M7CL

Digital Mixing Console

M7CL-32

M7CL-32 Rear Panel

*Peak Meter Bridge MBM7CL is option.

M7CL-48

M7CL-48 Rear Panel

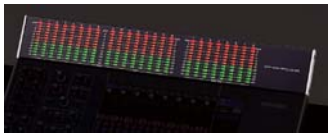
*Peak Meter Bridge MBM7CL is option.

Centralogic interface delivers digital live sound mixing with the comfort and efficiency of analog.

- Yamaha Centralogic™ interface with touch-screen allows total control from an easily accessible central area.
- The M7CL-48 provides a total of 56 inputs – 48 mono mic/line inputs and 4 stereo line inputs. The M7CL-32 has a total of 40 inputs – 32 mono mic/line inputs and 4 stereo line inputs.
- 27 buses in the form of 16 mix buses, an LCR bus, and eight matrixes that can be used with inputs as well as buses.
- Straightforward connection via analog input connectors for every input channel.
- 16 analog "omni" outputs as well as a 2TR digital output.
- Three Mini-YGDAI I/O card slots can accommodate up to 16 channels of digital or analog I/O each, for up to an addition 48 I/O channels.
- Eight DCA groups and eight mute groups.
- Virtual 8-unit rack for effects and graphic EQ.
- Advanced access management functions provide multi-level control over user access.
- Recallable right down to head amp gain, plus safe and focus functions.
- M7CL Editor software application supplied.

OPTIONS

MBM7CL
Meter Bridge



Although the M7CL has comprehensive metering facilities built in (simply touch the meter section on the display for full-screen total-system visual monitoring), 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

Rear Panel

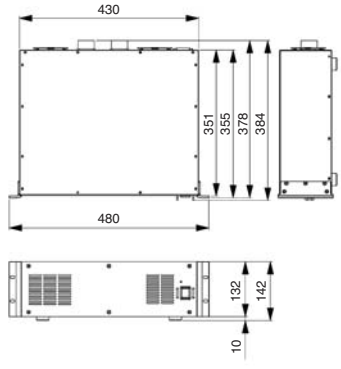
For many applications you can simply plug the M7CL directly into a convenient AC outlet and use the built-in power supply. But you should consider the external PW800W Power Supply Unit in situations where maximum regulation and reliability are required. When a PW800W unit is added the internal power supply and the PW800W provide redundant failsafe operation.

GENERAL SPECIFICATIONS (PW800W)

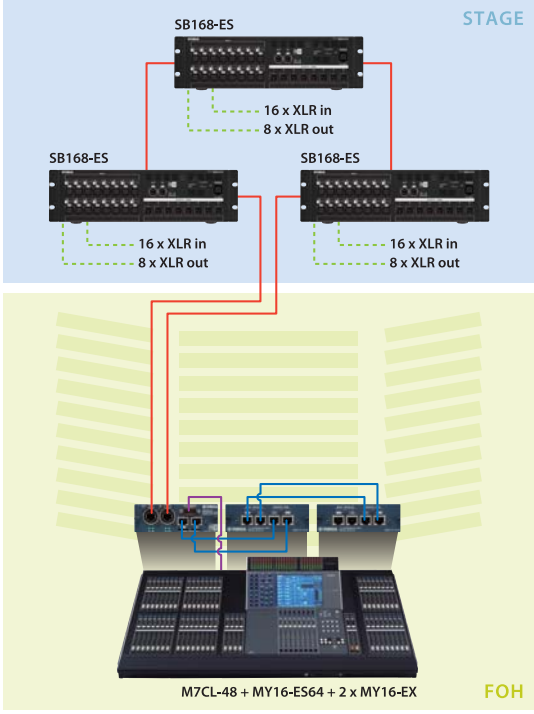
Power Consumption		1000W
Dimensions (W x H x D)		480 x 142 x 384mm (18.7" x 5.5" x 14.98")
Weight		10kg (22lbs)
Included Accessories		Power cord, Cord clamp, Owner's Manual
Temperature Renge	**Operating**	10°C–35°C
	Storage	–20°C–60°C

DIMENSIONS (PW800W)

unit : mm



SYSTEM EXAMPLE



Medium Scale Live Sound System with M7CL-48

This example depicts a live sound system built around an M7CL-48 console. This system offers 48 inputs and 24 outputs on stage.

This system uses CAT5e cables and ES-100 ring topology in a redundant configuration to connect the stage boxes and the M7CL-48, allowing simple, hassle-free setup.

