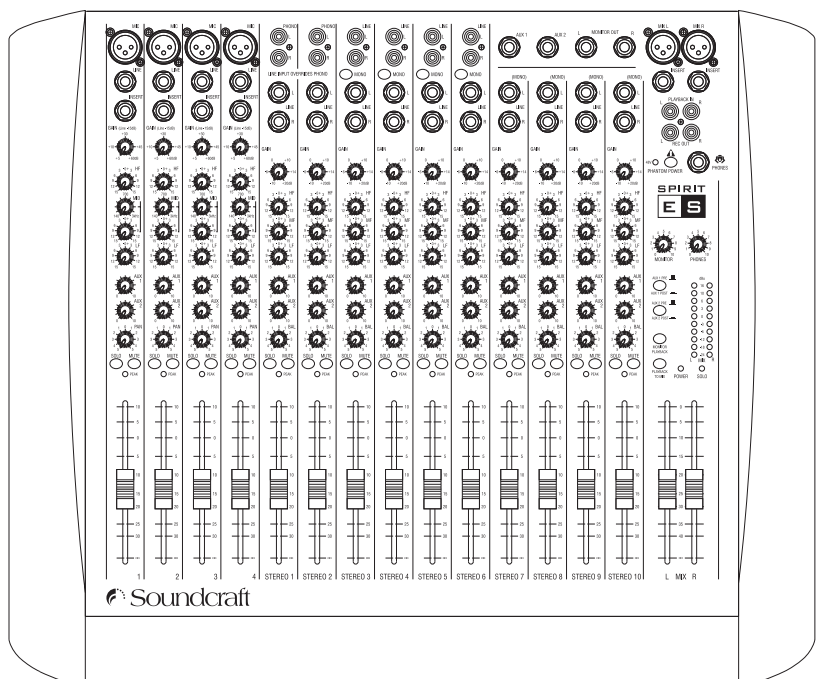
Rugged chassis design, with rack-mount capability

2 auxiliary sends, switchable pre or post-fade

Peak LED on all input channels

Global +48V phantom power

100mm faders throughout

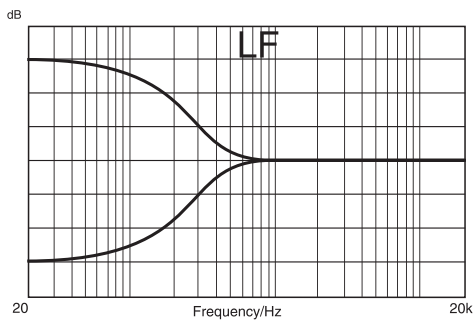
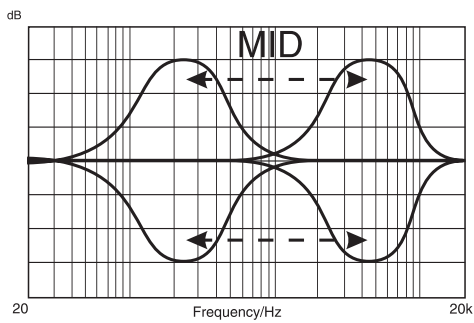
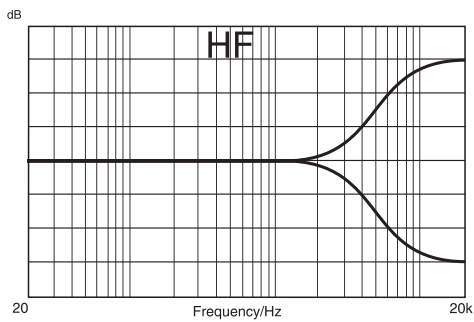


