Technical Data

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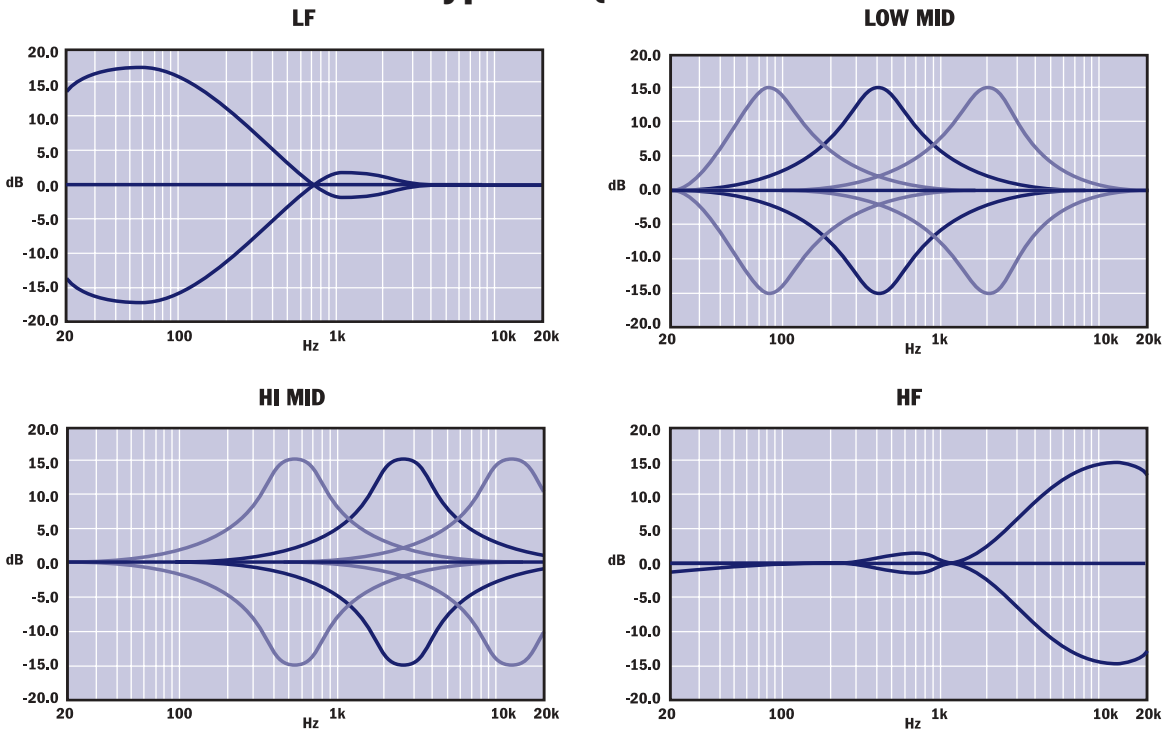
Introduction

- 16, 24 and 32 channel frame sizes
- GB30 mic preamp and precision equalisation circuitry
- True 7-bus architecture
- 2 Stereo Inputs
- 2 Stereo Returns
- Channel direct outputs
- 6 aux sends, 4 of which are pre/post switchable
- Integral universal voltage, switched-mode PSU for light weight
- Talkback facility
- 100mm faders
- +48 phantom power
- 18dB/octave high pass filter
- Group and mix inserts
- 12-segment LED metering

