Signature Series

Maximum Resilience Broadcast Audio

Signature HA1M
2 Mono Input Stereo Headphone Amplifier With Mix Out

HA1M Front

HA1M Rear

FEATURES

- 2 x mono inputs or 1 x stereo input
- Individual left/right level controls
- 1 x 6.35mm & 1 x 3.5mm headphone outputs
- Mono mix out

The Signature HA1M is a broadcast specification 2 channel headphone amplifier, designed to operate in a mono or a stereo mode.

The HA1M has 2 x XLR inputs that can be used as either a stereo input, or as 2 x mono inputs. There is a selector switch to change between mono and stereo modes.

In stereo mode, the left input goes to the left ear, and the right input goes to the right ear. Each input has its own level pot for adjusting the volume level in the left or right ear. In the mono mode, each input goes to both headphone outputs. The level pots adjust the relevant input levels in both ears.

There are 2 x headphone outputs on jack sockets. One is 6.35mm and the other is 3.5mm. The headphone circuits can accept stereo connections, or mono connections from single earpieces.

The headphone drivers are independent and so varying impedance connections can be used in either socket at the same time.

The rear panel has a single XLR output that is a mix of both inputs.

Rear panel inputs and outputs are electronically balanced on XLRs and can accommodate unbalanced connections if required.

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.

A bright front panel LED indicates that the unit is operational.

Glensound

Keeps Working

Signature HA1M
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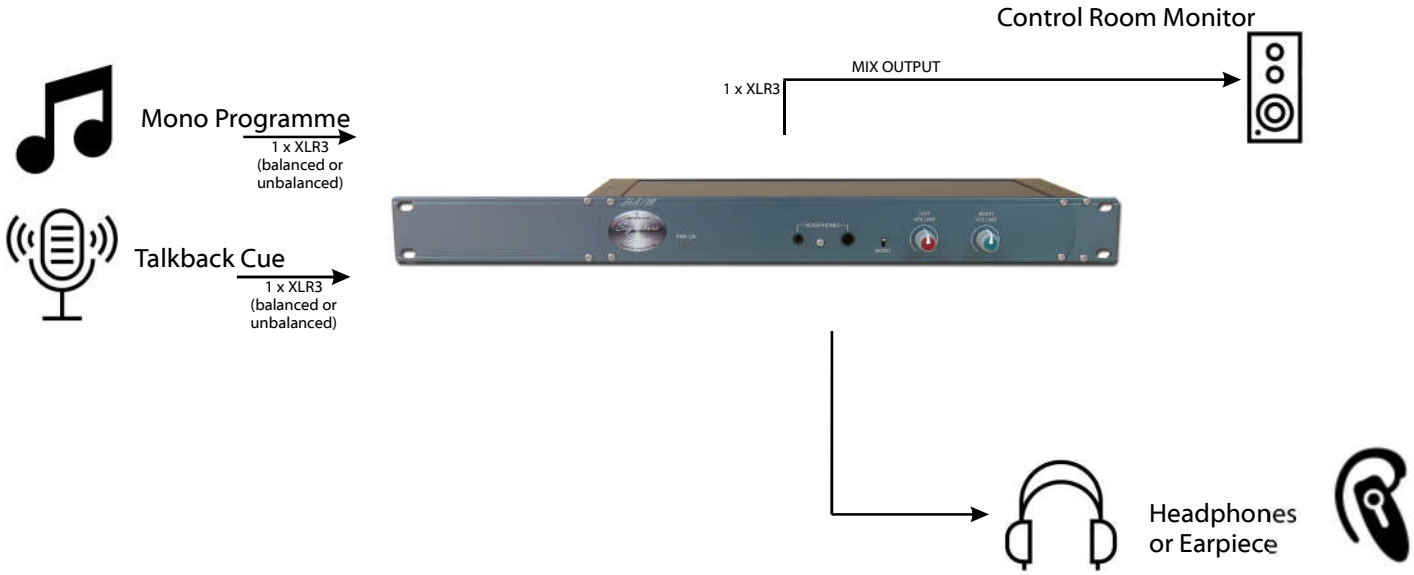
EXAMPLE APPLICATION

Presenter Programme & Cue Monitor
Headphone monitoring



An On Air presenter either in TV or Radio will often be required to take cue feeds from a director or producer and simultaneously monitor the programme audio.

In this situation both the mono programme and mono talkback cue feeds are fed into the HA1M, one source into the left input and the other into the right input. The presenter's stereo headphones are connected via the front panel headphone socket and the individual input level controls allow the presenter to adjust the volume at which he/ she monitors each of the 2 sources. In this case the presenter would monitor cue in one ear and programme in the other.

If the front panel mono switch was operated then the presenter would hear both cue and programme in both ears.

An alternative but similar scenario would be if the presenter was using a mono earpiece instead of stereo headphones. In this case the front panel mono switch would need to be on. Because the HA1M has sophisticated headphone amplifier circuits it is quite safe to connect the mono earpiece jack to either of the front panel headphone sockets on the HA1M.

In both of the above examples the line level mix output on the rear of the HA1M could be used for feeding an auxiliary monitoring position in a control room.

