



**RDL**<sup>®</sup>  
Radio Design Labs

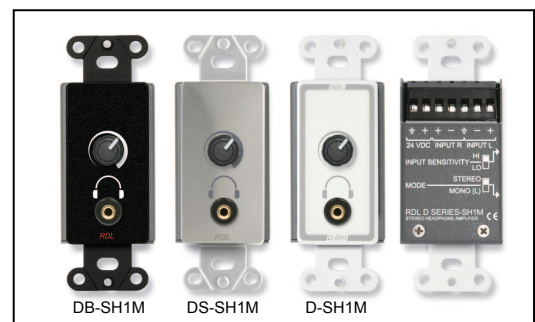
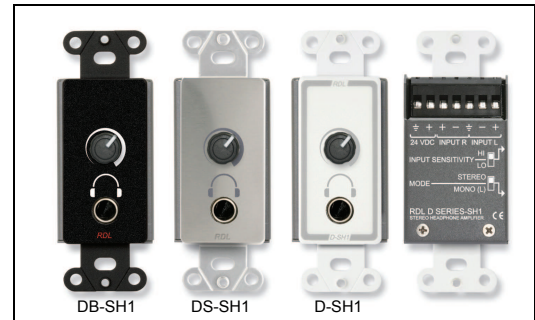
SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## ACCESSORIES

Models **D-SH1, DB-SH1, DS-SH1**  
**Stereophonic Headphone Amplifier**  
1/4" (6.3mm) Jack

Models **D-SH1M, DB-SH1M, DS-SH1M**  
**Stereophonic Headphone Amplifier**  
1/8" (3.5mm) Jack

- Integral Long-Life VCA Stereo Level Control
- Balanced or Unbalanced Inputs
- Switch-Selectable Input Sensitivity
- Switch-Selectable Mono (Left) or Stereo Operation
- Amplifier To Drive High or Low Impedance Headsets
- Output: 1/4" (6.3 mm) standard headphone jack (-SH1)
- Output: 1/8" (3.5 mm) mini jack (-SH1M)
- Convenience of Decora® Mounting Possibilities



The D SERIES-SH1/M is a Decora-compatible stereophonic headphone amplifier from Radio Design Labs. All metal enclosures are attractively finished in white, black or brushed stainless steel to complement the decor encountered in commercial environments. Custom labeling is available at [www.rdl.net](http://www.rdl.net).

**APPLICATION:** The D SERIES-SH1/M is used in applications requiring headphones of any impedance to be driven from consumer or professional audio sources. The -SH1/M is ideally suited to applications as diverse as language translation, museums, interview studios and music stores.

The -SH1/M is a dual channel headphone amplifier with balanced/unbalanced left (**INPUT L**) and right (**INPUT R**) inputs. Each input accepts operating levels between -20 dBV and +20 dBu. Two recessed slide switches located on the side of the rear enclosure are set prior to mounting the module. One switch is provided for setting the **INPUT SENSITIVITY**. The **MODE** switch selects between stereo and mono operation. In the **MONO (L)** position, the left input is used to drive both output channels. When the module is used in a monaural system, only the left channel input must be wired. The front panel level control is a long-life potentiometer controlling matched VCAs. Audio does not pass through this control, assuring years of noise-free level adjustment. The output amplifiers deliver more than 50 mW into either high or low impedance headphones through a durable, metal 1/4" (6.3 mm) standard headphone jack (-SH1) or a 1/8" (3.5 mm) mini jack (-SH1M).

Module operation is from a 24 Vdc ground-referenced power supply. It can also operate from a 12 Vdc supply with a 6 dB reduction in headroom and a maximum output power of 10 mW.

The versatile input level range, low distortion, audio clarity and excellent crosstalk performance make this module ideally suited to a wide variety of audio applications. Use this module in conjunction with other RDL modules as part of a high quality, flexible audio/video system.

