

Overview

This powerful digital production console offers DAW control, 6.1 channel surround mixing capability, and a range of top-quality effects, including many employing renowned Yamaha VCM technology. The DM2000VCM Digital Production Console is a first-class platform for stereo or surround audio production.



Rear Panel

Features

- Precise 24-bit/96-kHz audio and high-performance head amps.
- 96 inputs and 22 buses (8 group buses, 12 auxiliary buses, and a stereo bus) mix capacity at 96kHz.
- Eight advanced multi-effect processors plus six 31-band GEQs.
- Scene memory and auto-mix functions for efficient workflow.
- Versatile channel pairing and grouping functions enhance mixing efficiency.
- Comprehensive interface with touch-sensitive 100-mm motor faders.
- Six Mini-YGDAI expansion slots for easy I/O expansion in a variety of formats.
- Compatible with Windows and Macintosh versions of Studio Manager version2 Software for seamless PC and Console interoperability.
- Easy integration with computer-based DAWs (Digital Audio Workstations) or digital recorders to create an advanced digital production environment.
- A comprehensive range of features for surround production, including an enhanced surround monitoring environment with bass management.
- A variety of Yamaha VCM effects and high-resolution REV-X reverbs.
- Included in the THX pm3™ Studio Certification Program Approved Equipment List.

Specifications

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Functional Specifications

Mixing Capacity	Input Mixing Channels		96 mono
	AUX Buses		12
	Group Buses		8
	Matrices		4 Stereo Matrix
	Stereo Buses		1
	Mono Buses		0
	Cue Bus		1 (Solo)
Local Connectors	Analog Input	XLR	24 (Input A)
		TRS	24 (Input B), 1 (2 TR In Analog 1)
		RCA pin	1 (2 TR In Analog 2)
	Analog Output	XLR	1 (Stereo Out)
		TRS Phone	8 (Omni Out)
		RCA pin	1 (Stereo Out)
	MY Slots		6
	ADAT I/O		0
	Digital In	AES/EBU	2
		Coaxial (IEC 60958)	1
	Digital Out	AES/EBU	2
		Coaxial (IEC 60958)	1
	GPI		2 in / 8 out
	Word Clock I/O		In / Out
	MIDI I/O		In / Out / Thru
	USB TO HOST		1
	Meter Bridge		Optional MB2000
	Ethernet		No (Control via USB TO HOST)
	Lamp		1 (with used with MB2000)
	Talkback In		0 (Built-in Mic)
	Video Out		No
	TC In		Yes
	Fault Output		No
	Phones		1
	AC Inlet		1
Scene Memory	Number of Scenes		99
	Recall Safe		Yes
	Focus Recall		No
	Fade Time		Yes
	Preview		No
	Selective Load / Save		Yes
	Global Paste		Yes
	Event List		No
	Overlay		No
	Isolate		No
	Tactile Control Keys		Yes
Input Channel Functions	Gain Compensation		No
	Silk		No
	Digital Gain		No
	ATT		Yes
	HPF		21.2Hz ~ 20kHz
	PEQ		4 Band Full PEQ
	Dynamics 1		Gate
	Dynamics 2		Comp
	Input Delay		Yes (frame delay support)
	Pan		CENTER NOMINAL or LR NOMINAL
	DCA Group		0 (8 Fader Group Master)
	DCA Rollout		No
Input Channel Functions	MUTE Group		8 (Mute Group Master)
	Number of Inserts		1
Output Channel Functions	Direct Out		Yes
	PEQ		4 Band Full PEQ
	GEQ		Yes (Up to 6 units)
	Dynamics 1		Compressor
	Output Channel Delay		Yes
	MUTE Group		0 (4 Mute Group Master)
	Number of Inserts		1
FX	Quick Pro Preset		No
	Number of FXs		8 (2 for multi channel effects)
GEQ	Number of FX Programs		67
	Available Channels		Bus, Mix, Matrix, Stereo
Recording	USB Memory Recording		No
	DVS Recording		No
	USB Audio Stream		No
Broadcast Functions	5.1 Surround Panning		Yes
	Surround Monitor		Yes (Bass Management support)
	Mix Minus		Yes
	L-Mono / R-Mono / LR-Mono		No
Monitor	Solo Mode		Yes (Mixdown Solo)
	Oscillator		Sine 100Hz / Sine 1kHz / Sine 10kHz / 1kHz/400Hz / Pink Noise / Burst Noise
Other Functions	Port to Port		No
	Dual Console		No
	Timecode Reader/Display		Yes
	Timecode Chase (Event List)		No (Automix support)
	Automix		Yes
	GPI/MIDI		Yes
	Wireless Mic Monitoring		No
	RTA		No
	Output Port Delay		No
	Cascade		Yes
	User Level		No
	Help File		No
	Channel Link		No
User Interface	Display		Non-touch display
	Centralogic Section		No
	Faders		24+1
	Selected Channel Encoders		ATT, PEQ (controls for 4 bands), Dynamics, Pan, Delay, Routing, Aux/Matrix Sends
	Channel Encoder		Yes (for Pan, Send Level, or an assigned parameter)
	Channel Name / Color Display		Channel Name Display Only
	Custom Fader Banks		Yes (4 x User Assignable Layer)
	User Defined Keys		16
	User Defined Knobs		No
	Touch and Turn Knob		No
	Monitor Level Knob		Yes (Control Room Level)
	Rack-mounting		No
Software	Editor		DM2000 V2 Editor running on Studio Manager V2
	StageMix		No
	MonitorMix		No
	Nuendo Live: Control integration		No
Console File Converter		No	