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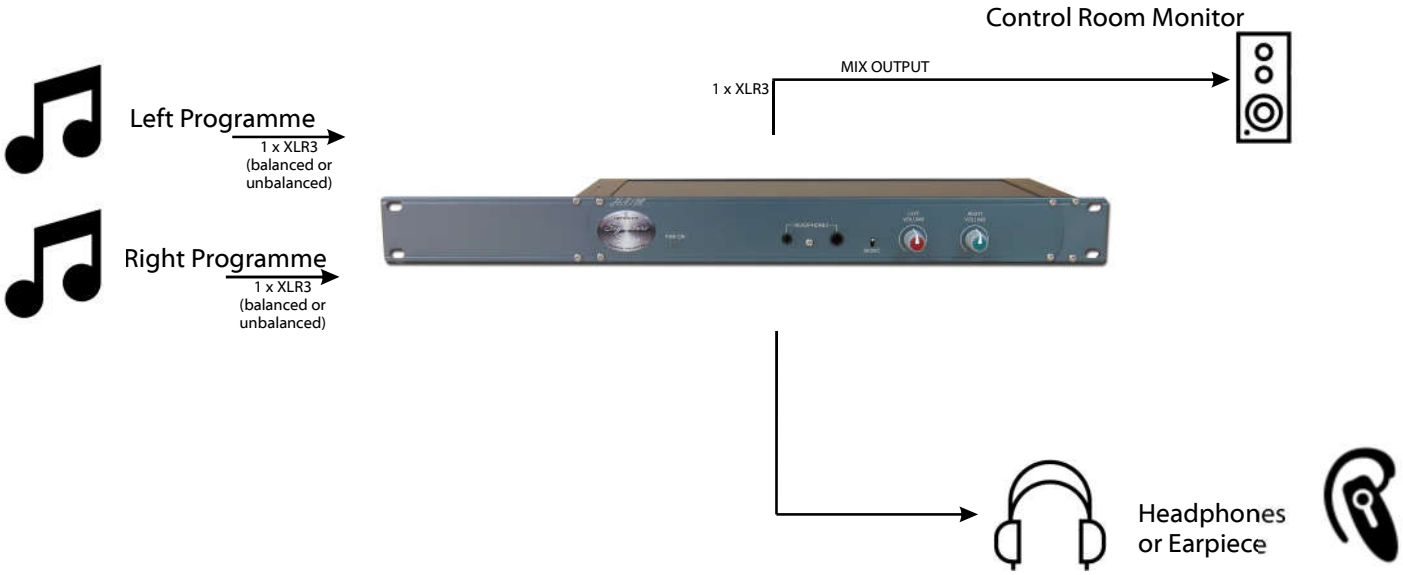
EXAMPLE APPLICATION

Stereo Programme Monitor
Stereo headphone monitoring c/w mono monitor



A fairly common requirement for TV, Radio & pro sound environments is for an operator/ presenter to monitor a stereo audio feed.

The HA1M has 2 audio inputs so allows the monitoring of a stereo programme/ audio feed from the internal headphone amplifier with the ability to individually adjust the volume/ level of the left and right stereo inputs.

In this scenario the left and right audio inputs would be connected on the 2 rear panel XLR audio inputs and the operator's headphones (or earpiece) would be plugged into either the 6.35mm or 3.5mm front panel jack sockets.

The mono mix output would allow a control room loudspeaker or another headphone amplifier to monitor the same audio mix as the operator.

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SPECIFICATION

AUDIO HEADPHONES

Frequency Response
>-2dB 20Hz to 20kHz

Maximum Output Level
+20dB into 1K Ohms +7dB into 32 Ohms

Distortion
<0.015% THD @ 100Hz & 10kHz
Reference to +8dBu output

Noise
>-89dB @ line up unweighted
RMS (22Hz to 22kHz)

Output Type
Sophisticated electronically balanced can accept mono or stereo jacks and automatic level correction for low or high impedance headphones

Headphone Impedance
32 - 1000 Ohms

Crosstalk
>-85dB @ 1k Ohms >-55dB @ 32 Ohms

AUDIO MIX OUT

Frequency Response
>-2dB 20Hz to 20kHz

Maximum Output Level
+24dBu

Distortion
<0.02% THD @ 100Hz, 1kHz & 10kHz
Reference to +8dBu output

Noise
>-90dB @ line up unweighted
RMS (22Hz to 22kHz)

Output Type
Electronically balanced can be wired unbalanced

Output Impedance
50 Ohms

AUDIO GENERAL

Maximum Input Level
+20dBu

Front Panel Pot Gain Range
-70dB to +10dB

POWER

Mains Input
Filtered IEC, 100 to 240VAC
47 - 63Hz

AC Consumption
1.5 Watts @ 230VAC

DC Input
4 Pin Neutrik XLR plug +/- 12V

Internal Mains Fuse
20mm 1A Anti Surge

PHYSICAL

Size
336 x 123 x 44mm (LxDxH) no rack ears
482mm 19" (1RU) with rack ears

Weight
0.94kg

Mechanics
All aluminium construction, anodized and laser etched

Shipping Carton
Rugged export quality cardboard carton
610 x 420 x 130mm LxDxH

Shipping Weight
2.35kg

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

E & OE

Signature Series

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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.

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.

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.

Neutral Colour Scheme To Complement Equipment Areas

Rack Screws Included

Modern Design

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.

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.

Quick Find Manual

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

CONTACT

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