

M7CL Version3

Digital Mixing Console



M7CL-48ES



**Peak Meter Bridge MBM7CL is option.*



M7CL-48



**Peak Meter Bridge MBM7CL is option.*



M7CL-32



**Peak Meter Bridge MBM7CL is option.*

**Centralogic™ Touch Panel Operation Takes Another Step Forward.
New M7CL-48ES Model Offers Easy EtherSound Stage Box System Setup**

- Straightforward hands-on operation with no layers.
- Large touch-panel display offers intuitive control.
- Centralogic™ interface allows access to all channels from a front-and-center fader group.
- Two models with onboard analog input: choose the M7CL-48 for a total of 56 inputs (48 microphone and 4 stereo line), or the M7CL-32 for a total of 40 inputs (32 microphone and 4 stereo line).
- Newly-added M7CL-48ES model with built-in EtherSound for easy digital networking and setup using EtherSound stage boxes.
- 16 mix bus and 8 matrix configuration, with an INPUT TO MATRIX function that provides 24 mix bus output capability.
- Powerful channel processing including dynamics, 4-band parametric EQ, and more.
- A versatile range of multi-effects built-in, including the REV-X Add-on Effect package.
- Memorizes up to 300 scenes, with programmable fade time.
- Three Mini-YGDAI card slots for expandability.
- M7CL Editor software provides advanced viewer/controller capability via a personal computer.
- Multi-level security features include password and USB memory key protection.
- USB memory data management capability.
- Ethernet port provided for control.
- Version 3 includes high-performance VCM effects.

[M7CL-48ES]

- Up to three SB168-ES stage box units can be directly connected in daisy chain or ring configuration via a built-in EtherSound I/O connectors.
- An AUTO CONFIGURE function provides easy automated stage box setup.

Owners of previous M7CL versions can download the free Version3 update.

OPTIONS

MBM7CL
Meter Bridge



The optional MBM7CL Meter Bridge fits right above the console's display and provides high-visibility level monitoring while allowing the display to be used for other operations.

LA1L
Gooseneck Lamp



PSL360
Power Supply Link Cable

PW800W
Power Supply Unit



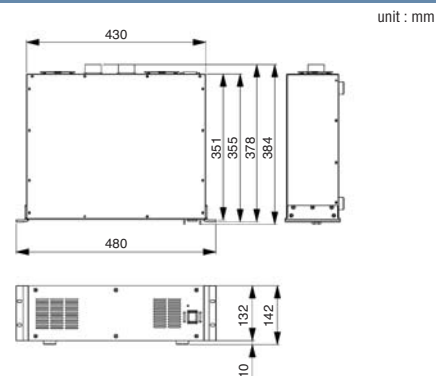
When a PW800W unit is added the internal power supply and the PW800W provide redundant failsafe operation.



GENERAL SPECIFICATIONS (PW800W)

Power Consumption	1000W
Dimensions (W x H x D)	480 x 142 x 384mm (18.7" x 5.5" x 14.98")
Weight	10kg (22lbs)
Included Accessories	Power cord, Cord clamp, Owner's Manual
Temperature Range	Operating 10°C–35°C Storage –20°C–60°C

DIMENSIONS (PW800W)



