Overview

The AD8HR is remotely controllable 8-channel AD converter and preamplifier with 96kHz processing.

Rear Panel

Features

- 1U size.
- Microphone preamplifier technology inherited from the PM5000 analog live sound console for unsurpassed sound quality.
- Microphone preamplifier gain can be remotely controlled in steps of 1 dB from compatible Yamaha digital mixing consoles.
- High-pass filter with remotely controllable cutoff frequency on each channel.
- Remotely switchable phantom power supply.
- AES/EBU digital connection to digital mixing console minimizes the need for analog cabling.
- Eight XLR connectors and D-Sub AES/EBU terminals.
- Dual output connectors enable 2 x 8-channel digital audio output in the AES/EBU format.
- Remote control can be implemented via RS422 or switchable PC/RS422 nine-pin terminals.

Specifications

General Specifications

Internal Processing		32bit
Sampling Frequency Rate	Internal	44.1kHz, 48kHz, 88.2kHz, 96kHz
	External	44.1kHz/88.2kHz (-10%) - 48kHz/96kHz (+6%)
Total Harmonic Distortion		Less than 0.01% (20Hz-40kHz)
Frequency Response		0, +1, -1.5dB 20Hz-40kHz
Dynamic Range		AD+DA: 110dB (Use DA824 for output)
Hum & Noise Level	Equivalent input noise	-128dBu (Use DA824 for output)
Crosstalk		-80dBu
Power Requirements		Depend on area of purchase; AC100V, 120V or 220-240V; 50/60Hz
Power Consumption		35 W
Dimensions		480mm x 45mm x 383.5mm (18.9" x 1.8" x 15.1")
Net Weight		5kg (11lbs)
Accessories		Owner's Manual, AC Cable, 4 x Rubber Foot

Analog Input Specifications

Input Terminals	GAIN	Actual Load Impedance	For Use With Nominal	Input level		Connector
				Nominal	Max. before Clip	
INPUT 1–8	–62 dB	3k Ω	50~600 Ω Mics & 600 Ω Lines	–62 dBu (615 µV)	–42 dBu (6.15 mV)	XLR-3-31 type (Balanced)*1
	+10 dB			+10 dBu (2.45 V)	+30 dBu (24.5 V)	

*1 XLR-3-31 type connectors are balanced. (1=GND, 2=HOT, 3=COLD)
*2 In these specifications, when dBu represents a specific voltage, 0dBu is referenced to 0.775 Vrms.
*3 AD converters are 24-bit linear, 128-times oversampling.

Digital I/O Specifications

Input/Output Terminals	Format	Level	Connector in Console
Input 1/2 (word clock only)*1 Output 1–8 x 2	AES/EBU	RS422	D-SUB 25p Female
HA REMOTE x 2	—	RS422	D-SUB 9p Male
WORD CLOCK IN	—	TTL / 75Ω	BNC
WORD CLOCK OUT	—	TTL / 75Ω	BNC

*1 Input 1/2 on DIGITAL OUT A can be selected for word clock master.
*2 Fs= 44.1, 48, 88.2 and 96 kHz is supported.
*3 Double Channel mode is supported (Fs= 88.2, 96 kHz).
*4 When locked to the word clock received via WORD CLOCK IN, the word clock will be output from WORD CLOCK OUT.

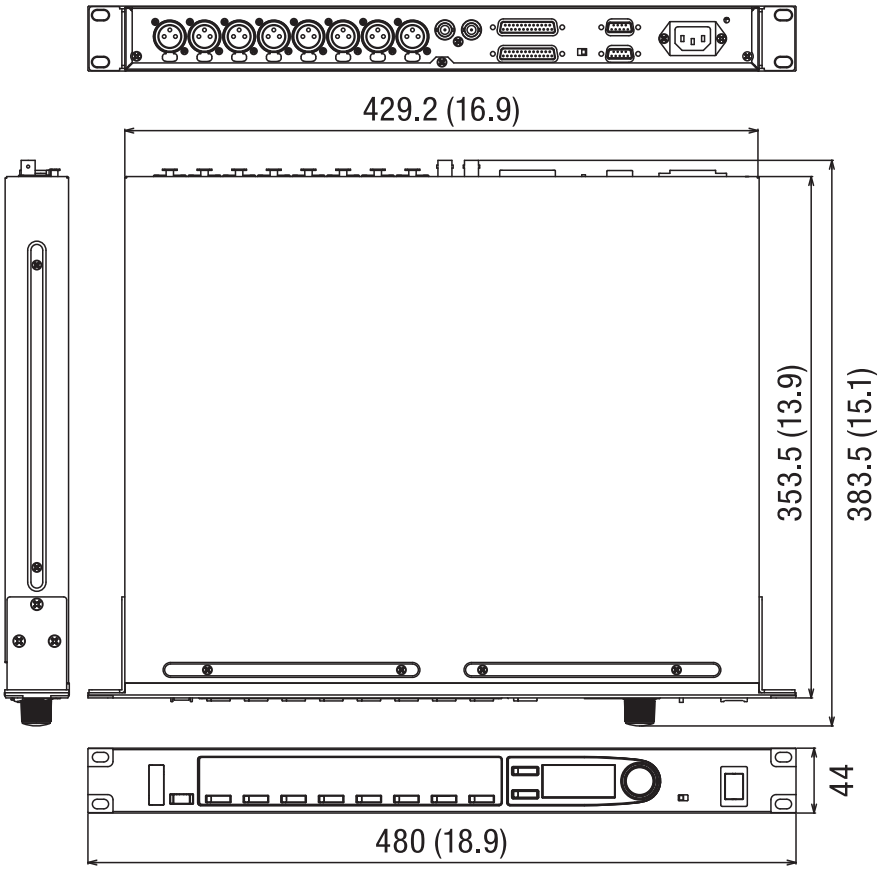
HA REMOTE Pin Assignment Table

Pin	Signal Name	Pin	Signal Name
1	N.C.	6	RX+/DSR*1
2	RX-/RXD*1	7	RTS
3	TX-/TXD*1	8	CTS
4	TX+/DTR*1	9	N.C.
5	GND		

*1 RS422/PC

Dimensions

Unit: mm (inch)



Architectural and Engineering Specifications

The Yamaha AD8HR shall be a 1U-size 8-channel analog-to-digital converter with remotely controllable head amplifiers. The AD8HR shall support 96-kHz processing in order to provide high conversion and sonic quality. Head amplifier gain shall be remotely controllable in 1-dB increments from a compatible mixing console. Each channel shall include a high-pass filter and phantom power. AES/EBU Out and word clock I/O terminals shall be provided. Dimensions shall be 480 (W) x 44 (H) x 383.5 (D) mm. Weight shall be 5 kg.

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