# TECHNICAL DATA

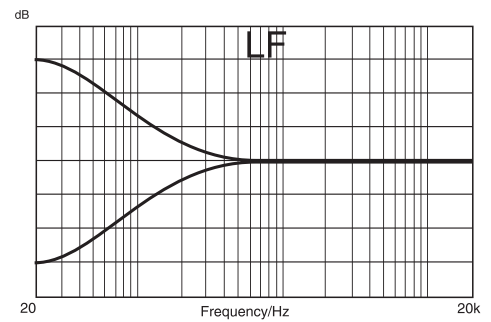
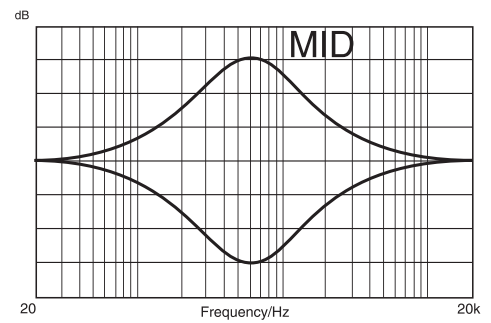
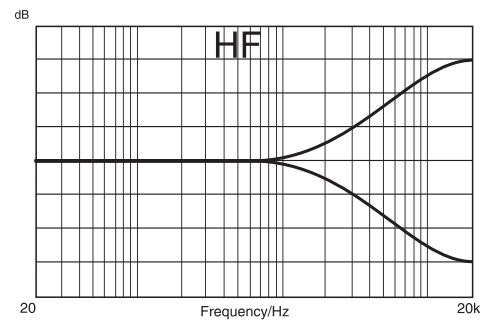
## SPIRIT E SERIES

### TYPICAL EQ CURVES

#### E6/8/12 EQ



#### ES Stereo EQ



# TECHNICAL DATA

## MODULES

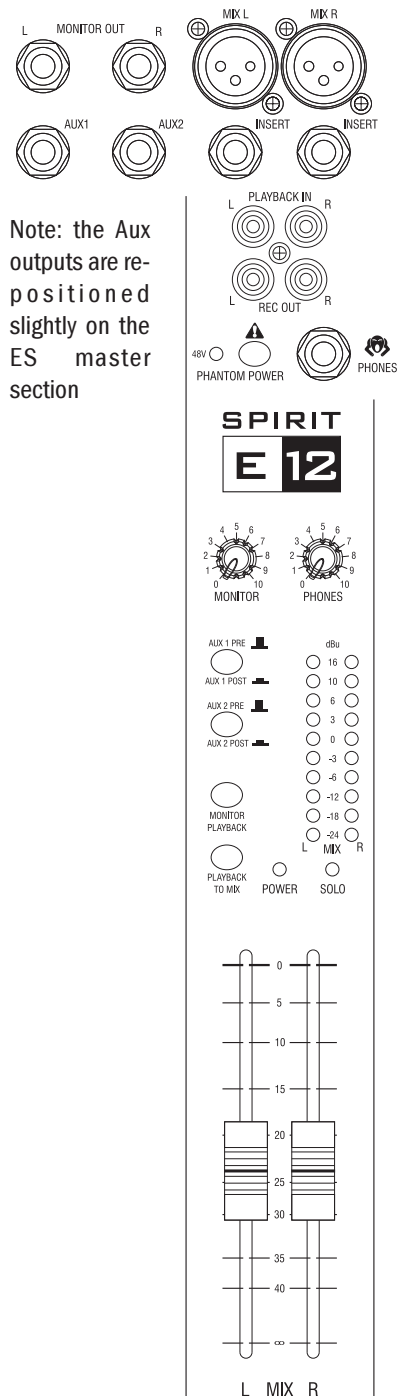