Typical EQ Curves



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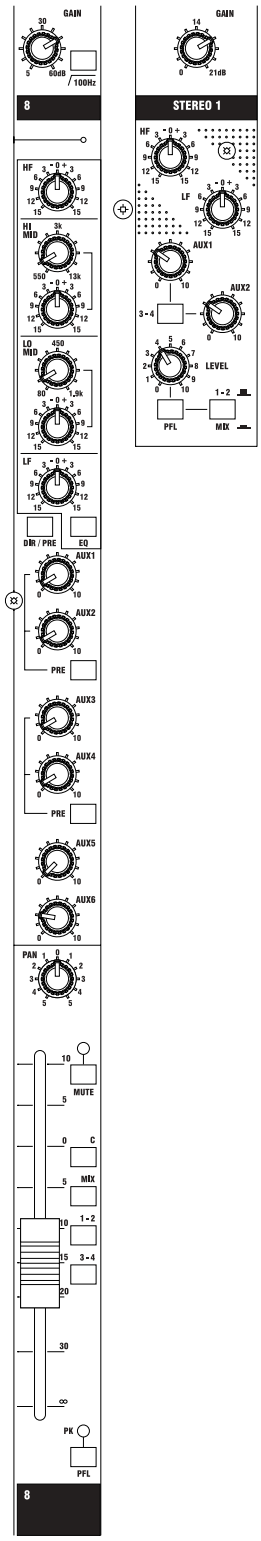
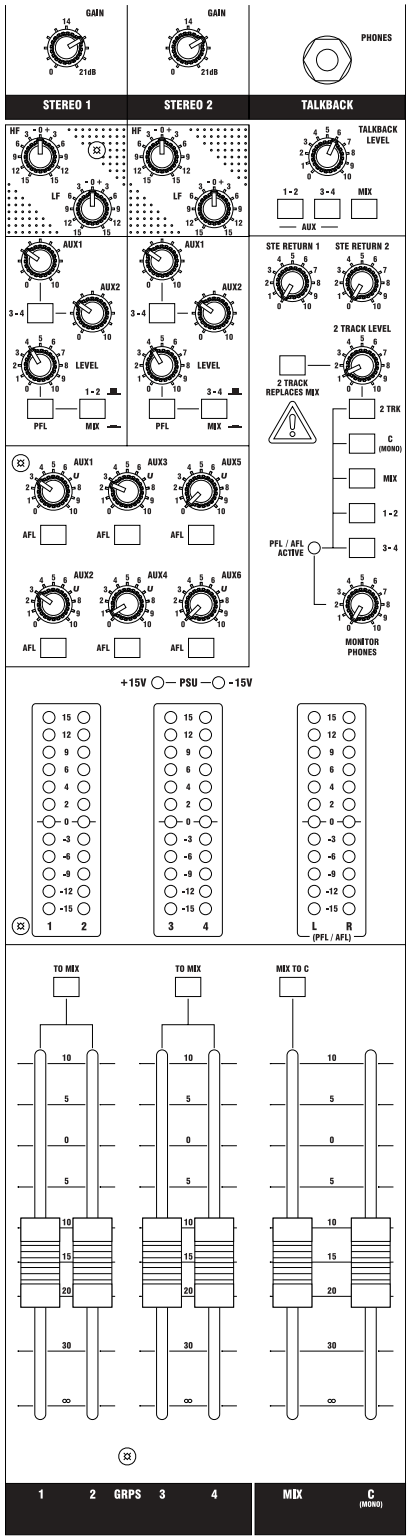
Mono/Stereo Inputs