Specifications

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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 2.3 ms CH INPUT to STEREO OUT (@fs=48 kHz) Less than 1.2 ms CH INPUT to STEREO OUT (@fs=96 kHz)
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) 108dB typ, AD+DA (to STEREO OUT) (@fs=48kHz) 106dB typ, AD+DA (to STEREO OUT) (@fs=96kHz)
Hum & noise level*2 (20Hz to 20kHz), Rs=150Ω	-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 (CH1-24) -80dB input to output
Phantom Power	+48V
Power requirements	Japan: AC100V 50/60Hz North America: AC120V, 60Hz Other Areas: AC220-240V, 50/60Hz
Power consumption	300W
Dimensions (W x H x D)	906mm x 257mm x 821mm (35.7" x 10.2" x 32.3") With MB & SP: 968mm x 371mm x 883mm (38.1" x 14.6" x 34.8")
Weight	43.0kg (94.8lbs) With MB & SP: 51.6kg (113.8lbs)

*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.

Analog Input Specifications

Input terminal	Actual source impedance		For use with nominal	Input level			Connector
	PAD	GAIN		Sensitivity	Nominal	Max. before clip	
CH INPUT A/B 1-24	0	-60dB	3kΩ	50-600Ω Mics & 600Ω Lines	-70dBu	-60dBu	A:XLR3-31 type* B:TRS Phone Jack*
	26	-16dB			-26dBu	-16dBu	
INSERT IN 1-24			10kΩ	600Ω Lines	-6dBu	+4dBu	TRS Phone Jack**
2TR IN ANALOG 1[L,R]			10kΩ	600Ω Lines	+4dBu	+4dBu	TRS Phone Jack*
2TR IN ANALOG 2[L,R]			10kΩ	600Ω Lines	-10dBu	-10dBV	RCA Pin Jack**

Analog Output Specifications

Output terminal	Actual source impedance	For use with nominal	GAIN SW	Output terminals		Connector
				Nominal	Max. before clip	
STEREO OUT[L,R]	600Ω	10kΩ Lines	—	-10dBV	+4dBV	RCA Pin Jack**
	75Ω	600Ω Lines	—	+4dBu	+18dBu*	XLR3-32 type*
STUDIO MONITOR OUT[L,R]	150Ω	10kΩ Lines	—	+4dBu	+18dBu*	TRS Phone Jack*
C-R MONITOR OUT LARGE[L,R]	75Ω	600Ω Lines	—	+4dBu	+18dBu*	XLR3-32 type*
C-R MONITOR OUT SMALL[L,R]	75Ω	600Ω Lines	—	+4dBu	+18dBu*	XLR3-32 type*
OMNI OUT 1-8	150Ω	10kΩ Lines	+18dB (default)	+4dBu	+18dBu	TRS Phone Jack*
			+4dB	-10dBu	+4dBu	
INSERT OUT 1-24	150Ω	10kΩ Lines	—	+4dBu	+18dBu	TRS Phone Jack**
			—	4mW	25mW	
PHONES	100Ω	8Ω Phones	—	12mW	75mW	ST Phone Jack**
		40Ω Phones	—			