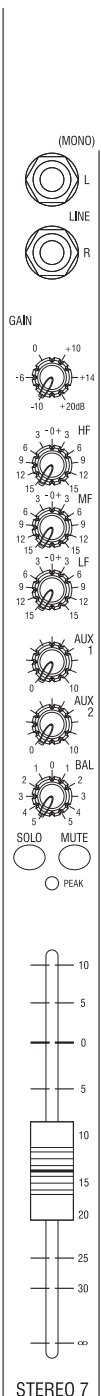
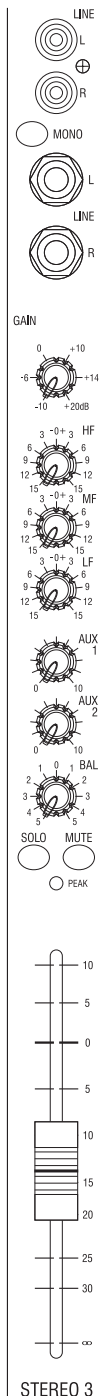
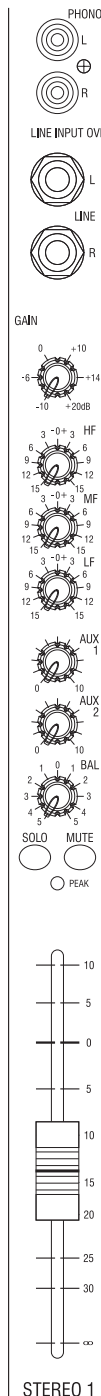
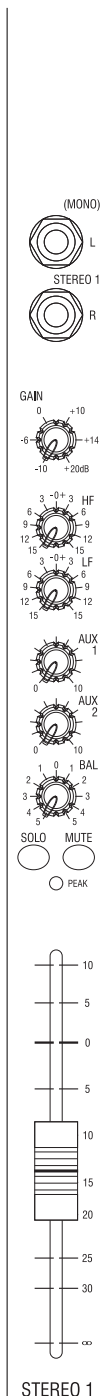
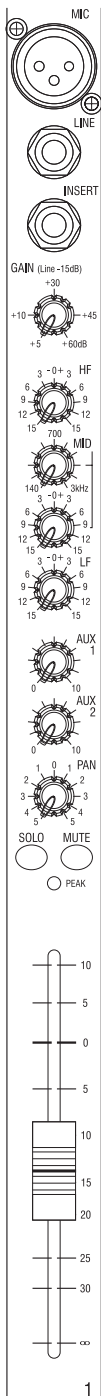
## SPIRIT E SERIES