Master Section



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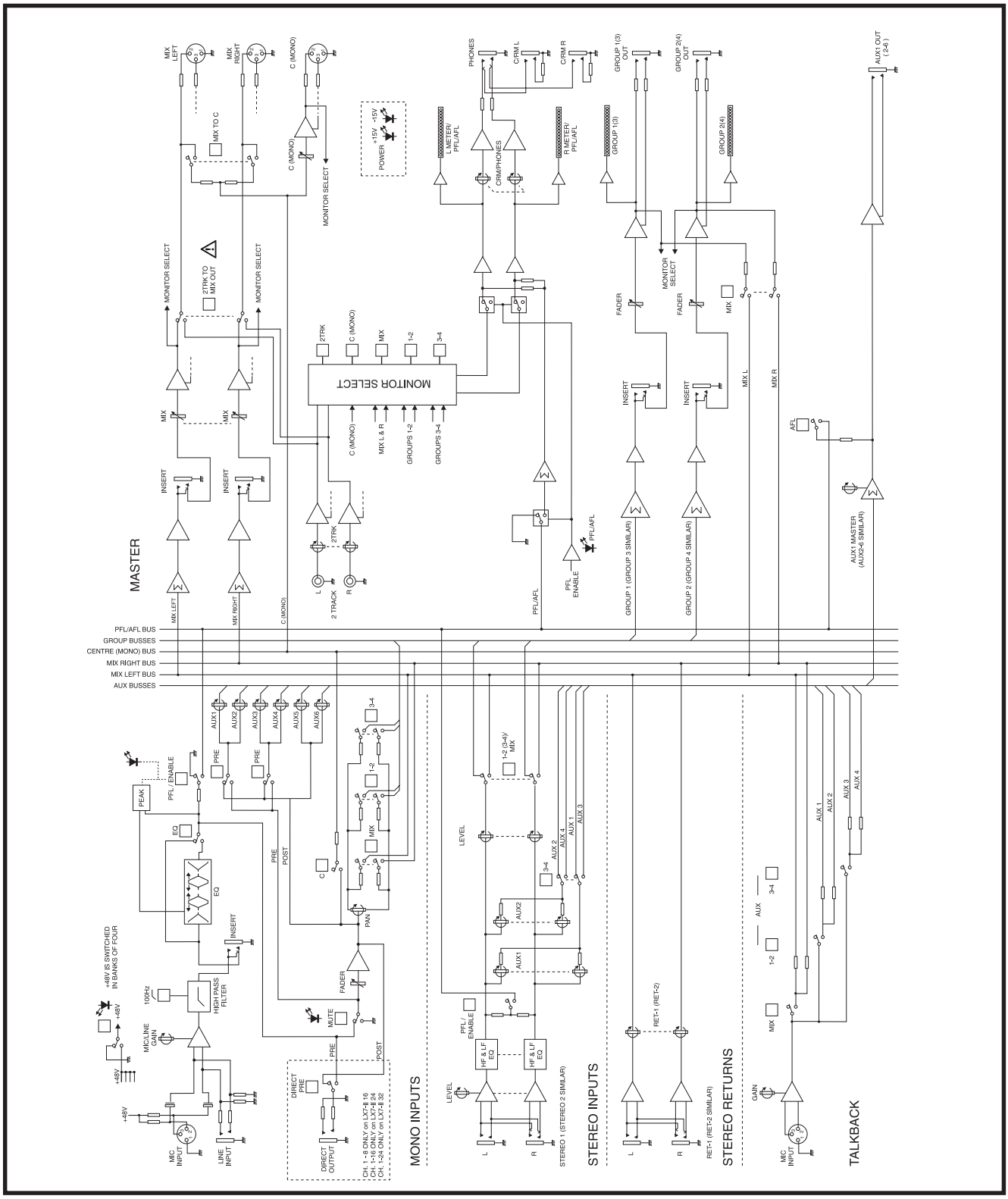
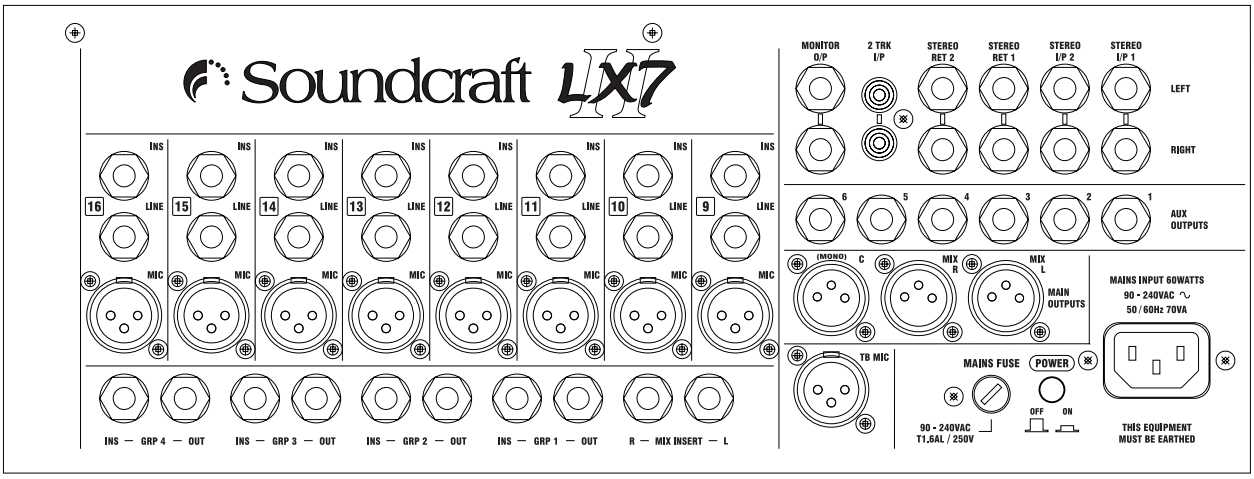
Block Diagram



