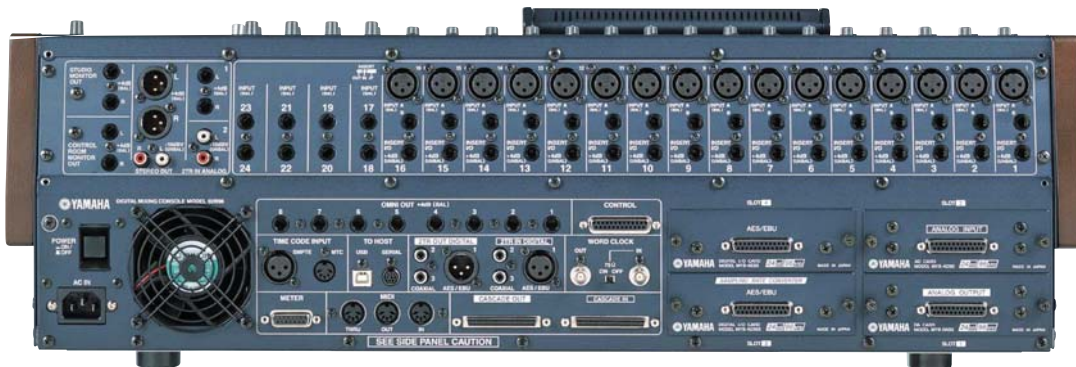


02R96VCM

Digital Mixing Console



02R96VCM



Rear Panel

*Peak Meter Bridge MB02R96 & Wood Side Pad SP02R96 are options.

A comprehensive update of the legendary 02R.

- Precise 24-bit/96-kHz audio and high-performance head amps.
- Generous mixing capacity with up to 56 simultaneous inputs and 18 mix buses (8 group buses, 8 auxiliary buses and a stereo bus) in the same compact desk-top dimensions as the original 02R.
- Powerful channel functions with flexible control and digital patching.
- Four advanced multi-effect processors include surround effects.
- Scene memory and auto-mix functions for efficient workflow.
- Versatile channel pairing and grouping functions enhance mixing efficiency.
- Comprehensive interface with 25 touch-sensitive 100-mm motor faders.
- 16 microphone/line inputs with balanced XLR/TRS jacks that feature top-performance head amplifiers for outstanding audio quality.
- Four mini-YGDAI expansion slots for easy I/O expansion in a variety of formats.
- Compatible with both Windows or Macintosh versions of Studio Manager version2 Software, allowing your PC and Console to work together seamlessly.
- A new dimension of production power with the addition of Yamaha VCM effects and processing.
- Included in the THX pm3™ Studio Certification Program Approved Equipment List.

OPTIONS

MB02R96
Peak Meter Bridge

SP02R96
Side Pad

02R96VCM

GENERAL SPECIFICATIONS

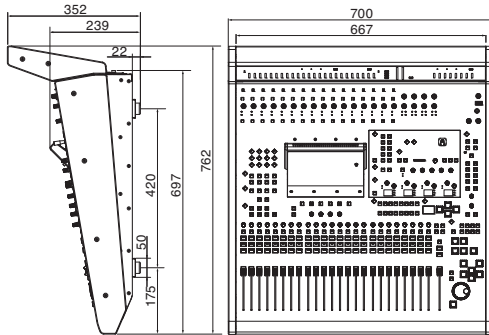
Internal processing	32bit (Accumulator=58bit)
Number of scene memories	99
Sampling frequency rate	Internal: 44.1kHz,48kHz,88.2kHz,96kHz External: Normal rate 44.1kHz (-10%) to 48kHz (+6%) Double rate 88.2kHz (-10%) to 96kHz (+6%)
Signal Delay	Less than 2.0 ms CH INPUT to STEREO OUT (@fs=48kHz) Less than 1.1 ms CH INPUT to STEREO OUT (@fs=96kHz)
Total harmonic distortion ^{*1} CH INPUT to STEREO OUT Input Gain=Min.	Less than 0.05%, 20Hz to 20kHz @+14dBu into 600Ω Less than 0.01%, 1kHz @+18dBu into 600Ω (@fs=48kHz) Less than 0.05%, 20Hz to 40kHz @+14dBu into 600Ω Less than 0.01%, 1kHz @+18dBu into 600Ω (@fs=96kHz)
Frequency response CH INPUT to STEREO OUT	20Hz - 20kHz, 0.5, -1.5dB, @+4dBu into 600Ω (@fs=48kHz) 20Hz - 40kHz, 0.5, -1.5dB, @+4dBu into 600Ω (@fs=96kHz)
Dynamic range (maximum level to noise level)	110dB typ. DA Converter (STEREO OUT) 105dB typ. AD+DA (to STEREO OUT)
Hum & noise level ^{*2} (20Hz to 20kHz) Rs=150Ω Input Gain=Max Input Pad=0dB Input Sensitivity=-60dB	-128dBu Equivalent Input Noise -92dBu residual output noise. STEREO OUT(STEREO OUT off) -92dBu(96dB S/N) STEREO OUT(STEREO fader at nominal level and all CH INPUT faders at minimum level) -64dBu(68dB S/N) STEREO OUT(STEREO fader at nominal level and one CH INPUT fader at nominal level)
Crosstalk (@1kHz) Input GAIN=min	-80dB adjacent input channels (CH1 to 24) -80dB input to output
Power requirements	Japan: AC100V 50/60Hz, 200W North America: AC120V, 60Hz, 200W Other Areas: AC220-240V, 50/60Hz, 200W
Dimensions (W x H x D)	02R96: 667 x 239 x 697mm (26.3" x 9.4" x 27.4") With MB and SP: 700 x 352 x 762mm (27.6" x 13.9" x 30.0")
Weight	34.0kg (75lbs) With MB&SP:39.4kg (86.9lbs)