### Mono Input Channel

### Stereo Input Channel (E6/8/12)

### Stereo Input Channels (ES) (There are 3 variants)

### Master Section

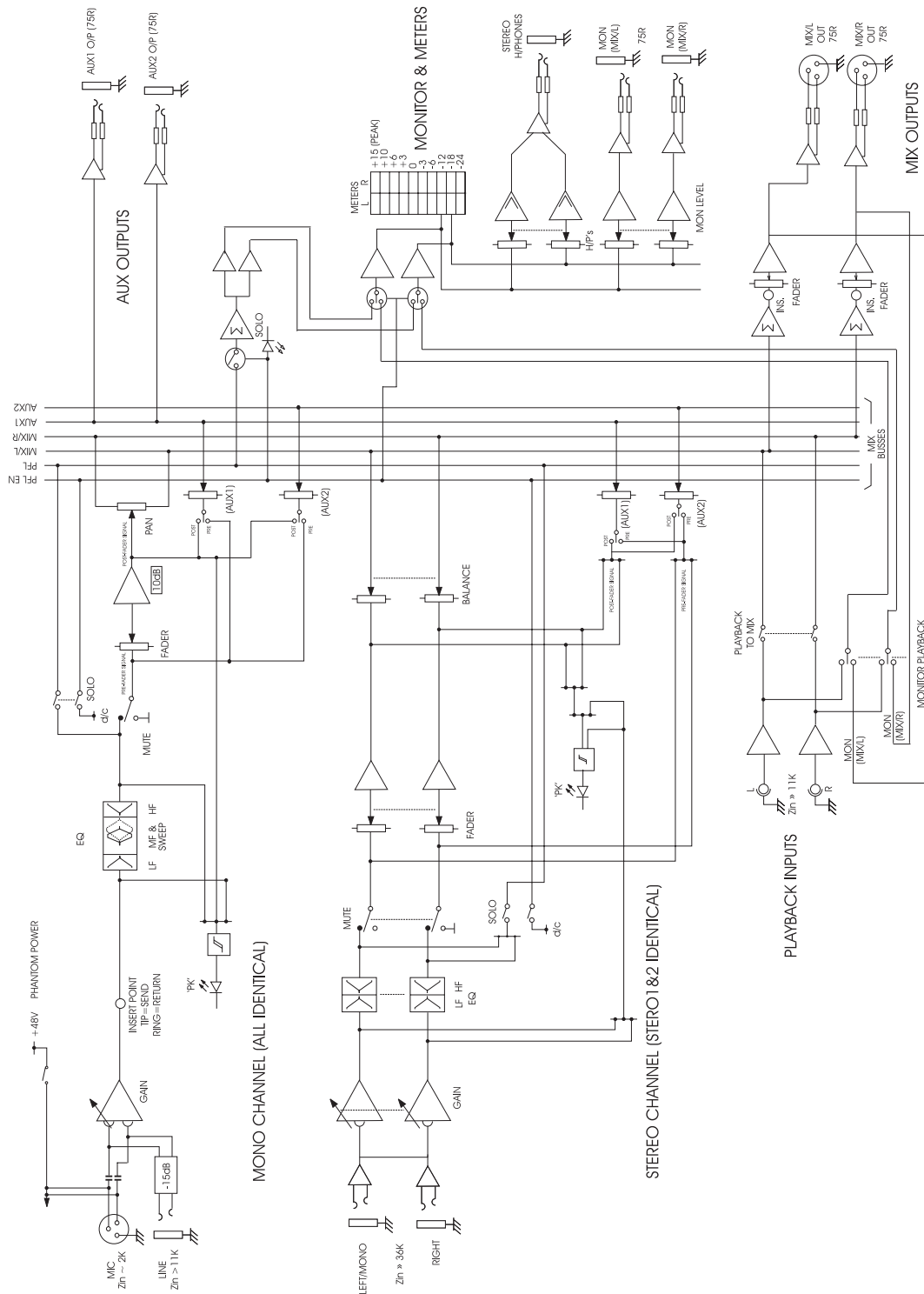