Connectors



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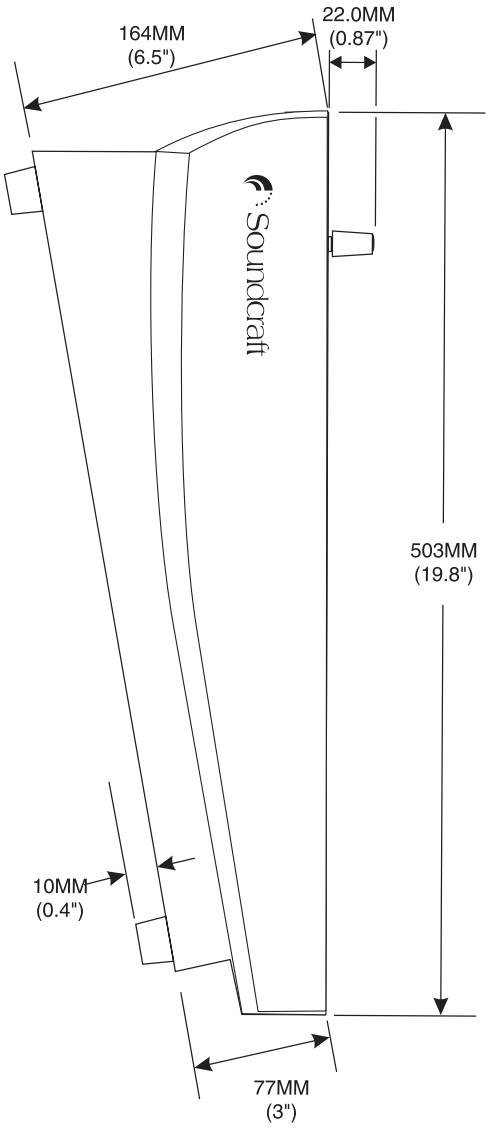
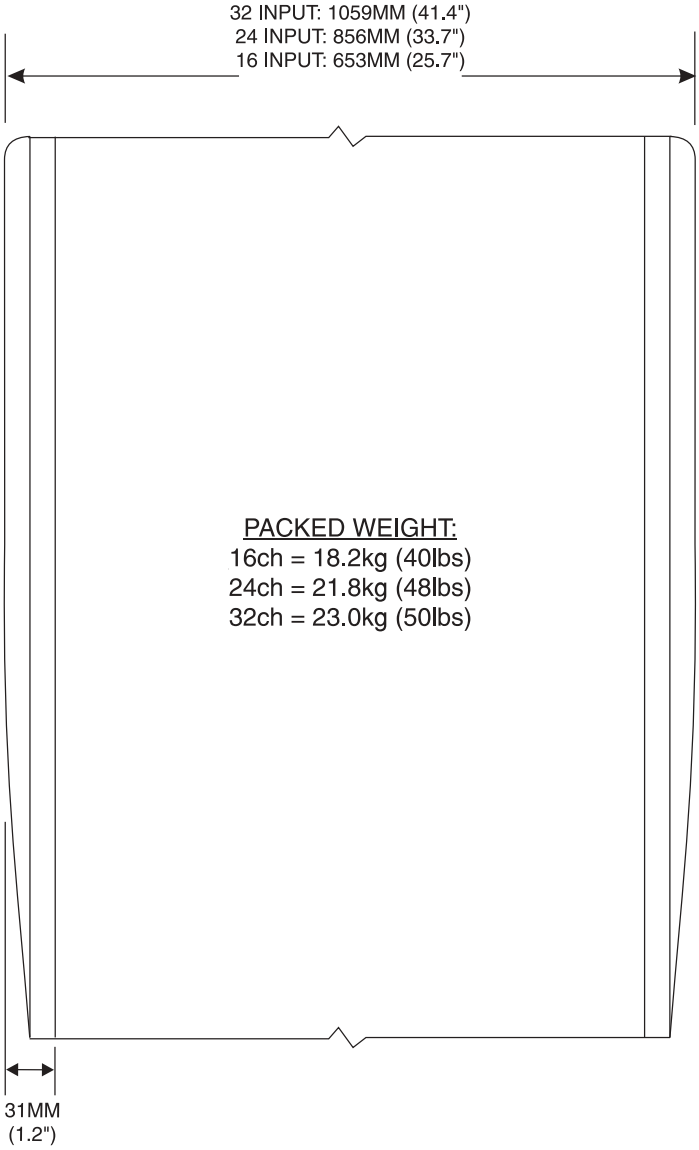
Dimensions