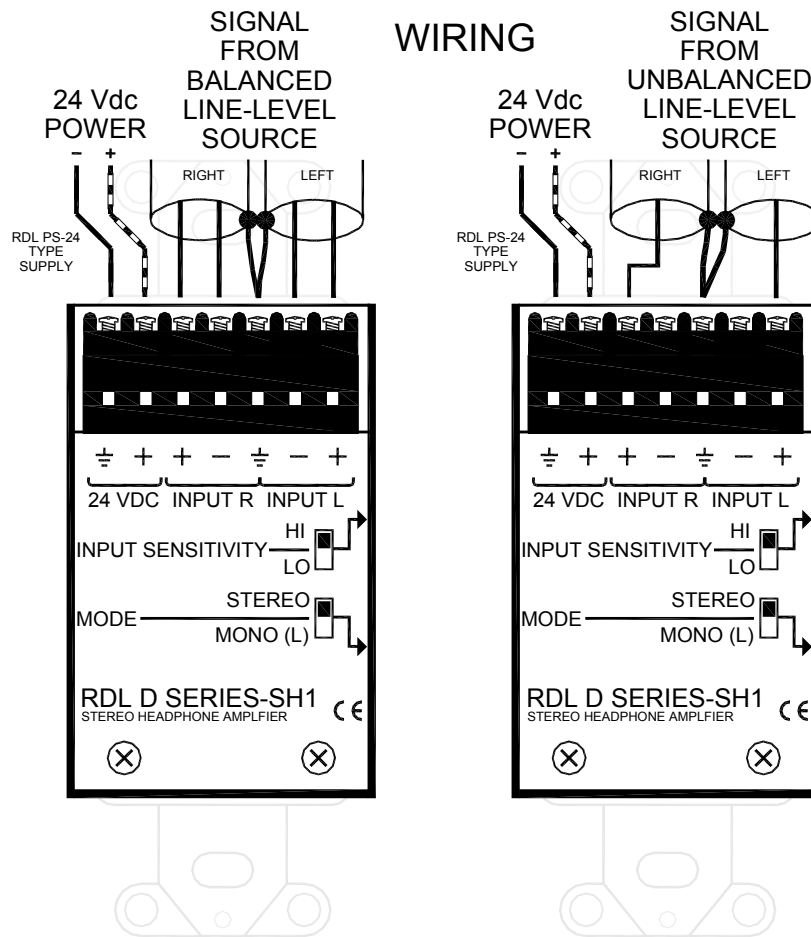
## Accessories

### Models D-SH1/M, DB-SH1M, DS-SH1/M Stereophonic Headphone Amp

## Installation/Operation



EN55103-1 E1-E5; EN55103-2 E1-E4  
Typical Performance reflects product at publication time  
exclusive of EMC data, if any, supplied with product.  
Specifications are subject to change without notice.



### TYPICAL PERFORMANCE

Inputs (2):	10 k $\Omega$ balanced or unbalanced bridging
Input Level:	+4 dBu nominal (Low input sensitivity) balanced; -15 dBV nominal (High input sensitivity) unbalanced
Maximum Input Level:	+21 dBu (Low input sensitivity) balanced; +3 dBV (High input sensitivity) unbalanced
Output Signal (normal rated):	10 mW into 100 $\Omega$
Output Signal (maximum):	50 mW into 100 $\Omega$
THD+N:	< 0.5% @ 1 kHz
Frequency Response:	30 Hz to 20 kHz (+/- 2 dB)
Noise:	< -70 dB below normal operating level
Gain:	User-adjustable on front panel; 18.5 dB (maximum, High input sensitivity); Unity (maximum, Low input sensitivity)
CMRR:	> 60 dB (50 to 120 Hz)
Crosstalk:	Below noise floor (20 Hz to 20 kHz)
Power Requirement:	24 to 33 Vdc @ 50 mA, Ground referenced

Radio Design Labs Technical Support Centers

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