M7CL Version3

GENERAL SPECIFICATIONS

Internal processing	32bit (Accumulator=58bit)
Number of scene memories	300
Sampling frequency rate	Internal: 44.1kHz,48kHz External: 44.1kHz (-10%) to 48kHz (+6%) <M7CL-32/48> 44.1kHz (-2.5%) to 48kHz (+2.5%) <M7CL-48ES>
Signal Delay	Less than 2.5ms CH INPUT to OMNI OUT (@fs=48kHz)
Total harmonic distortion^{*1} CH INPUT to OMNI OUT Input Gain=Min.	Less than 0.05% 20Hz to 20kHz @+4dBu into 600Ω
Frequency response CH INPUT to OMNI OUT	+0.5,-1.5dB 20Hz - 20kHz @+4dBu into 600Ω
Dynamic range (maximum level to noise level)	110dB, DA Converter (OMNI OUT) 108dB, AD+DA (to OMNI OUT)
Hum & noise level^{*2} (20 to 20kHz), Rs=150Ω	-128dBu equivalent input noise -84dBu residual output noise
Crosstalk (@1kHz) input GAIN=min	-100dB ^{*3} , -80dB adjacent input channels -100dB ^{*3} , -80dB input to output
Power requirements	110V-240V, 50/60Hz
Power consumption	M7CL-48ES: 150W, M7CL-48: 300W, M7CL-32: 250W
Dimensions (W x H x D)	M7CL-48ES: 1274 x 286 x 701mm (50.2" x 11.2" x 27.5") M7CL-48: 1274 x 286 x 701mm (50.2" x 11.2" x 27.5") M7CL-32: 1060 x 286 x 701mm (41.7" x 11.2" x 27.5")
Weight	M7CL-48ES: 46kg (101lbs) M7CL-48: 50kg (110lbs) M7CL-32: 42kg (92lbs)

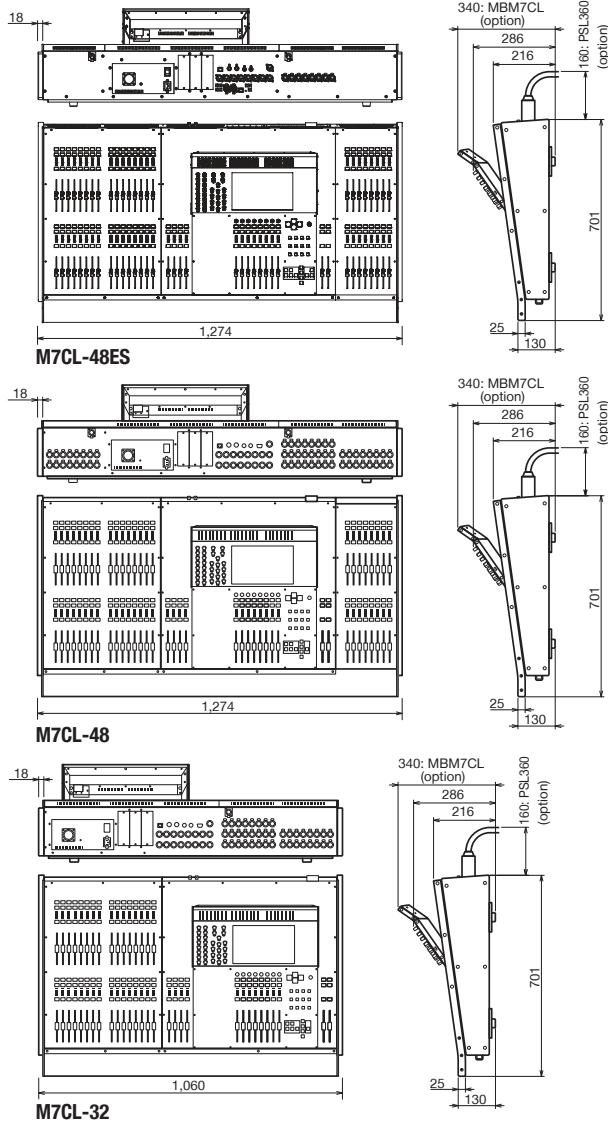
*1. Total harmonic distortion is measured with a 6dB/oct filter @80Hz

*2. Hum & noise are measured with 6dB/oct filter @12.7kHz; equivalent to a 20kHz filter with infinite dB/oct attenuation.