164MM
(6.5")
22.0MM
(0.87")
Soundcraft
503MM
(19.8")
10MM
(0.4")
77MM
(3")


32 INPUT: 1059MM (41.4")
24 INPUT: 856MM (33.7")
16 INPUT: 653MM (25.7")
PACKED WEIGHT:
16ch = 18.2kg (40lbs)
24ch = 21.8kg (48lbs)
32ch = 23.0kg (50lbs)
31MM
(1.2")

Architect's Specification

The Mixing Console shall be constructed in an all-steel chassis, with removable side cheeks, and shall be available in a 16, 24, and 32 input configuration. There shall be one main PCB for the channel and master section, and one PCB for I/O. There shall be Main Left/Right outputs, 4 Group outputs, a C (Mono) Output, and L/R Control Room outputs in addition to 6 auxiliary send outputs. Direct outputs will be provided for all but the last eight channel strips. There shall be 2 stereo effects return inputs, which default to Mono with only Left input applied. There will be 2 Stereo input strips with EQ, level and Aux sends, 2 stereo returns (to Mix), and an additional 2-Track input provided. A Talkback facility shall be included, assignable to the Aux sends and Mix outputs. The unit will utilize a switched-mode universal voltage internal power supply.

Each Mono Input shall have low-impedance balanced inputs via XLR sockets and line-level inputs via balanced ¼" connectors. Gain shall be continuously variable from 5dB to 60dB, and phantom power will be switchable in blocks of 4 input channels. There shall be a switchable 100Hz High Pass filter with an 18db per octave slope. The EQ shall be a 4-band type with a 2nd order shelving HF at 13kHz, 2nd order shelving LF at 80Hz, and two sweepable mid-range controls from 80Hz – 1.9kHz, and 550Hz – 13kHz respectively. The Q for Mid-range control shall be fixed at 1. Gain shall be cut or boosted by 15db on all bands (center detented). The EQ circuit shall be engaged via a switch. Six external Aux sends shall be provided. Auxes 1-4 will be switchable pre or post-fader in groups of two, and Auxes 5 and 6 will be fixed for post fade operation. All sends will be post-mute. There will be a Direct Output on all but the last eight channels, with switchable pre or post-fade signal output. There shall be a pre-EQ, pre-mute TRS ¼" insert point. Routing shall be assigned, post-pan, to the Mix, Mono Bus, Group 1-2, and Group 3-4 via a switch above each fader. Faders will be 100mm high quality type. There shall be a channel Mute switch and Mute LED indicator, as well as a PFL switch and LED indicator. The PFL LED will default to a Peak Indicator when the PFL switch is released.

Each Stereo input strip will have line-level inputs via two ¼" balanced TRS connectors. Stereo Channels will default to mono with only Left input applied. A continuously variable gain control from 0-22 db will be provided, as well as a 2 band Shelving EQ with frequency centers at 60Hz and 12kHz respectively. Gain shall be cut or boosted by 15db on both bands (center detented). Two post-fade Aux sends will be provided, with switchable routing to either Aux 1 and 2 outputs or Aux 3 and 4 outputs . Routing shall be assigned to the Mix or respective Group pair, Stereo Input 1 routable to Groups 1 and 2, and Stereo Input 2 routing to Groups 3 and 4. There shall be a PFL switch.

