

01V96VCM

Digital Mixing Console



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Rear Panel



Still Small and Professional —Now with VCM Effects.

- Precise 24-bit/96-kHz audio and high-performance head amps.
- Generous mixing capacity with up to 40 simultaneous inputs and 20 mix buses (20 buses: a main stereo program bus, 8 individual mixing buses, 2 solo buses, and 8 auxiliary buses) in a compact rack-size mixer.
- Digital I/O via 8-channel optical ADAT and coaxial 2-track inputs and outputs.
- I/O expansion slot accepts mini-YGDAI cards for up to 16 additional channels of I/O in a variety analog or digital formats.
- Powerful channel functions with flexible control and digital patching capability.
- Four advanced multi-effect processors at 44.1/48 kHz, or two at 88.2/96 kHz
- Comprehensive interface with large LCD, 100-mm motor faders, and dedicated scene memory keys.
- Versatile channel pairing and grouping functions enhance mixing efficiency.
- Compatible with both Windows or Macintosh versions of Studio Manager version2 Software, allowing your PC and console to work together seamlessly.
- Easy integration with computer-based DAWs (Digital Audio Workstations) or digital recorders.
- Cascade Link function allows two 01V96 consoles to be connected to provide up to 80 input channels.
- A new dimension of production power with the addition of Yamaha VCM Channel Strip and Rev-X effects.

OPTIONS

RK-1
Rack-mount Kit

AE-021
MASTER STRIP

AE-051
VINTAGE STOMP

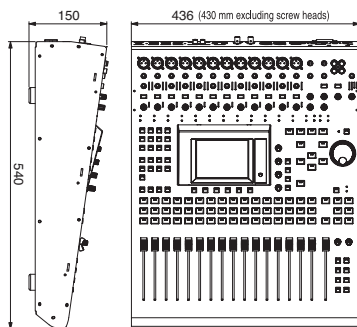
GENERAL SPECIFICATIONS

Internal processing	32bit (Accumulator 58bit)
Number of scene memories	99
Sampling frequency	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 1.6ms CH INPUT to STEREO OUT (@fs=48kHz) Less than 0.8ms 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 @+14dB into 600Ω Less than 0.01%, 1kHz @+24dB into 600Ω (@fs=48kHz) Less than 0.05%, 20Hz to 40kHz @+14dB into 600Ω Less than 0.01%, 1kHz @+24dB into 600Ω (@fs=96kHz)
Frequency response CH INPUT to STEREO OUT	20Hz - 20kHz, 0.5, -1.5dB, @+4dB into 600Ω (@fs=48kHz) 20Hz - 40kHz, 0.5, -1.5dB, @+4dB into 600Ω (@fs=96kHz)
Dynamic range (maximum level to noise level)	110dB typ. DA Converter (STEREO OUT) 105dB typ. AD+DA (to STEREO OUT) (@fs=48kHz) 105dB typ. AD+DA (to STEREO OUT) (@fs=96kHz)
Hum & noise level *2 (20Hz to 20kHz) Rs=150Ω	-128dBu Equivalent Input Noise. -86dBu residual output noise. STEREO OUT STEREO OUT off.
Input Gain=Max, Input Pad=0dB	-86dBu (90dB S/N) STEREO OUT STEREO fader at nominal level and all CH INPUT faders at minimum level.
Input Pad=0dB Input Sensitivity=-60dB	-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 (CH1-12) 80dB adjacent input channels (CH13-16) 80dB input to output
Power requirements	Japan: AC100V 50/60Hz, 90W North America: AC120V, 60Hz, 90W Other Areas: AC220-240V, 50/60Hz, 90W
Dimensions (W x H x D)	436 x 150 x 540mm (16-15/16" x 5-5/16" x 21-1/4")
Weight	15.0kg (33.1lbs.)

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

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

DIMENSIONS



unit : mm

ANALOG INPUT / OUTPUT SPECIFICATIONS

Input Terminal	Pad	Gain	Actual Load Impedance	For Use With Nominal	Input Level			Connector
					Sensitivity	Nominal	Max. before Clip	
CH INPUT 1 to 12	0	-60dB	3kΩ	50-600Ω Mics & 600Ω Lines	-70dBu	-60dBu	-40dBu	XLR-3-31 type (Balanced) ^{*2} 8-Phone jack (TRS)(Balanced) ^{*3}
	20	-16dB			-26dBu	-16dBu	+4dBu	
CH INPUT 13 to 16		-26dB	10kΩ	600Ω Lines	-36dBu	-26dBu	-6dBu	Phone jack (TRS)(Balanced) ^{*3}
		+4dB			-6dBV	+4dBu	+24dBu	
CH INSERT IN 1 to 12			10kΩ	600Ω Lines	-12dBu	-2dBu	+18dBu	Phone jack (TRS) (Unbalanced) ^{*3}
2TR IN [L,R]			10kΩ	600Ω Lines	-10dBV	-10dBV	+10dBV	RCA pin jack (Unbalanced)

* 0dBu=0.775 Vrms.