- CAT5e cable (EtherSound™)
- CAT5e cable
- Analog
- HA Remote

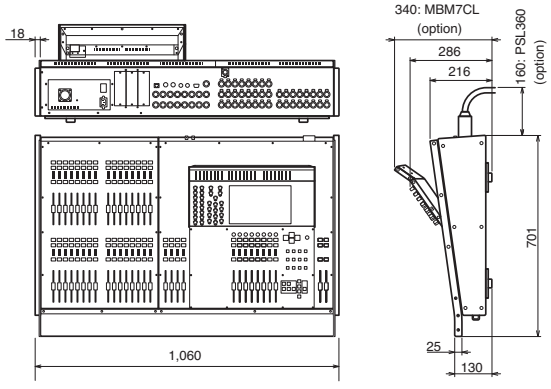
GENERAL SPECIFICATIONS

Internal processing	32bit (Accumulator=58bit)
Number of scene memories	300
Sampling frequency rate	Internal: 44.1kHz,48kHz External: 44.1kHz (-10%) to 48kHz (+6%)
Signal Delay	Less than 2.5ms (INPUT to OMNI OUT @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	20Hz - 20kHz, 0, +0.5,-1.5dB @+4dBu into 600Ω
Dynamic range (maximum level to noise level)	110dB, DA Converter (OMNI OUT) 108dB, AD+DA (OMNI OUT)
Hum & noise level *2	-128dB, Equivalent input noise (20-20kHz, Rs=150Ω, Input Gain=Max) -84dB, Residual noise
Crosstalk (@1kHz)	-80dB Adjacent input channels (INPUT1-48, ST IN 1-4 [L, R], (GAIN:min) to OMNI OUT 1-16)
Power requirements	110V-240V, 50/60Hz
Power consumption	M7CL-48: 300W, M7CL-32: 250W
Dimensions (W x H x D)	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-48: 50kg (110lbs) M7CL-32: 42kg (92lbs)

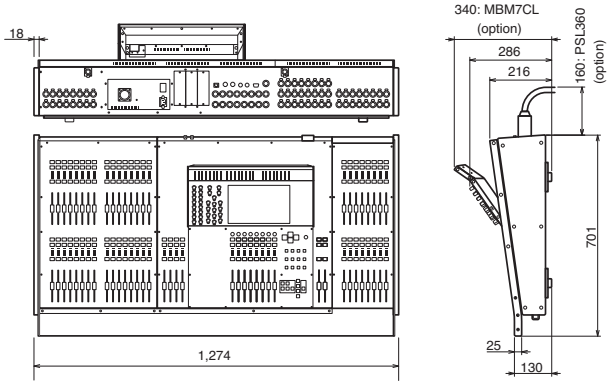
*1. Total harmonic distortion is measured with a 6dB/oct filter @80Hz
*2. Hum & noise are measured with 6dB/oct filter @12.7kHz; equivalent to a 20kHz filter with infinite dB/oct attenuation.

DIMENSIONS

unit : mm



M7CL-32



M7CL-48

ANALOG INPUT SPECIFICATIONS

Input terminal		Actual load impedance	For use with nominal	Input level			Connector
	GAIN			Sensitivity	Nominal	Max. before clip	
INPUT 1-n* ST IN 1-4[L,R]	-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	

*M7CL-48: n=48, M7CL-32: n=32

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	75Ω	600Ω Lines	+24dB*	+4dBu	+24dBu	XLR-3-32 type *
			+18dB	-2dBu	+18dBu	
PHONES	15Ω	8Ω Phones	—	75mW	150mW	ST Phone jack **
		40Ω Phones	—	65mW	150mW	

*Default
0dB=0.775Vrms; 0dBV=1.00Vrms

DIGITAL OUTPUT SPECIFICATIONS

Terminal	Format	Data length	Level	Connector
2TR OUT DIGITAL	AES3	24bit	RS422	XLR3-32 type (Balanced)

CONTROL I/O SPECIFICATIONS

Terminal		Format	Level	Connector
ETHERNET		ETHERNET	—	RJ45
MIDI	IN	MIDI	—	DIN Connector 5P
	OUT	MIDI	—	DIN Connector 5P
WORD CLOCK	IN	—	TTL/75Ω	BNC Connector
	OUT	—	TTL/75Ω	BNC Connector
REMOTE		—	RS422	D-sub 9pin(male)
LAMP 1, 2 *		—	0V-12V	XLR-4-31 type *1
USB HOST		USB1.1	—	A type USB Connector

*1. 4pin=HOT,3pin=COLD,Lamp rating 5 W,Voltage control by software
*M7CL-48 only

BLOCK DIAGRAM