Note: the Aux outputs are re-positioned slightly on the ES master section

# TECHNICAL DATA

## SPIRIT E SERIES

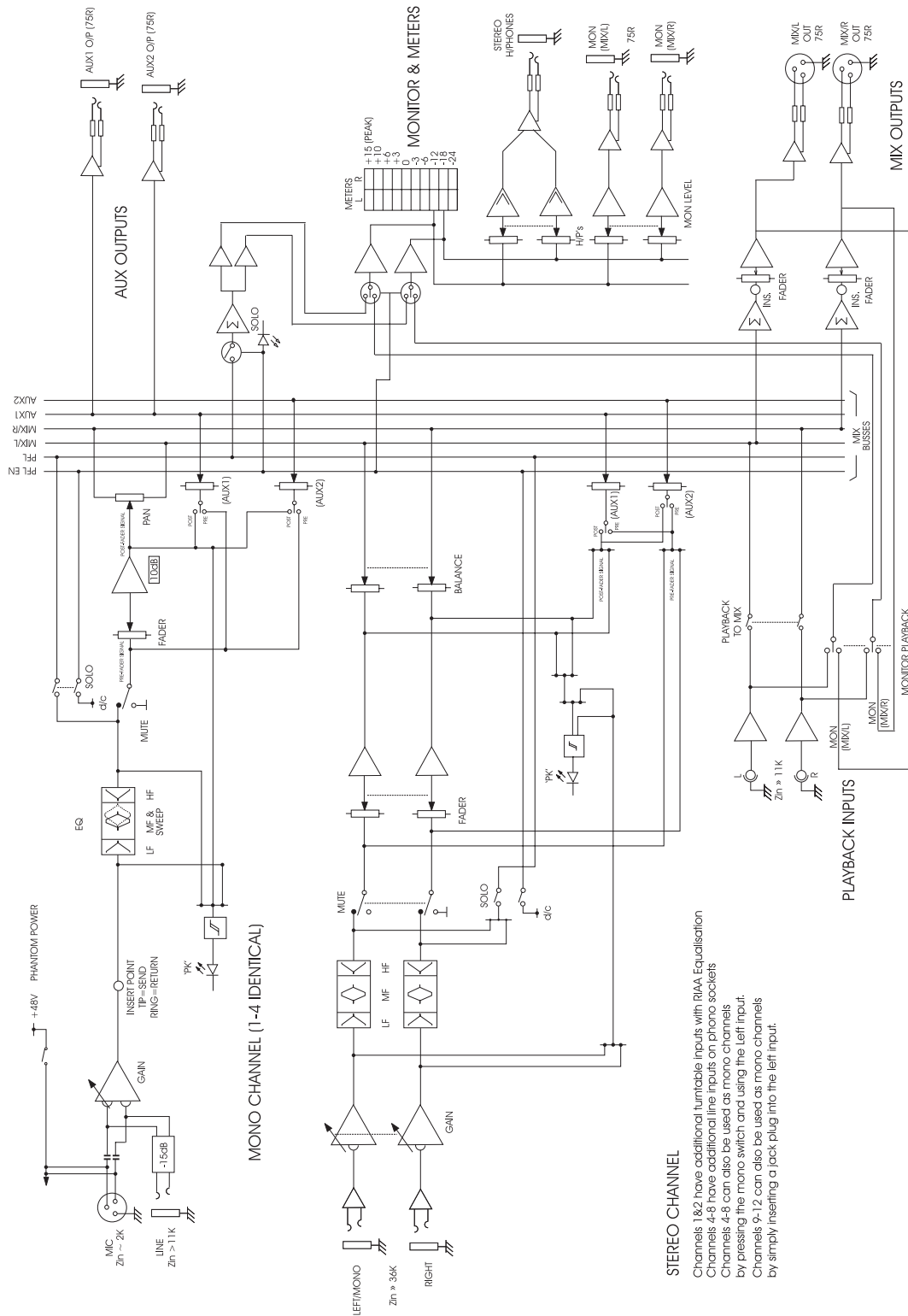
## E6/8/12 BLOCK DIAGRAM



# TECHNICAL DATA

## ES BLOCK DIAGRAM

