

# PM5D Version2 / PM5D-RH Version2



## Digital Mixing Console



# PM5D Version2

PM5D

PM5D Rear Panel



# PM5D-RH Version2

PM5D-RH

PM5D-RH Rear Panel



*The PM5D and PM5D-RH Digital Mixing Consoles take the digital revolution to the next level.*

- The PM5D features standard high-performance head amps, while the PM5D-RH adds head-amp recall capability that allows head amp gain settings to be recalled along with the other console scene data.
- 48 mono and 4 stereo inputs, 24 mix buses and 2 stereo outputs, and 8 matrix outputs (expandable).
- Custom "DSP7" LSI for ultra-high-speed 96-kHz/32-bit processing.
- I/O capacity and functionality can be doubled or tripled by adding one or two rack-mountable DSP5D Digital Mixing Systems.
- Easy "virtual soundcheck" with individually assignable channels does not require complex re-patching.
- Built-in VCM (Virtual Circuit Modeling) effects offer impeccable simulations of classic signal processing gear.
- 8 high-performance multi-effect processors and 12 graphic equalizers built in.
- Enhanced security features keep the system operating flawlessly in any application.

ACCESSORIES

**LA5000**  
Gooseneck Lamp



OPTIONS

**PSL120**  
Power Supply Link Cable



**PW800W**  
Power Supply Unit



The PM5D is reliably powered by an external power supply unit. The PW800W is extremely compact and lightweight (3U, 10kg). Thanks to its high efficiency, the low speed cooling fans are extremely quiet. Two PW800W units can be serially connected using optional PSL120 cable for failsafe operation. PW800W accepts 100 - 240 volts so it can be used anywhere.

# PM5D Version2 / PM5D-RH Version2

## GENERAL SPECIFICATIONS (PM5D, PM5D-RH)

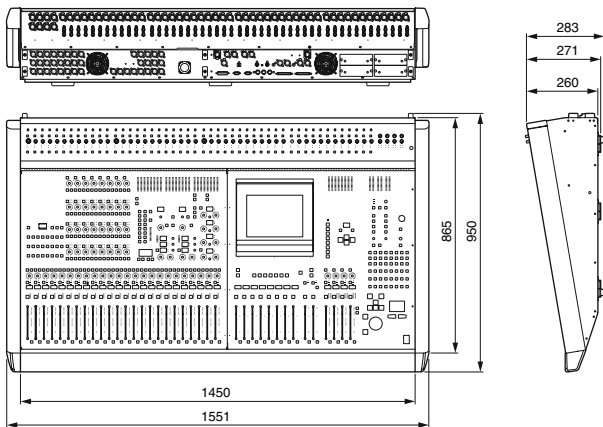
	PM5D	PM5D-RH
Internal processing	32bit (Accumulator=58bit)	
Number of scene memories	500	
Sampling frequency rate	Internal: 44.1kHz, 48kHz, 88.2kHz, 96kHz External: 44.1kHz(-10%) to 48kHz(+6%) 88.2kHz(-10%) to 96kHz(+6%)	
Signal Delay	≥ 2.3 ms INPUT to STEREO A,B (@Fs = 48 kHz) ≥ 1.15 ms INPUT to STEREO A,B (@Fs = 96 kHz)	≥ 2.5 ms INPUT to STEREO A,B (@Fs = 48 kHz) ≥ 1.25 ms INPUT to STEREO A,B (@Fs = 96 kHz)
Total harmonic distortion *1 Input Gain=Min.	≥ 0.05% 20Hz to 20kHz, (@44.1kHz, 48kHz) ≥ 0.05% 20Hz to 40kHz, (@88.2kHz, 96kHz)	
Frequency response	0, +0.5, -1.5dB; 20Hz to 20kHz (@44.1kHz, 48kHz) 0, +0.5, -1.5dB; 20Hz to 40kHz (@88.2kHz, 96kHz)	
Dynamic range	DA: 110dB AD+DA: 108dB@48kHz; 106dB@96kHz	
Hum & noise level *2	-128dB equivalent input noise -86dB residual output noise*	
Crosstalk(@1kHz) Input GAIN=min	80dB adjacent input channels 80dB input to output	
Power requirements	Refer to PW800W power requirements	
Power consumption	Refer to PW800W power consumption	
Dimensions (W x H x D)	1551 x 283 x 950 mm (61" x 11.1" x 37.4")	
Weight	98.0kg (215lbs)	97.0kg (213lbs)

\*1. Total harmonic distortion is measured with a 18dB/Oct filter @80kHz.

