

AD8HR

AD Converter with Remote Preamplifier



AD8HR

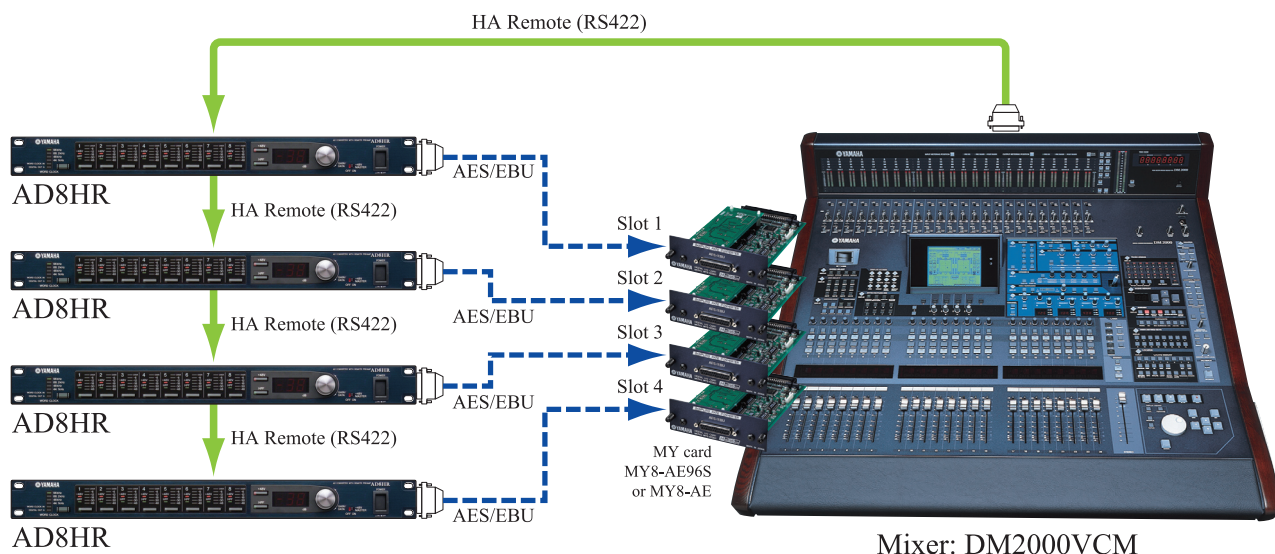


Rear Panel

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.

SYSTEM EXAMPLE



--- AES/EBU
— HA Remote (RS422)

GENERAL SPECIFICATIONS

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	0.9ms Typ. ANALOG INPUT to DIGITAL OUTPUT (@fs=48kHz) 0.45ms Typ. ANALOG INPUT to DIGITAL OUTPUT (@fs=96kHz)
Total harmonic distortion*1	Less than 0.05%, 1kHz @-1dBFS Output, Gain = -62dB Less than 0.01%, 1kHz @-1dBFS Output, Gain = +10dB
Frequency response (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
Dynamic range	110dB typ. Gain = +10dB
Hum & noise level*2 (20Hz to 20kHz), Rs=150Ω	-80dBFS, Gain = -62dB -110dBFS, Gain = +10dB
Crosstalk (@1kHz)	-100dB*, -80dB, Adjacent Input Channels
Phantom Power	+48V
Power requirements	Japan: AC100V, 50/60Hz North America: AC120V, 60Hz Other Areas: AC230V, 50Hz
Power consumption	35W
Dimensions (W x H x D)	480mm x 44mm x 355mm (18.9" x 1.73" x 13.9"), 1U
Weight	5.0kg (11lbs)

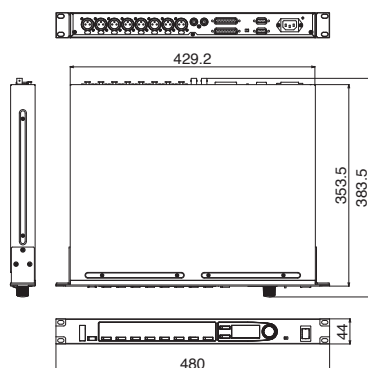
*1 Total harmonic distortion is measured with a 18dB/Oct filter @80kHz.

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

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

DIMENSIONS

unit : mm



ANALOG INPUT SPECIFICATIONS

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

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.