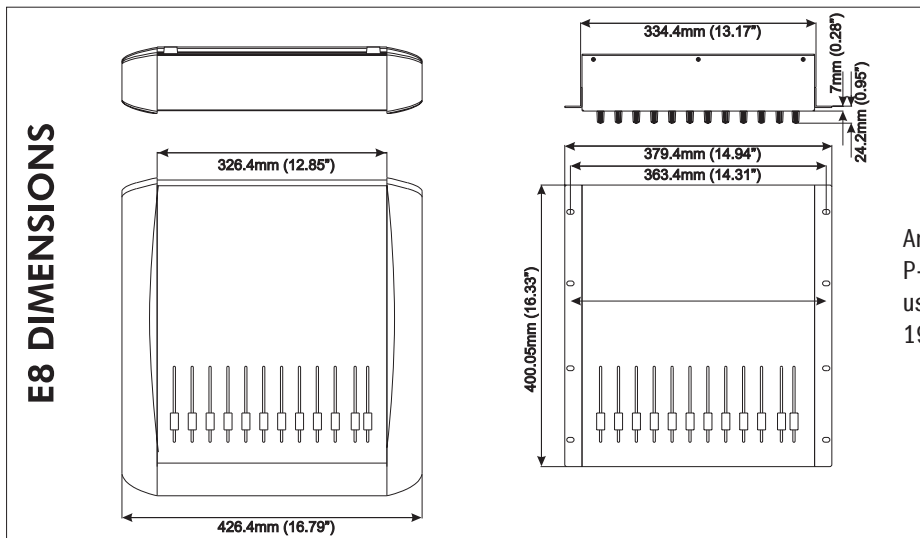
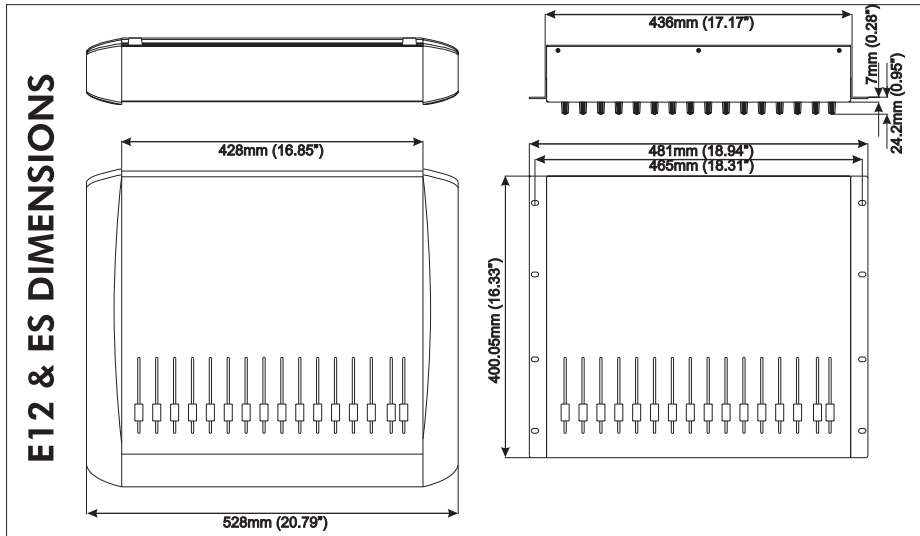
## SPIRIT E SERIES



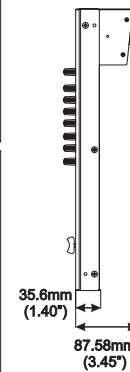
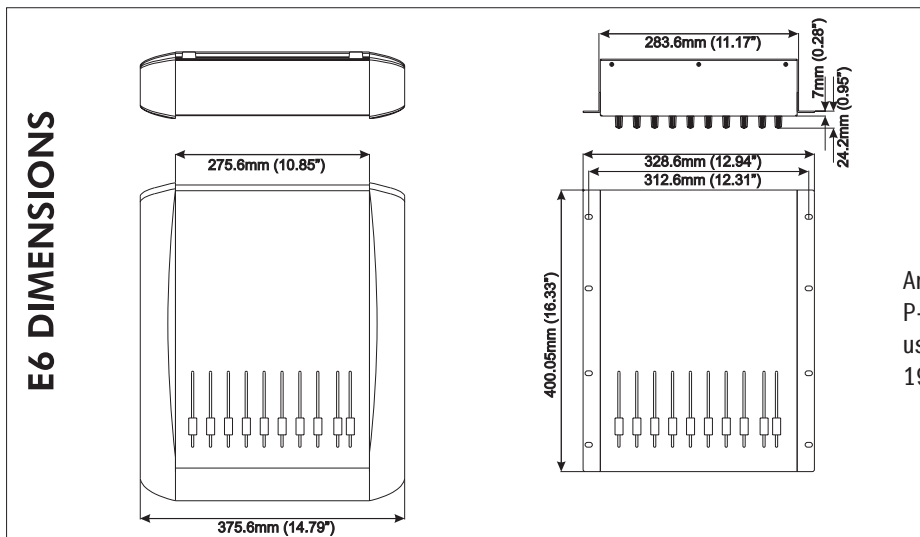
# TECHNICAL DATA

