SPECIFICATIONS

All measurements taken with an Audio Precision System One. All noise measurements taken with trim at minimum and faders at unity gain with 22 Hz to 22 kHz bandwidth unless otherwise specified. All In & Out measurements made on balanced +4 dBu connectors. (+4 dBu into a line input with faders at unity and the meter reading "0" will yield +4 dBu into a balanced load or -2 dBu into an unbalanced load.) ***Subject to change without notice.***

Frequency Response

10 Hz – 75 kHz +0/-1 dB	(any input to any output at nominal operating levels)
-3 dB Point:	>125 kHz

Connectors

MIC IN jacks:	Female XLR (Pin 1 ground, Pin 2 +, Pin 3 -)
LINE IN and 2 TRACK IN jacks:	Female 1/4" 3-conductor phone (Tip = +, ring = -, sleeve = ground)
INSERT jacks:	Female 1/4" 3-conductor phone (Tip = send, ring = return, sleeve = ground) Inserting plug to first "click" allows direct output without breaking normal signal flow
MAIN OUT, CONTROL ROOM OUT, and AUX SEND jacks:	Female 1/4" 3-conductor phone (Tip = +, ring = -, sleeve = ground)
STEREO AUX RETURN jacks:	Female 1/4" 2-conductor, unbalanced

Levels

MIC IN	-62 dBu to -12 dBu nominal, maximum level +11 dBu
LINE IN	-42 dBu to +8 dBu nominal, maximum level +31 dBu (balanced)
TAPE IN	-10 dBV to +4 dBu nominal, +27 dBu maximum
ALL OUTPUT LEVELS (when meter is at 0 VU)	+4 dBu (1.24 volts) into a balanced load -2 dBu into an unbalanced load
MAXIMUM OUTPUT LEVEL	+21 dBu unbalanced, +27 dBu balanced (5 dB above "PK" segment of main meter)
HEADROOM	23 dB above nominal output
MAXIMUM GAIN	+76 dB, MIC IN to DIRECT, GROUP, and L/R outputs, balanced +70 dB unbalanced +72 dB MIC IN to MON 1/2 OUT

	+82 dB MIC IN to AUX 3-6 OUT
CHANNEL PEAK LED ON:	+85 dB, MIC IN to MONITOR OUT, balanced. 6 dB below channel clipping
METER:	Peak type -24 dB to PK (+18 dB over reference at L/R OUT, 5 dB before output clipping)
INSERT/DIRECT OUT (tip)	Unity gain
INSERT IN (ring)	Maximum level 18 dBu

Impedance

MIC IN	50-150 ohm nominal source impedance (presents 3.8 k ohm load impedance)
LINE IN	50 Ω to 2 k Ω nominal (>22 k Ω load impedance)
TAPE IN	50 Ω to 2 k Ω nominal (>16 k Ω load impedance)
OUTPUTS (MAIN, GROUP, DIRECT, AUX and MON):	150Ω unbalanced, 300Ω balanced

Noise performance (typical)

Dynamic Range	111 dB (Mic/Line to Main L/R output)
Signal-to-noise ratio	88 dB (Mic/Line to Main L/R output)
MIC IN to INSERT OUT	-129 dB Equivalent Input Noise at maximum gain, 150Ω source
Mic output noise (minimum gain, 150Ω source, to INSERT)	-91 dBu
Mix Output Noise (faders at nominal, trims minimum, 150Ω source terminations):	
16 channels assigned	-83 dBu unbalanced, -77 dBu balanced
1 channel assigned	-90 dBu unbalanced, -84 dBu balanced

Distortion (THD+N)

Measured with a 0 dBu signal into a MIC IN jack; TRIM set for +15 dBu output at INSERT jack:

At INSERT jack:	Better than 0.0010%
At MAIN OUT (+21 dBu):	Better than 0.0015%

Power

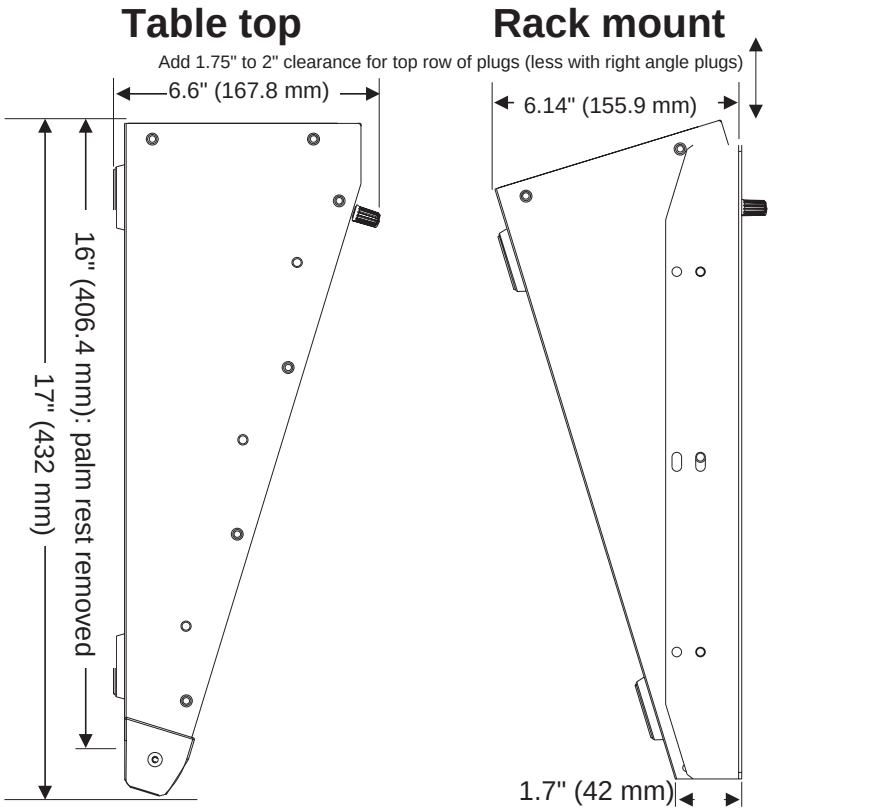
USA model:	120 VAC, 60 Hz 100 watts power consumption maximum

