

Inheriting the unprecedented sonic quality of the PM5000, an eight-channel analog-to-digital converter supporting sampling rates of up to 96kHz and Head Amp Remote Control from the DM2000 and DM1000. A new AD converter combining unparalleled sound quality with a host of innovative functions.



AD CONVERTER WITH REMOTE PREAMP

AD8HR

Awe-inspiring sound quality derived from the PM5000 with sampling rates of up to 96kHz

It goes without saying that head amplifiers play a vital role in determining the sound quality of any analog-to-digital converter, and for this reason, we have selected the circuitry used in our PM5000 — the state-of-the-art analog mixing console — for the AD8HR's microphone pre-amp design. In order to achieve immaculate sound reproduction through 96kHz processing, the finest available parts have been carefully selected. What's more, strict and impartial listening tests have been carried out exhaustively by many top professionals in order to perfect the high-grade design of this eight-channel AD converter and to ensure that only the input signal — with all of its most delicate nuances — will be heard.

Head Amp Remote Control allows a high-degree of integration with digital mixers

The AD8HR's mic pre-amp can be remotely controlled in steps of 1 dB from digital mixing consoles such as the DM2000 and DM1000*, and with a high pass filter and a phantom power supply integrated into each channel, both the filter and phantom power can be turned on and off by remote control, as can the filter's cut-off frequency. This Head Amp Remote Control function makes it possible for the AD8HR to be used as a stage box. In addition to the many advantages that this offers, digital connection of the AD8HR and DM2000 using an AES/EBU cable reduces the requirements for analog wiring to the bare minimum. This in turn ensures that sound-quality deterioration can easily be kept in check and that wiring layouts can be simplified. Moreover, this feature also allows up to 255 AD8HRs to be daisy-chained.

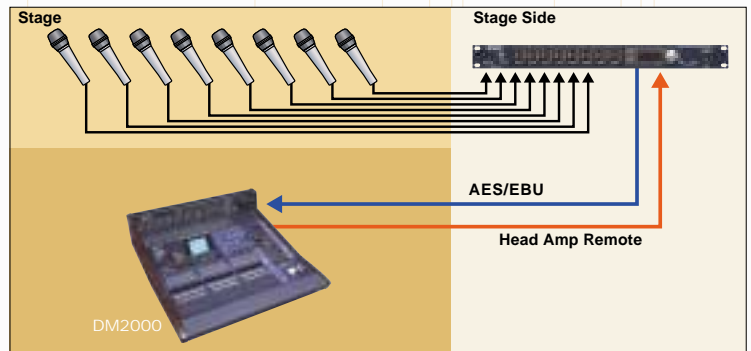
*: The DM2000 or DM1000 software (to be announced in the near future) must be upgraded in order to make full use of these functions; furthermore, Version 1. xx of the DM2000 or DM1000 software only provides support for remote control in 6dB steps.

Eight XLR connectors and standard AES/EBU terminals packed into a compact 1U design

Packaged in a space-saving 1U case, the AD8HR boasts a full range of analog and digital interfaces. And with its integrated high-pass filters and phantom power supplies, this AD converter features all of the functions required for effective and flexible live mixing. Moreover, the front panel and its controllers have been designed with full consideration given to the speedy operation and instant recognition required in live situations.

Each of the rear panel's eight inputs features an XLR connector with a latch lock; furthermore, a pair of D-SUB25 pin AES/EBU digital output terminals is fitted as standard and with BNC terminals provided for word clock input and output, the AD8HR covers every base in terms of digital connection.

Using the two D-SUB25 pin AES/EBU digital output terminals to full advantage, the input signal can also be separated into two lines for parallel output, allowing such applications as one line for FOH and the other for monitoring or recording. In addition, remote control can be realized using an RS422 or a switchable PC/RS422 nine-pin terminal.



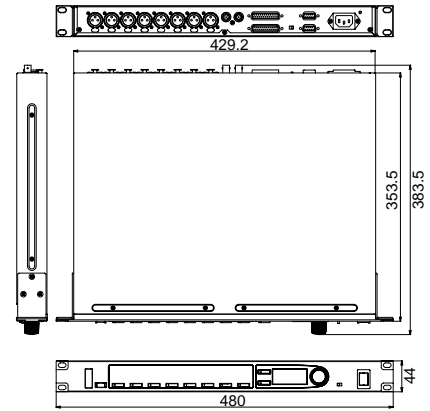
Rear Panel

AD8HR SPECIFICATIONS

Frequency response (INPUT1-8 to DIGITAL OUT1-8)	20Hz-20kHz, @44.1kHz, 48kHz -3, +1dB, GAIN -62dB 20Hz-40kHz, @88.2kHz, 96kHz -3, +1dB, GAIN -62dB
Total Harmonic Distortion	Less than 0.05%, -1dBfs output@1kHz Gain : -62dB Less than 0.01%, -1dBfs output@1kHz Gain : +10dB
Equivalent Input Noise	Less than -128dB (Rs=150Ω, GAIN -62dB)
Dynamic range	110dB (typical), GAIN +10dB
Crosstalk	Less than -80dB between adjacent channels @ 1kHz
Phantom power	+48V
Sampling rate	44.1kHz, 48kHz, 88.2kHz, 96kHz
Power requirements	U.S.A. & Canada 120V AC, 60Hz Europe 230V AC, 50Hz
Power consumption	35W
Dimensions (W x H x D)	480 x 44 x 353.5 mm (18.9 x 1.7 x 13.9inches)
Weight	5kg (11lbs)

DIMENSIONS

unit : mm



ANALOG INPUT CHARACTERISTICS

Input Terminals	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(615uV)	-42dBu(6.15mV)	XLR-3-31 type(Balanced)*1
	+10dB			+10dBu(2.45V)	+30dBu(24.5V)	

*1. INPUT 1-8 XLR-3-31 type Connectors are balanced.(1=GND,2=HOT,3=COLD)

*2. In these specifications, when dBu represents are specific voltage,0dBu is referenced to 0.775 Vrms.

*3. INPUT 1-8 AD converters are 24bit linear, 128 times oversampling.

DIGITAL INPUT & OUTPUT CHARACTERISTICS

INPUT/OUTPUT Terminals	FORMAT	LEVEL	Connector in Console
Input 1/2(WC Only) Output 1-8x2	AES/EBU	RS422	D-SUB 25p Female
COM A,B	-	RS422	D-SUB 9p Male
WORD CLOCK IN	-	TTL/75Ω	BNC
WORD CLOCK OUT	-	TTL/75Ω	BNC

Either Input 1 or Input 2 can be selected for the master clock. (Digital OUT A only)

Both Double Speed / Double Channel modes are also supported. (Fs = 88.2 or 96kHz)

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