* 0dBV=1.00 Vrms.

* +48V DC(phantom power) is supplied to CH INPUT(1-24) XLR type connector via each individual switch.

*1 Sensitivity is the lowest level that will produce an output of +4 dB (1.23 V) or the nominal output level when the unit is set to maximum gain. (All faders and level controls are maximum position.)

*2 XLR-3-31 type connectors are balanced (1=GND, 2=HOT, 3=COLD).

*3 Phone jacks are balanced (Tip=HOT, Ring=COLD, Sleeve=GND).

*4 CH INSERT IN/OUT phone jacks are unbalanced. (Tip=OUTPUT, Ring=INPUT, Sleeve=GND).

• In these specifications, 0 dBu = 0.775 Vrms, 0 dBV=1.00 Vrms.

• All input AD converters (CH INPUT 1-16) are 24-bit linear, 128-times oversampling. (@fs=44.1, 48 kHz)

• +48 V DC (phantom power) is supplied to CH INPUT (1-12) XLR type connectors via individual switches.

• Three PHANTOM +48V switches CH1-4, 5-8, 9-12 turn on the phantom power for inputs 1-4, 5-8, 9-12 respectively

Output Terminal	Actual Source Impedance	For Use With Nominal	Output Level		Connector
			Nominal	Max. before Clip	
STEREO OUT (L,R)	150Ω	600Ω Lines	+4dBu	+24dBu	XLR-3-32 type ^{*1} (Balanced)
OMNI OUT 1 to 4	150Ω	10kΩ Lines	+4dBu	+24dBu	Phone jack (TRS)(Balanced) ^{*2}
MONITOR OUT (L,R)	150Ω	10kΩ Lines	+4dBu	+24dBu	Phone jack (TRS)(Balanced) ^{*2}
CH INSERT OUT 1 to 12	600Ω	10kΩ Lines	-2dBu	+18dBu	Phone jack (TRS) (Unbalanced) ^{*3}
2TR OUT (L,R)	10kΩ	600Ω Lines	-10dBV	+10dBV	RCA pin jack (Unbalanced)
PHONES	100Ω	8Ω Lines	4mW	25mW	Stereo phone jack (TRS)(Unbalanced) ^{*4}
		40Ω Lines	12mW	75mW	

* 0dBu=0.775 Vrms.

* 0dBV=1.00 Vrms.

*1 XLR-3-32 type connectors are balanced (1=GND, 2=HOT, 3=COLD).

*2 Phone jacks are balanced (Tip=HOT, Ring=COLD, Sleeve=GND).

*3 CH INSERT IN/OUT phone jacks are unbalanced. (Tip=OUTPUT, Ring=INPUT, Sleeve=GND).

*4 PHONES stereo phone jack is unbalanced (Tip=LEFT, Ring=RIGHT, Sleeve=GND).

• In these specifications, 0 dBu = 0.775 Vrms, 0 dBV=1.00 Vrms.

• All output DA converters are 24-bit, 128-times oversampling. (@fs=44.1, 48 kHz)

DIGITAL INPUT / OUTPUT SPECIFICATIONS

Terminal	Format	Data Length	Level	Connector
2TR IN DIGITAL	IEC-60958	24bit	0.5Vpp/75Ω	RCA pin jack
ADAT IN	ADAT ^{*1}	24bit	-	OPTICAL

*1 ALESIS Proprietary Multichannel Optical Digital Interface Format.

Terminal	Format	Data Length	Level	Connector
2TR OUT DIGITAL	IEC-60958 Consumer use	24bit ^{*2}	0.5Vpp/75Ω	RCA pin jack
ADAT OUT	ADAT ^{*3}	24bit	-	OPTICAL

*1 channel status of 2TR OUT DIGITAL type: linear PCM, category code : Digital signal mixer, copy prohibit: NO, emphasis: NO, clock accuracy: Level II (1000 ppm), sampling rate: depends on the internal configuration.

*2 dither: word length 16/20/24 bit.

*3 ALESIS Proprietary Multichannel Optical Digital Interface Format.

CONTROL I/O SPECIFICATIONS

I/O Port	Format	Level	Connector in Console
TO HOST USB	USB	0V - 3.3V	B type USB connector
MIDI	IN ^{*1}	MIDI	DIN Connector 5P
	OUT	MIDI	DIN Connector 5P
	THRU	MIDI	DIN Connector 5P
WORD CLOCK	IN	-	TTL/75Ω BNC Connector
	OUT	-	TTL/75Ω BNC Connector

*1 MIDI IN can use as TIME CODE IN MTC.