The Group sections shall have 100mm faders situated to the left of the Master faders. Outputs will be routed to dedicated balanced ¼" jacks with TRS insert points. A switch to route Groups to Mix will be provided. The Mono Bus will have a dedicated 100mm fader and dedicated balanced XLR output. A "Mix-to-Mono" switch will be provided, creating a summation of the Left and Right Master outputs in addition to the dedicated Mono Bus signal.

The Master section shall consist of one 100mm master fader which controls Left and Right master level. Six master Aux sends with AFL switches shall be provided, as well as 2 external stereo Aux returns which default to mono with Left input. Each Aux return will have a dedicated level control. A Headphone/Control Room monitoring section will be provided which will include dedicated level control and switchable monitoring from 2TRK, Mix, Mono, Group 1 and 2, or Group 3 and 4 outputs. There shall be a –10 RCA 2-Track input with dedicated level control. A switch will be provided to allow 2TRK input to override Main Mix Output. Headphone insertion shall override Control Room monitor feed. A Talkback facility, assignable to the Aux sends and Mix outputs shall be provided. There shall be a 12 segment multi-colored LED meter for the Group Masters, and Left / Right Masters, and a master AFL/PFL LED indicator shall be provided. Two LED indicators for Voltage monitoring shall be included. Master outputs shall be balanced XLR with ¼" TRS inserts available.

The console dimensions and weight shall be published in product literature according to frame size. The console shall be the **Soundcraft LX7ii**.

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Typical Specifications

Frequency Response	XLR input to any output	+0/-1dB, 20Hz-20kHz
T.H.D. & Noise All measurements at +10dBu output 30dB gain	XLR input to Direct output	<0.007% @ 1kHz
	XLR input to Mix output	<0.008% @1kHz
Mic Input E.I.N.	22Hz-22kHz bandwidth, unweighted	<-128dBu (150 Ohm source)
Mic Gain	Min	5dB
	Max	60dB
Bus Noise	Mix output, input faders @ -µ, Mix fader 0dB	
	32 channels routed	<-85dBu
	16 channels routed	<-88dBu
	Grp output, input faders @ -µ, Grp fader 0dB	
	32 channels routed	<-85dBu
	16 channels routed	<-88dBu
	Aux output, input sends @ -µ, Aux master 0dB	
	32 channels routed	<-88dBu
	16 channels routed	<-91dBu
Crosstalk @ 1kHz	Input channel Muting	>98dB
	Input fader cutoff	>98dB
	Input pan pot isolation	>82dB
	Mix routing isolation	>98dB
	Group routing isolation	>98dB
	Adjacent channel isolation	>100dB
	Group-Mix crosstalk	<-84dB
	Aux send off	<-94dB
CMRR	Mono input measured at max gain	typically 80dB @ 1kHz
Input & Output	Input Channel Mic Input	+15dBu max
Levels	Input Channel Line Input	+30dBu max
	Stereo Inputs & Insert Returns	+20dBu max
	All Outputs	+20dBu max
	Nominal Operating Level	0dBu
	Headphone Power	2 x 250mW into 200W phones
Input & Output Impedances	Mic Input	2kW
	Line inputs	>10kW
	Input Channel Insert Return	5 kW (with EQ in, otherwise worst case 1.8 kW)
	Mix, Group, Aux Outputs	150W
	Insert Sends	75W
	Recommended headphone impedance	50-600W
	Headphone Power	2 x 250mW into 200W phones
HP Filter (Mono Input)	100Hz, 18dB per octave	
EQ (Mono Input)	HF	12kHz, +/-15dB, 2nd order shelving
	Hi-Mid	550Hz-13kHz, +/-15dB, Q=1
	Lo-Mid	80Hz-1.9kHz, +/-15dB, Q=1
	LF	80Hz, +/-15dB, 2nd order shelving
Metering	6 tri-colour 12-segment LED bargraphs.	
Power Consumption	Universal Mains Input 85V–270v AC, 50/60Hz.	
	Power Consumption	less than 50W
Weight	16 Channel	18.2kg (40lbs)
	24 Channel	21.8kg (48lbs)
	32 Channel	25.4kg (56lbs)
Operating Conditions	Temperature Range	-10° to +30°
	Relative Humidity	0% to 80%

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Issue 1 1/04
ZL0620

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