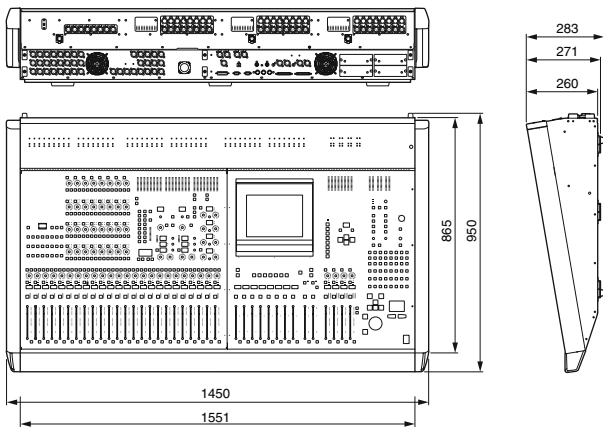
\*2. Hum & noise level is measured with a 6dB/oct filter @12.7kHz; equivalent to 20kHz filter with infinite dB/Oct attenuation

## DIMENSIONS (PM5D, PM5D-RH)

unit : mm



PM5D Version2



PM5D-RH Version2

## ANALOG INPUT CHARACTERISTICS (PM5D)

Input terminal	Actual load impedance		For use with nominal	Input level			Connector	
	PAD	GAIN		Sensitivity	Nominal	Max. before clip		
INPUT	0	-62dB	3kΩ	50-600Ω Mics & 600Ω Lines	-80dBu	-60dBu	-40dBu	XLR3-31 type
	26	-62dB			-36dBu	-16dBu	+4dBu	
ST IN 1-4[L,R]		-34dB	4kΩ	600Ω Lines	-	-34dBu	-	XLR3-31 type
		+10dB			-10dBu	+10dBu	+30dBu	
INSERT IN 1-48			10kΩ	600Ω Lines	-16dBu	+4dBu	+24dBu	TRS Phone jack
2TR IN ANALOG 1,2[L,R]			10kΩ	600Ω Lines	-6dB (-12dBu)	+4dB (-2dBu)	+24dB (+18dBu)	XLR3-31 type
TALKBACK			3kΩ	50-600Ω Mics & 600Ω Lines	-60dBu	-50dBu	-30dBu	XLR3-31 type

## ANALOG INPUT CHARACTERISTICS (PM5D-RH)

Input terminal	Actual load impedance		For use with nominal	Input level			Connector	
	PAD	GAIN		Sensitivity	Nominal	Max. before clip		
INPUT 1-48 & ST IN 1-4[L,R]		-62dB	3kΩ	50-600Ω Mics & 600Ω Lines	-82dBu	-62dBu	-42dBu	XLR3-31 type
		+10dB			-10dBu	+10dBu	+30dBu	
2TR IN ANALOG 1,2[L,R]			10kΩ	600Ω Lines	-6dB (-12dBu)	+4dB (-2dBu)	+24dB (+18dBu)	XLR3-31 type
TALKBACK			3kΩ	50-600Ω Mics & 600Ω Lines	-60dBu	-50dBu	-30dBu	XLR3-31 type