*3. Crosstalk is measured with a 30 dB/octave filter @22 kHz

DIMENSIONS

unit : mm



ANALOG INPUT SPECIFICATIONS

Input terminal	GAIN	Actual load impedance	For use with nominal	Input level			Connector
				Sensitivity	Nominal	Max. before clip	
INPUT 1-48 (M7CL-48)	-62dB	3kΩ	50-600Ω Mics & 600Ω Lines	-82dBu	-62dBu	-42dBu	XLR3-31 type*
	+10dB			-10dBu	+10dBu	+30dBu	
ST IN 1-4 [L,R] (M7CL-32/48)	-62dB	3kΩ	50-600Ω Mics & 600Ω Lines	-82dBu	-62dBu	-42dBu	XLR3-31 type*
	+10dB			-10dBu	+10dBu	+30dBu	
OMNI IN 1-8 (M7CL-48ES)	-62dB	3kΩ	50-600Ω Mics & 600Ω Lines	-82dBu	-62dBu	-42dBu	XLR3-31 type*
	+10dB			-10dBu	+10dBu	+30dBu	
TALKBACK	-60dB	3kΩ	50-600Ω Mics & 600Ω Lines	-70dBu	-60dBu	-40dBu	XLR3-31 type*
	-16dB			-26dBu	-16dBu	+4dBu	

ANALOG OUTPUT SPECIFICATIONS

Output terminals	Actual source impedance	For use with nominal	GAIN SW	Output terminals		Connectors
				Nominal	Max. before Clip	
OMNI OUT 1-16 (M7CL-32/48)	75Ω	600kΩ Lines	+24dB	+4dBu	+24dBu	XLR3-32 type*
				+18dB	-2dBu	
OMNI OUT 1-8 (M7CL-48ES)	15Ω	8Ω Phones	-	75mW	150mW	ST Phone Jack **
				40Ω Phones	65mW	

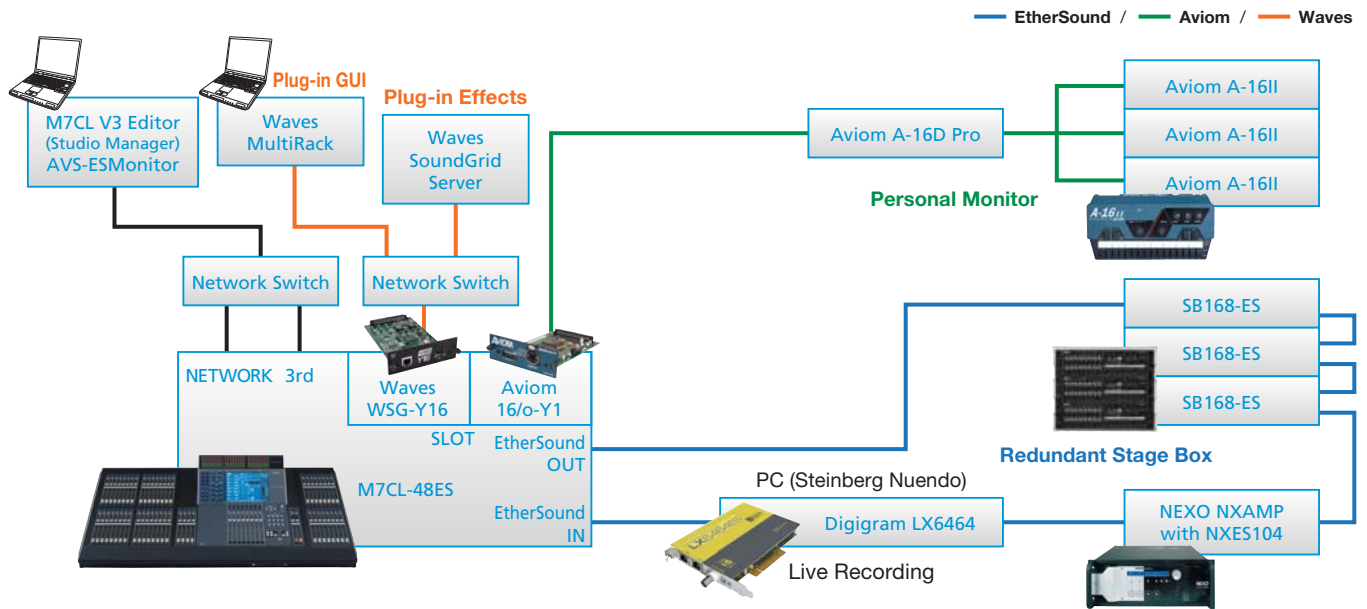
DIGITAL OUTPUT SPECIFICATIONS

Terminal	Format	Data length	Level	Audio	Connector	
2TR OUT DIGITAL	AES/EBU	AES/EBU	24bit	RS422	-	XLR3-32 type
EtherSound (M7CL-48ES)	EtherSound	24bit	100Base-TX	48ch Input/24ch Output @48kHz	etherCON	