Digital Input Specifications

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

Digital Output Specifications

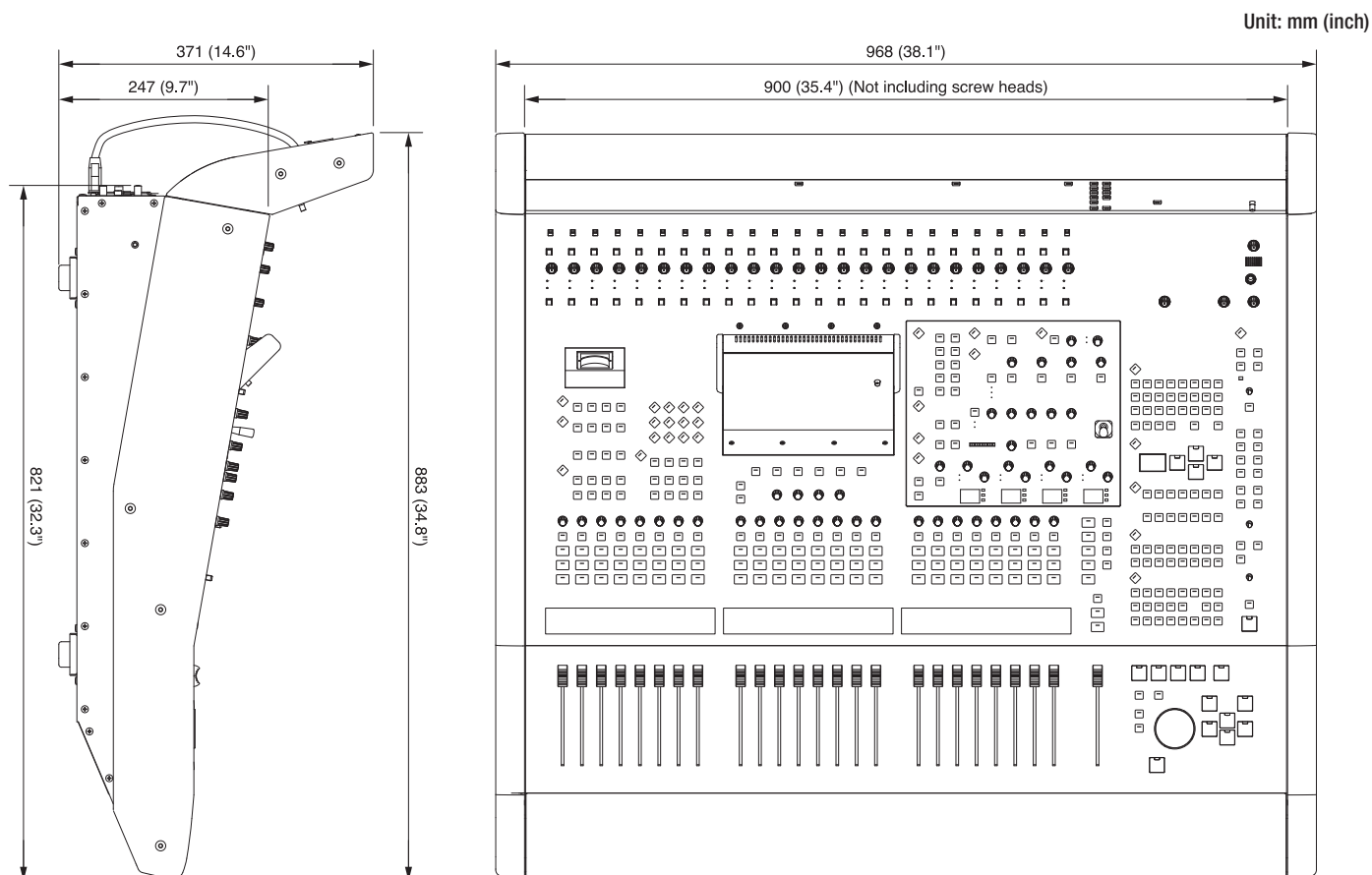
Terminal	Format	Data length	Level	Connector
2TR OUT DIGITAL	1 AES/EBU (Professional use)	24bit	RS422	XLR3-32 type
	2 AES/EBU (Professional use)	24bit	RS422	XLR3-32 type
	3 IEC-60958 (Consumer Use)	24bit	0.5Vpp/ 75Ω	RCA Pin Jack
CASCADE OUT	—	—	RS422	D-sub Half Pitch Connector 68Pin (Female)

Control I/O Specifications

Terminal	Format	Level	Connector
TO HOST	Serial	—	Mini DIN Connector 8P
	USB	USB1.1	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	XLR3-31 Type*
WORD CLOCK	IN	—	TTL/75Ω (ON/OFF)*1
	OUT 1, 2	—	Nominal -10dB/10kΩ
CONTROL	—	Open collector	D-Sub Connector 25P (Female)
REMOTE	—	RS422	D-Sub Connector 9P (Male)
KEYBOARD	PS/2	—	DIN Connector 6P
STORAGE CARD	—	—	SmartMedia slot
METER	—	RS422	D-SUB Connector 15P (Female)
LAMP (with MB2000)	—	0-12V	XLR4-31 Type

*1 This switch is on the rear panel.