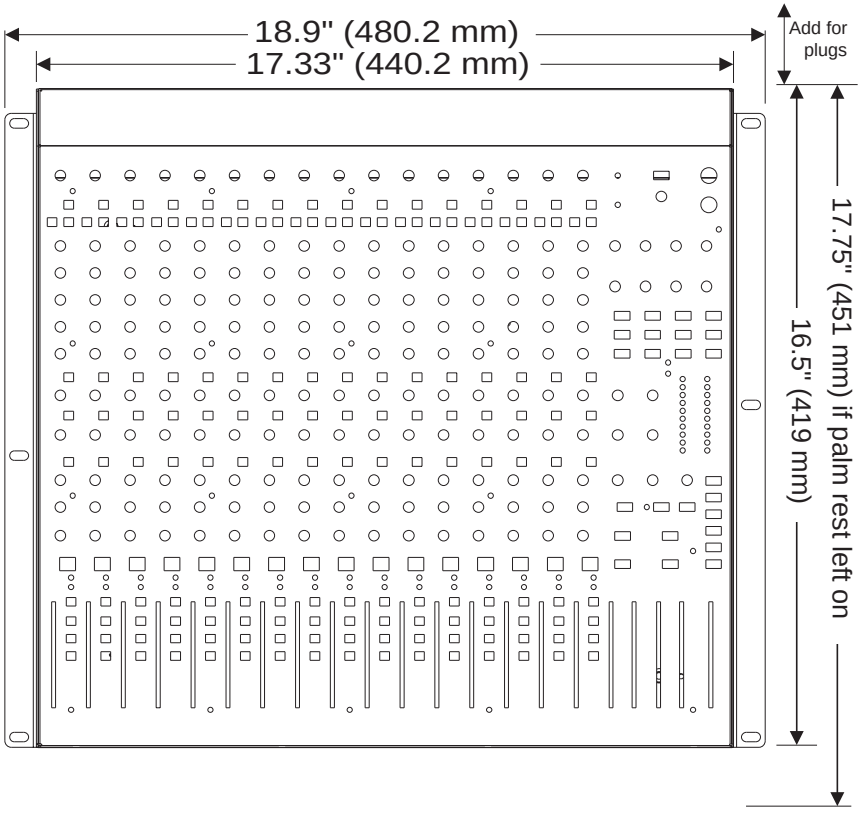
Mounting dimensions

19" EIA rack mountable, 10 spaces (plus additional spaces for connectors, depending on application)

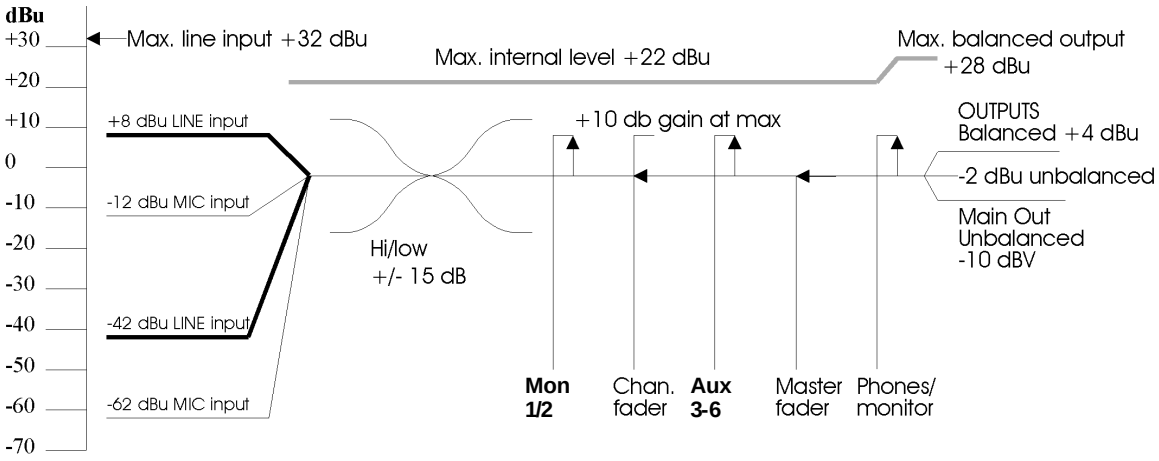
Rear Panel:	
Mic Inputs	XLR (16)
Balanced Line Inputs	1/4" TRS (16)
Balanced Tape Inputs	1/4" TRS (16)
Direct Outputs	1/4" TRS (16)
Channel Inserts	1/4" TRS (16)
Aux and Monitor Sends	1/4" TRS (6)
L/R Main Outputs	1/4" TRS (2)
Main Inserts	1/4" TRS (2)
Group Outs	1/4" TRS (4)
Control Room Outputs	1/4" TRS (2)
Stereo Aux Returns	1/4" mono (8)
2-Track Inputs	1/4" TRS (2)
Front Panel:	
Headphone Jacks (2)	1/4" TRS
Dimensions:	
Studio 32 Console	(WxHxD) 19" x 17.75" x 6.6" (48 cm x 45 cm x 17 cm)--see dimensional drawing
Weight:	
Studio 32 Console	21 lbs. (9.4 kg)
Total Shipping Weight:	Approximately 24 lbs. (10.9 kg)