*1 Total Harmonic Distortion is measured with a 6dB/octave filter @80kHz

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

DIMENSIONS

unit : mm



ANALOG INPUT SPECIFICATIONS

Input Terminal	Pad	Gain	Actual Load Impedance	For Use With Nominal	Input Level			Connector
					Sensitivity ^{*1}	Nominal	Max. before Clip	
CH INPUT A/B 1-16	0	-60dB	3kΩ	50-600Ω Mics & 600Ω Lines	-70dBu	-60dBu	-46dBu	A:XLR3-31 type* B:TRS Phone jack*
	26	-16dB			-26dBu	-16dBu	-2dBu	
CH INPUT 17-24		-34dB	4kΩ	600Ω Lines	0dBu	+10dBu	+24dBu	TRS Phone jack*
		+10dB			-44dBu	-34dBu	-20dBu	
CH INSERT IN 1-16			10kΩ	600Ω Lines	-6dBu	+4dBu	+18dBu	TRS Phone jack*
2TR IN ANALOG1(L,R)			10kΩ	600Ω Lines	+4dBu	+4dBu	+18dBu	TRS Phone jack*
2TR IN ANALOG2(L,R)			10kΩ	600Ω Lines	-10dBV	-10dBV	+4dBV	RCA pin jack**

ANALOG OUTPUT SPECIFICATIONS

Output Terminal	Actual Source Impedance	For Use With Nominal	Gain SW	Output Level		Connector	
				Nominal	Max. before Clip		
STEREO OUT(L,R)	600Ω	10kΩ Lines	-	-10dBV	+4dBV	RCA pin jack**	
	150Ω	600kΩ Lines	-	+4dBu	+18dBu	XLR3-32 type*	
STUDIO MONITOR OUT(L,R)	150Ω	10kΩ Lines	-	+4dBu	+18dBu	TRS Phone jack*	
C-R MONITOR OUT (L,R)	150Ω	600kΩ Lines	-	+4dBu	+18dBu	TRS Phone jack*	
OMNI OUT 1-8	150Ω	10kΩ Lines		+18dB (default)	+4dBu	+18dBu	TRS Phone jack*
				+4dB	-10dBu	+4dBu	
INSERT OUT 1-16	600Ω	10kΩ Lines	-	+4dBu	+18dBu	TRS Phone jack*	
PHONES	100Ω	8Ω Lines	-	4mW	25mW	ST Phone jack**	
		40Ω Lines	-	12mW	75mW		

DIGITAL INPUT SPECIFICATIONS

Terminal	Format	Data Length	Level	Connector
2TR IN DIGITAL	1 AES/EBU	24bit	RS422	XLR3-31 type*
	2 IEC-60958	24bit	0.5Vpp/75Ω	RCA Pin Jack
	3 IEC-60958	24bit	0.5Vpp/75Ω	RCA Pin Jack
CASCADE IN	-	-	RS422	D-sub Half Pitch Connector 68P (Female)

DIGITAL OUTPUT SPECIFICATIONS

Terminal	Format	Data Length	Level	Connector
2TR OUT DIGITAL	1 AES/EBU (Professional use)	24bit	RS422	XLR3-32 type*
	2 IEC-60958 (Consumer Use)	24bit	0.5Vpp/75Ω	RCA Pin Jack
	3 IEC-60958 (Consumer Use)	24bit	0.5Vpp/75Ω	RCA Pin Jack
CASCADE OUT	-	-	RS422	D-sub Half Pitch Connector 68P (Female)

CONTROL I/O SPECIFICATIONS

I/O Port	Format	Level	Connector in Console	
TO HOST	Serial	-	Mini DIN Connector 8P	
	USB	USB 1.1	0V ~ 3.3V	B type USB Connector
MIDI	IN	MIDI	-	DIN Connector 5P
	OUT	MIDI	-	DIN Connector 5P
	THRU	MIDI	-	DIN Connector 5P
TIME CODE IN	MTC	MIDI	-	DIN Connector 5P
	SMPTE	SMPTE	Nominal - 10dB/10kΩ	XLR-3-31 type (Balanced)
WORD CLOCK	IN	-	TTL/75Ω (ON/OFF)	BNC Connector
	OUT	-	TTL/75Ω	BNC Connector
CONTROL	-	-	-	D-SUB Connector 25P (Female)
METER	-	RS422	-	D-SUB Connector 15P (Female)

