# Stereo Hi-Fi audio balun Extender Operating Instructions

#### **Overview**

The Stereo Hi-Fi audio balun (LM-SHFB) allows unbalanced line level stereo analogue audio to be transmitted via Category 5e/6 unshielded copper twisted pair (UTP) in a point-to-point connection. The product is designed for audio applications where full-range, hi-fidelity audio frequency response is required. Used in pairs, the Stereo Hi-Fi Balun eliminates costly and bulky coaxial cable, allowing audio equipment to be connected or moved within a Structured cabling environment.

### **Applications**

Boardroom systems, classroom training, auditoriums, custom home installations and intercom systems.

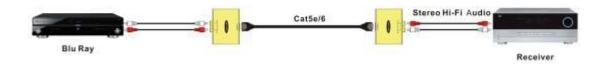
#### Features & Benefits

20 Hz to 20 KHz bandwidth
Cost-efficient cabling
Up to 3025ft (1,000m) via Cat5e/6 UTP
Quicker moves, adds and changes

### **Quick Setup Guide:**

Plug the left and right RCA connectors of the transmit Balun into the audio output of the source component, plug the left and right RCA connectors from the receive Balun into your desired input component. Insert the CAT5 cable into both ends of the Baluns. You may use standard EIA 568A/B Termination.

### **Typical Application**



## **Specifications:**

Environment	Line level unbalanced analog stereo audio
Devices	DVD players, satellite receivers, MPEG players, laptops, hi-fidelity
	stereo audio amplifiers, audio switchers, AV monitors, powered
	subwoofer and other line level audio equipment
Transmission	Transparent to the user.
3dB Bandwidth	20 Hz to 20 KHz over the distance range
Maximum Input	1.1Vp-p
Insertion Loss per balun pair	Less than 2 dB over the frequency range.
Common Mode Rejection	Greater than 60 dB @ 1KHz
	Greater than 40 dB over the frequency and distance range
THD	Maximum 0.007% @ 1 KHz over distance range
Audio Source Impedance	100 ohms maximum
Audio Receiver Impedance	10 k ohms minimum
Max. Distance – Cat5e/6 UTP	3025ft (1,000m)

Pin Configuration (RJ45)	Audio 1 (White): pins 1[R] & 2 [T]
EIA 568 A or B	Audio 2 (Red): pins 7 [R] & 8 [T]
Cable – UTP	24AWG or lower solid copper twisted pair wire
	Impedance: 100 ohms at 1 MHz; Maximum capacitance: 20 pf/foot.
	Attenuation: 6.6 dB/1000 ft at 1 MHz
Connectors	Two RCA-F connectors for audio:white red
	RJ45 for twisted pair
Temperature	Operating: 0° to 55°C
	Storage: -20° to 85°C
	Humidity: Up to 95% non-condensing
Enclosure	Aluminum alloy
Dimensions(packaging)	155mm*80mm*30mm (including one pair of Balun)
Weight(packaging)	300g
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NOTE: Baluns are interchangeable for transmit or receive functions.