## SPIRIT E SERIES

### DIMENSIONS



An E8 Rack Extender (Part # P-\$20001D-01) may be used to mount the E8 in a 19" rack



An E6 Rack Extender (Part # P-\$20000D-01) may be used to mount the E6 in a 19" rack

# TECHNICAL DATA

## Architect's and Engineer's Specifications

### Soundcraft Spirit E Series Mixing Console October 2002

The audio mixing console shall be a self-contained unit, complete with input, output 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 12 (8, 6) mono input channels, two stereo input channels and a stereo mix master output. 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 1/4" 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 60Hz with 15dB of cut or boost, and an MF control continuously variable from 140Hz to 3kHz with a Q of 0.77 and cut or boost of 15dB. Two auxiliary sends shall be provided, with individual level controls. Each Aux shall be individually globally switchable to be pre-fade or post-fade sends. Routing to the mix output shall be in stereo via a Pan control with -4.5dB centre-drop, along with Mute and SOLO (PFL) functions. A Peak LED shall warn of signals within 6dB of clipping. There shall be a pre-EQ insert point on a 1/4" TRS jack, and a 100mm fader shall control the overall channel signal level.

The stereo input channel shall have the following features: Line input connectors on electronically balanced 1/4" jack connectors with input gain continuously variable from 0 to +22dB. There shall be a two-band equaliser with HF and LF shelving controls at 12kHz and 60Hz with cut or boost of 15dB. Two auxiliary sends shall be provided, both with individual level controls and feeding a mono sum of the stereo channel to the Aux busses. Each Aux shall be individually globally switchable to be pre-fade or post-fade sends. Routing to the mix output shall be in stereo via a Balance control, along with Mute and SOLO (PFL) functions. A Peak LED shall warn of signals within 6dB of clipping, and a 100mm fader shall control the overall channel signal level.

The Master section shall contain the following facilities: a stereo playback input and record output, a stereo mix output, monitor outputs, output metering, a 1/4" headphone output mounted on the console front panel, 2 Aux master outputs, and a global 48V phantom power switch with LED. The Playback inputs shall be routed to the Mix outputs via a gain control when a PLAYBACK TO MIX button is pressed, and to the monitor outputs when a MONITOR PLAYBACK is pressed. Ten-segment LED bargraph 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 100mm faders and fed to electronically balanced XLR connectors. There shall be Mix Inserts on 1/4" jack connectors.

The two Auxiliary Master outputs shall be fed to electronically balanced 1/4" jack connectors. The output level of the 1/4" 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 Spirit E Series brochure. The audio mixing console shall be the **Soundcraft Spirit E Series E12** (E6, E8)

### Soundcraft Spirit E Series ES Mixing Console October 2002

The audio mixing console shall be a self-contained unit, complete with input, output 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 10 stereo input channels, four mono input channels and a stereo mix master output, and be capable of routing 26 input signals to mix. 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 stereo input channel shall have the following minimum features: Line input connectors on electronically balanced 1/4" jack connectors with input gain continuously variable from 0 to +22dB. There shall be a three-band equaliser with HF, MF and LF shelving controls at 12kHz, 600Hz and 60Hz with cut or boost of 15dB. Two auxiliary sends shall be provided, both with individual level controls and feeding a mono sum of the stereo channel to the Aux busses. Each Aux shall be individually globally switchable to be pre-fade or post-fade sends. Routing to the mix output shall be in stereo via a Balance control, along with Mute and SOLO (PFL) functions. A Peak LED shall warn of signals within 6dB of clipping, and a 100mm fader shall control the overall channel signal level.

At least two of the stereo input channels shall be capable of accepting signals from a record turntable and applying RIAA equalisation and pre-amplification to that signal. These signals shall be connected via RCA/phono sockets. A signal inserted on the 1/4" jack connectors will override the RCA/phono input.

