

# AD8HR

## AD Converter with Remote Preamplifier



# AD8HR



Rear Panel



1U

Remotely controllable 8-channel AD converter and preamplifier with 96 kHz processing.

- 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.
- Up to 255 AD8HRs can be daisy-chained for massive input capacity.
- AES/EBU digital connection to digital mixing console minimizes the need for analog cabling.
- Eight XLR connectors and D-Sub AES/EBU terminals in a compact 1U design.
- 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.

### GENERAL SPECIFICATIONS

<b>Sampling frequency</b>	Internal: 44.1kHz, 48kHz, 88.2kHz, 96kHz External: Normal rate: 44.1kHz (-10%) to 48kHz (+6%) Double rate: 88.2kHz (-10%) to 96kHz (+6%)
<b>Signal delay</b>	0.9ms Typ. ANALOG INPUT to DIGITAL OUTPUT (@fs=48kHz) 0.45ms Typ. ANALOG INPUT to DIGITAL OUTPUT (@fs=96kHz)
<b>Total harmonic distortion<sup>*1</sup></b>	Less than 0.05%, 1kHz @ -1dBfs Output, Gain = -62dB Less than 0.01%, 1kHz @ -1dBfs Output, Gain = +10dB
<b>Frequency response</b> (INPUT1 to 8 to DIGITAL OUT1 to 8)	20Hz - 20kHz, +1.0, -3.0dB, @ -1dBfs, Gain = -62dB 20Hz - 20kHz, +1.0, -1.5dB, @ -1dBfs, Gain = +10dB
<b>Dynamic range</b>	110dB typ. Gain = +10dB
<b>Hum &amp; noise level<sup>*2</sup></b> (20Hz to 20kHz), Rs=150Ω	-80dBfs, Gain = -62dB -110dBfs, Gain = +10dB
<b>Crosstalk (@1kHz)</b>	-100dB*, -80dB, Adjacent Input Channels
<b>Phantom Power</b>	+48V
<b>Power requirements</b>	Japan: AC100V, 50/60Hz North America: AC120V, 60Hz Other Areas: AC230V, 50Hz
<b>Power consumption</b>	35W
<b>Dimensions (W x H x D)</b>	480mm x 44mm x 355mm (18.9" x 1.73" x 13.9"), 1U
<b>Weight</b>	5.0kg (11lbs)

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

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

\* Crosstalk is measured with a 30dB/octave filter @22kHz.

### ANALOG INPUT SPECIFICATIONS

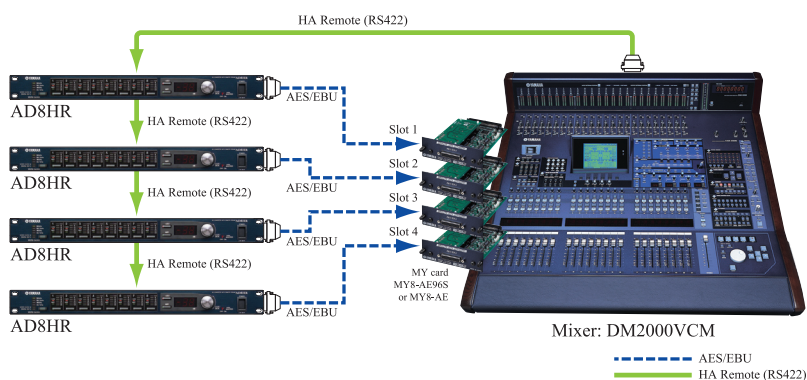
PAD	GAIN	Actual Load Impedance	For use with nominal	Input level		Connector
				Nominal	Max. before clip	
INPUT 1-8	-62dB +10dB	3kΩ	50-600Ω Mics & 600Ω Lines	-62dBu +10dBu	-42dBu +30dBu	XLR3-31 type*

### DIGITAL INPUT AND OUTPUT SPECIFICATIONS

	Output terminal	Format	Level	Connector
DIGITAL OUT A	INPUT1/2 (WC only)*	AES/EBU	RS422	D-sub 25 pin
	OUTPUT1-8			
DIGITAL OUT B	OUTPUT1-8	AES/EBU	RS422	D-sub 25 pin
WORD CLOCK	IN	-	TTL/75Ω	BNC
	OUT			

\* Input1/2 (Primary) can be assigned to Word Clock source.

### SYSTEM EXAMPLE



### DIMENSIONS