CONTROL I/O SPECIFICATIONS

Terminal	Format	Level	Connector	
NETWORK (Ethernet)	IEEE802.3	-	RJ-45	
3rd Port (M7CL-48ES)				
MIDI	IN	MIDI	-	DIN Connector 5P
	OUT	MIDI	-	DIN Connector 5P
WORD CLOCK	IN	-	TTL/75Ω	BNC Connector
	OUT	-	TTL/75Ω	BNC Connector
REMOTE (M7CL-32/48)	-	RS422	-	D-Sub Connector 9P (Male)
USB HOST	USB1.1	-	-	A type USB Connector

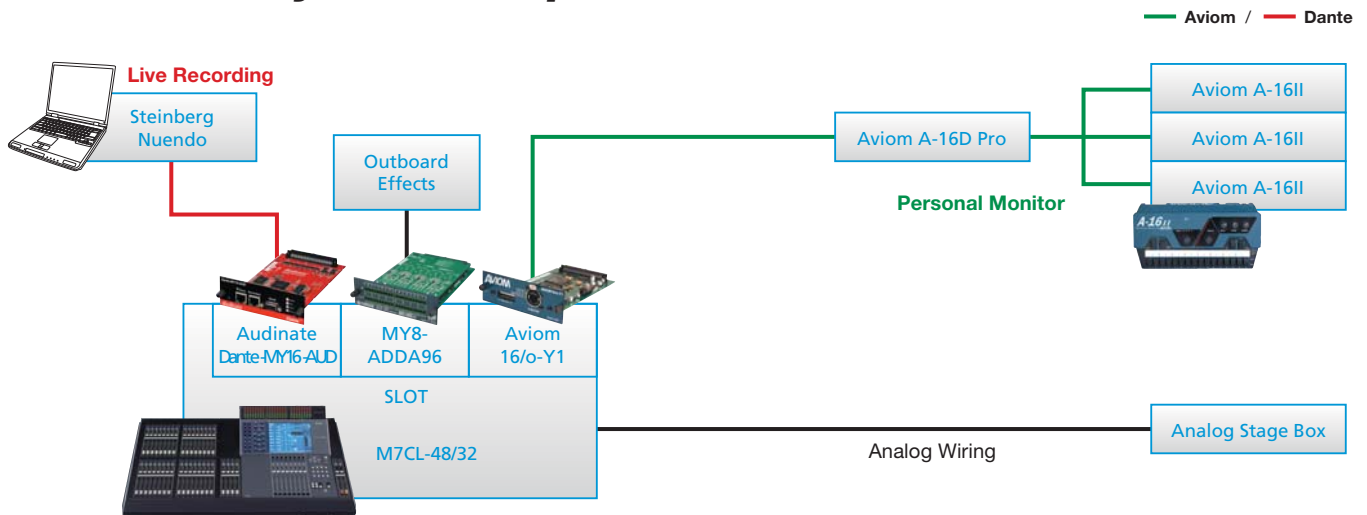
M7CL-48ES System Example



- SB168-ES units ring connected for redundancy.
- Digigram LX6464 allows 48-channel live recording to Steinberg NUENDO DAW software.
- Aviom devices provide a clean, simple personal monitoring system.
- Waves WSG-Y16 card and MULTIRACK make a variety of plug-in effects available.

* For this system it is necessary to turn Auto Configure OFF and use the AVS-ESMonitor application to set up the patches.

M7CL-48/32 System Example



- A simple system that makes full use of existing analog infrastructure.
- Smooth upgrade from an analog console. Card slots provide room for further expansion.
- Aviom personal monitoring devices can be easily added.
- Versatile, high-performance live recording via Audinate's Dante-MY16-AUD card.
- MY8-ADDA96 card allows convenient insertion of outboard effects.

M7CL Version3

BLOCK DIAGRAM (M7CL-48ES)