## ANALOG OUTPUT CHARACTERISTICS (PM5D, PM5D-RH)

Output terminals	Actual source impedance	For use with nominal	GAIN SW	Output terminals		Connectors	
				Nominal	Max. before Clip		
STEREO A,B[L,R]	150Ω	600Ω Lines		+24dB	+4dBu	+24dBu	XLR-3-32 type
				+18dB	-2dBu	+18dB	
MONITOR OUT[L,R,C]	150Ω	600Ω Lines		+24dB	+4dBu	+24dBu	XLR-3-32 type
				+18dB	-2dBu	+18dB	
CUE OUT[L,R]	150Ω	600Ω Lines		+24dB	+4dBu	+24dBu	XLR-3-32 type
				+18dB	-2dBu	+18dB	
MATRIX OUT 1-8	150Ω	600Ω Lines		+24dB	+4dBu	+24dBu	XLR-3-32 type
				+18dB	-2dBu	+18dB	
MIX OUT 1-24	150Ω	600Ω Lines		+24dB	+4dBu	+24dBu	XLR-3-32 type
				+18dB	-2dBu	+18dB	
INSERT OUT 1-48	150Ω	10kΩ Lines		-	+4dB	+24dB	TRS Phone jack
		8Ω Phones			75mW	150mW	ST Phone jack
PHONES	15Ω	40Ω Phones			65mW	150mW	

0dB=0.775Vrms; 0dBV=1.00Vrms

## DIGITAL INPUT CHARACTERISTICS

Terminal	Format	Data length	Level	Connector	
2TR IN DIGITAL with SRC	1 AES/EBU	AES/EBU (Professional Use)	24bit	RS422	XLR3-31 type
	2 AES/EBU	AES/EBU (Professional Use)	24bit	RS422	XLR3-31 type
	3 COAXIAL	IEC-60958 (Consumer Use)	24bit	0.5Vpp/75Ω	RCA pin jack
CASCADE IN	-	-	-	RS422	D-sub Half Pitch Connector 68Pin (female)

## DIGITAL OUTPUT CHARACTERISTICS (PM5D, PM5D-RH)

Terminal	Format	Data length	Level	Connector	
2TR OUT DIGITAL	1 AES/EBU	AES/EBU (Professional Use)	24bit	RS422	XLR3-31 type
	2 AES/EBU	AES/EBU (Professional Use)	24bit	RS422	XLR3-31 type
	3 COAXIAL	IEC-60958 (Consumer Use)	24bit	0.5Vpp/75Ω	RCA pin jack
CASCADE OUT	-	-	-	RS422	D-sub Half Pitch Connector 68Pin (female)

## CONTROL I/O CHARACTERISTICS (PM5D, PM5D-RH)

Terminal	Format	Level	Connector	
TO HOST	USB	USB1.1	0V-3.3V	B Type USB Connector
	IN	MIDI	-	DIN Connector 5P
MIDI	OUT	MIDI	-	DIN Connector 5P
	THRU	MIDI	-	DIN Connector 5P
TIME CODE IN	SMPTe	SPMTe	0.3Vpp(min.) / 10Vpp(max.), 10kΩ	XLR-3-31 Type (Balanced) *1
WORD CLOCK	IN	-	TTL/75Ω (ON/OFF)	BNC Connector
	OUT	-	TTL/75Ω	BNC Connector
GPI	-	-	-	D-Sub Connector 25P (Female) *3
HA REMOTE	-	RS422	-	D-Sub Connector 9P (Male)
RS422 REMOTE	-	RS422	-	D-Sub Connector 9P (Female)
KEYBOARD	PS/2	-	-	DIN Connector 6P
MOUSE	PS/2	-	-	DIN Connector 6P
LAMP 1, 2, 3	-	2.5V-11.5V	-	XLR-4-31 Type *2
MEMORY CARD	-	-	-	PCMCIA (Compact Flash)

\*1. XLR-3-31 type connectors are balanced. (1/Sleeve=GND, 2/Tip=HOT, 3/Ring=COLD)

\*2. 4pin=HOT, 3pin=COLD, Lamp rating 5 W, Voltage control by variable volume

\*3. Inputs: 4 channels, Outputs: 12 channels

Input Pin: AD Converter (7bit, 128steps, Voltage Detection Range: -5V, Maximum Rating: 5V)

Output Pin: Open Collector (Vmax=12V, Imax/pin=75 mA, GPO1-8: Total Imax=300 mA, GPO9-12: Total Imax=300 mA)

Power Pin: Power Supply (Vp=5V, Imax/2 pin=500 mA)



BLOCK DIAGRAM