At least four of the remaining stereo inputs shall feature both RCA/phono and 1/4" jack sockets for line input connections, and be able to switch the selected incoming signal to be mono. A signal inserted on the 1/4" jack connectors will override the RCA/phono input.

The mono input channel shall have the following features: an electronically balanced wide range mic and line input on XLR and 1/4" 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 60Hz with 15dB of cut or boost, and an MF control continuously variable from 140Hz to 3kHz with a Q of 0.77 and cut or boost of 15dB. Two auxiliary sends shall be provided, with individual level controls. Each Aux shall be individually globally switchable to be pre-fade or post-fade sends. Routing to the mix output shall be in stereo via a Pan control with -4.5dB centre-drop, along with Mute and SOLO (PFL) functions. A Peak LED shall warn of signals within 6dB of clipping. There shall be a pre-EQ insert point on a 1/4" TRS jack, and a 100mm fader shall control the overall channel signal level.

The Master section shall contain the following facilities: a stereo playback input and record output, a stereo mix output, monitor outputs, output metering, a 1/4" headphone output mounted on the console front panel, 2 Aux master outputs, and a global 48V phantom power switch with LED. The Playback inputs shall be routed to the Mix outputs via a gain control when a PLAYBACK TO MIX button is pressed, and to the monitor outputs when a MONITOR PLAYBACK is pressed. Ten-segment LED bargraph 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 100mm faders and fed to electronically balanced XLR connectors. There shall be Mix Inserts on 1/4" jack connectors.

The two Auxiliary Master outputs shall be fed to electronically balanced 1/4" jack connectors. The output level of the 1/4" 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 Spirit E Series brochure. The audio mixing console shall be the **Soundcraft Spirit E Series ES**.



# TECHNICAL DATA

## SPIRIT E SERIES

### TYPICAL SPECIFICATIONS

#### Noise (22Hz-22kHz measurement bandwidth)

Mic EIN @ max gain, 150 W source impedance .....	-128dBu
Mix @max, faders down .....	<-85dBu

#### Crosstalk (typ. @ 1kHz)

Channel mute .....	>96dB
Fader cut-off (rel +10 mark) .....	>96dB
Aux send pot offness .....	>86dB

#### Frequency response

Mic/Line input to any output .....	+/- 0.5dB 20Hz - 20kHz
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#### THD+Noise

Mic gain 30dB, -30dBu input .....	
Mix out, fader max @ 1kHz .....	<0.007 %

#### Input & output Impedances

Mic input .....	2.4k $\Omega$
Line input .....	11k $\Omega$
Stereo input .....	100k $\Omega$
Outputs .....	75 $\Omega$

#### Input & output levels

Mic input max level .....	+17dBu
Line input max level .....	+30dBu
Stereo input max level .....	+30dBu
Mix output max level .....	+20dBu
Headphones (@ 200 $\Omega$ ) .....	300mW

#### EQ

EQ Bands (Mono input) +/- 15dB

Lo .....	80Hz
Mid (swept) .....	140Hz - 3kHz
Hi .....	12kHz
Q .....	1.5

EQ Bands (stereo input) +/- 15dB

Lo .....	80Hz
Mid (ES only) .....	600Hz
Hi .....	12kHz

#### WEIGHT

E6 .....	5.75 kg (12.68 lbs)
E8 .....	6.75 kg (14.88 lbs)
E12/ES .....	7.75 kg (17.09 lbs)

#### AVERAGE POWER CONSUMPTION (QUIESCENT)

E6 .....	13 Watts
E8 .....	14.5 Watts
E12 .....	17 Watts
ES .....	15.5W

#### MIN / MAX OPERATING TEMPERATURE (E SERIES FAMILY)

Centigrade / Fahrenheit .....	0°C - 50°C / 32°F - 122°F
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