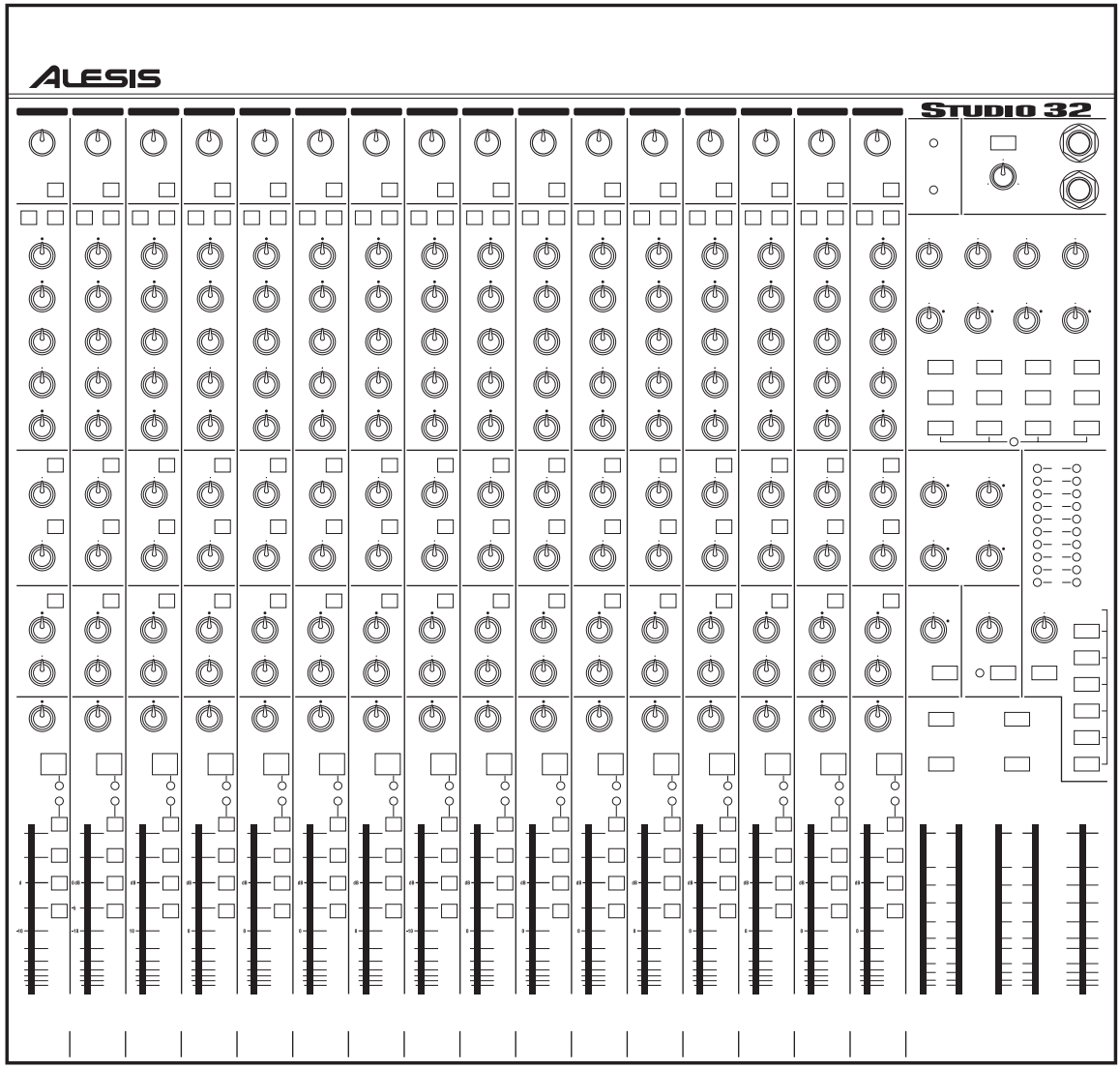
Dimensional Drawings:





GAIN DIAGRAM





BLOCK DIAGRAM