Dimensions



Options

- Meter Bridge MB2000
- Wooden Side Panels SP2000
- Gooseneck Lamp LA1L
- Digital Audio Cable CA003

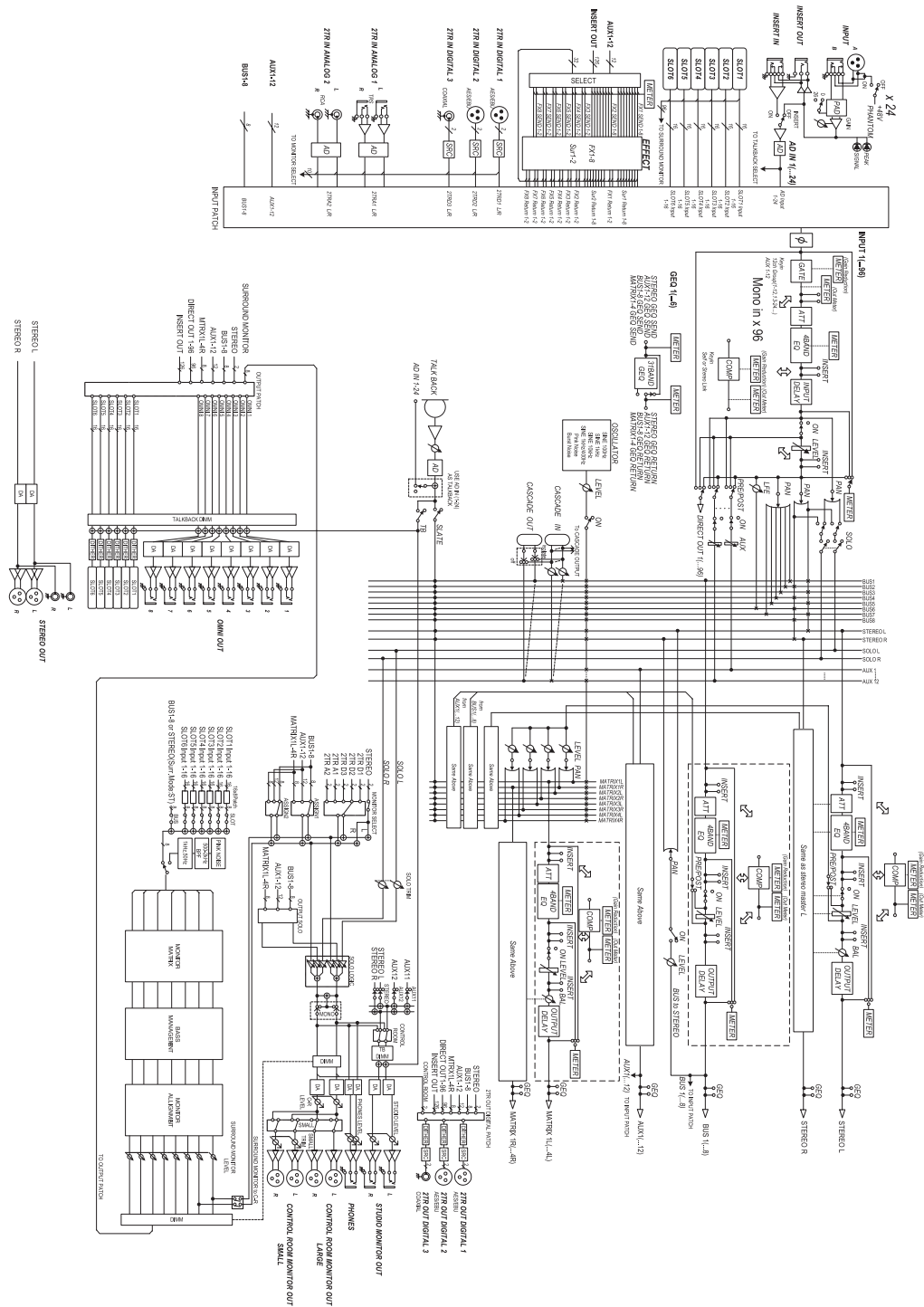
Software

- Studio Manager V2
- DM2000 Editor

Architectural and Engineering Specifications

The Yamaha DM2000VCM Digital Production Console shall provide DAW control functionality, 6.1 surround mixing capability, up to 96kHz sampling frequency, and other features aimed at enhancing audio production efficiency and workflow. With 24 + 1 (Master) faders it shall provide a mixing capacity of up to 96 mono inputs, 8 groups, 12 auxiliary buses, and 4 stereo matrix buses. It shall provide 8 powerful effect processors, including VCM effects, REV-X reverb effects, iSSP surround processing, and more. All 96 input channels shall include gate, compressor, 4-band PEQ, delay, and other facilities. Local I/O shall include 24 microphone/line line inputs, 24 inserts, 8 outputs (TRS phone), 2 analog 2TR inputs (TRS phone/RCA), stereo outputs, studio monitor outputs, 2 C-R monitor outputs (Large/Small), 2 AES/EBU I/O, IEC-60957 I/O, cascade I/O, 6 Mini-YGDAI slots, word clock I/O, MIDI I/O, USB host, plus Control, Remote, and Key connectors. Dimensions shall be 906 (W) x 257 (H) x 821 (D) mm. Weight shall be 43 kg.

Block Diagrams



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