rignature Series Maximum Resilience Broadcast Audio



Signature ADC 1 Stereo Analogue To Digital Converter



ADC 1 Front



ADC 1 Rear

FEATURES

Analogue inputs on 2 x 3 pin XLR, & 2 x phono

Digital output on AES 3 Pin XLR, S/PDIF on phono, & optical TOSlink

Word clock sync input on AES 3 pin XLR & BNC

Front panel headphone connection for monitoring

The Signature ADC 1 is a broadcast specification stereo analogue The DARS (Digital Audio Reference Signal) can also be input on a to digital audio converter.

The analogue inputs are available separately on balanced XLR connections or unbalanced RCA phono connections.

The digital outputs are available separately in three formats:

- 3 pin XLRs using AES
- RCA phono plug using S/PDIF
- optical connectors using TOSlink

The digital output is 24 bit and can be selected to be from 44.1kHz to 192 kHz.

separate 3 pin XLR input, or via the word clock input on a BNC connection.

The front panel features a 6.35mm stereo jack socket for headphones monitoring, with a full size pot to adjust the volume level. A front panel screen shows current operation mode and allows configuration of all unit parameters.

Power is provided by an internal switch mode power supply, with a wide input range. There is also an input for external 12V DC power. The 12V DC input can be connected to the optional Signature PS1external DC Master Power Station, for situations where a redundant power supply is desirable.



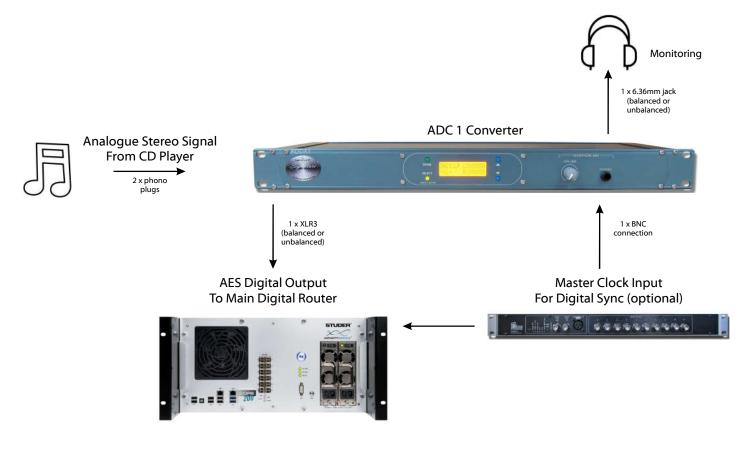
Signature Series Maximum Resilience Broadcast Audio



Signature ADC 1 Stereo Analogue To Digital Converter

EXAMPLE APPLICATION

Radio Station Analogue To Digital Conversion Connecting CD Player Into Digital System



A radio station may be largely digitally linked, with all router and mixer connections via AES. If there are no analogue inputs on the system then the Signature ADC 1 can be used to link the CD player into the digital console.

The stereo analogue outputs from the CD player connect into the $2 \times phono$ analogue inputs on the Signature ADC 1. To maintain digital clock rates throughout the station, an optional link can be made to the station master clock for the digital clock reference.

Without this, the digital clock sampling frequency rate can be set on the front panel from 44.1 kHz to 192 kHz.

The single XLR output connects the stereo digital AES signal into the master routers digital input for use and routing throughout the stations digital infrastructure.



Signature Series

Maximum Resilience Broadcast Audio



Signature ADC 1 Stereo Analogue To Digital Converter

SPECIFICATION

AUDIO INPUTS - ANALOGUE

Maximum Input Level

+24dBu

Input Impedance

20k Ohm balanced, 10k Ohm unbalanced

Balanced Input Type

Sophisticated electronically balanced (can be wired unbalanced) on 2 x Neutrik XLR connectors

Unbalanced Input Type

2 x Gold plated RCA phono sockets

INPUTS - DIGITAL SYNC

Digital Sync

Input 1: Word clock TTL on BNC

Input 2: DARS (AES/EBU) Neutrik XLR 3 pin

socket

AUDIO OUTPUTS - DIGITAL

Internal Clock Frequency Rates

44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz,

192kHz

Resolution

24 bit

OdBFs Equivalents

+18dBu, +12dBu, +6dBu, 0dBu

Noise

-108dBFs

Frequency Response

>-0.5dB 15Hz to 20kHz

THD+Noise (ref +8dBu)

- -100Hz = 0.008%
- -1kHz = 0.006%
- 10kHz = 0.009%

Physical Outputs

- AES/EBU balanced XLR
- S/PDIF RCA phono
- TOSlink optical

HEADPHONE OUTPUT

Output Gain Range

+10dB to off

Headphone Impedance

100-1000 Ohms

Maximum Output Level

+18dB into 600 Ohms

POWER

Mains Input

Filtered IEC, 100 to 240VAC

47 - 63Hz

AC Consumption

3.5 Watts @ 230VAC

DC Input

4 Pin Neutrik XLR plug +/- 12V

DC Consumption

+12V=175mA,-12V=75mA

Internal Mains Fuse

20mm 1A Anti Surge

PHYSICAL

Size

445 x 163 x 44mm (LxDxH) no rack ears

482mm 19" (1RU) with rack ears

Weight

1.35kg

Mechanics

All aluminium construction, anodized and

laser etched

Shipping Carton

Rugged export quality cardboard carton

610 x 420 x 130mm LxDxH

Shipping Weight

2.8kg

ENVIRONMENTAL

Operating Temperature

0 to +50 °C (32° to 122°F)

Storage Temperature

-20 to +70 °C (-4° to 158°F)

Relative Humidity

0 to 95% non-condensing

Signature Series

Maximum Resilience Broadcast Audio

Signature Series Standard Features



STANDARD FEATURES

19" Rack Mount Ears



A Signature unit can rack mount in a 1U 19" rack, regardless of the size of the unit. Rack ears are included as standard with every unit.

every unit. Neutral Colour Scheme To



Internal Switch Mode AC Power Supply



A Signature unit has an internal switch mode AC power supply, allowing worldwide power connections from 100-240V via an IEC socket.

Front Or Rear Mounting



A Signature unit can be rack mounted via the front panel or if it is more convenient, via the rear panel by simply swapping the rack ears over.

Rack Screws Included



12V DC Power Connection



All Signature units (except PS1) have a 4 pin XLR ±12V DC socket for connection to the PS1 Power Station. This can act as the primary or backup power source.

Side Wings For Flat Surface Fixing



A Signature unit has side wings with mounting holes at the top and bottom, allowing flush fixing from above OR underneath.

Modern Design



Quick Find Manua



A Signature unit has a QR code attached. This can be scanned to simply and quickly locate the manual and technical information.

CONTACT

Glensound

6 Brooks Place, Maidstone Kent, UK, ME14 1HE **Tel:** +44 (0)1622 753 662

Web: www.glensound.com
Email: sales@glensound.com

