Specifications

Environment	Composite video and unbalanced line audio for the consumer and commercial market.
Devices	DVD, VCR, camcorders, audio receivers, audio amplifiers, AV switchers, splitters, AV mixers and other analogue audio-video equipment featuring coaxial input or output with BNC or RCA connectors.
Transmission	Transparent to the user
Bandwidth	Video: DC to 8 MHz Audio: 60 Hz to 50 kHz
Maximum Video Input	1.1 Vp-p
Insertion Loss	Less than 2 dB per pair over the frequency range from DC to 8 MHz
Return Loss	Greater than 15 dB over the frequency range from DC to 8 MHz
Common Mode Rejection Ratio (CMRR)	Greater than 40 dB at 8 MHz
Max. Distance: Video	Cat 5E/6: 2,200 ft
Max. Distance: Audio	Cat 5E/6: 5,000 ft
Cable: **Cat 5E/6 UTP/STP**	24 AWG or lower solid copper twisted pair wire Impedance: 100 ohms at 1 MHz Maximum capacitance: 20 pf/ft Attenuation: 6.6 dB/1,000 ft at 1 MHz
Cable: RCA	Standard audio cable terminated by RCA connectors
Cable: BNC	75-ohm coaxial cable
Connectors	Two (2) RCA-receptacle for video Two (2) RCA-receptacles for audio One (1) RJ45 jack
Pin Configuration	Video 1: Pins 7(R) & 8(T) Video 2: Pins 4(R) & 5(T) Audio 1: Pins 1(R) & 2(T) Audio 2: Pins 3(R) & 6(T)
Impedance	Video: 75 ohms (RCA) unbalanced Audio: 600 ohms (RCA) unbalanced
Temperature	Operating: 0° to 55°C Storage: -20° to 85°C Humidity: Up to 95% non-condensing
Enclosure	Fire retardant plastic
Dimensions	2.40” x 2.25” x 1.00” (6.10 x 5.72 x 2.54 cm)
Weight	2.1 oz (61 g)
Warranty	Lifetime
Order Information	500012 Dual Audio-Video Balun

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Dual Audio-Video Balun
500012
Quick Installation Guide

Overview

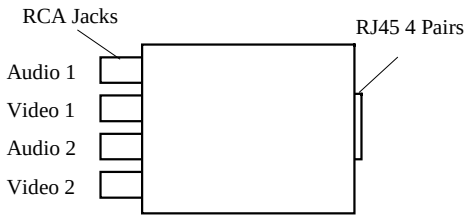
The Dual Audio-Video Balun is designed for standard baseband video/audio equipment using RCA connectors for both video and audio. The balun has two RCA connectors for video 1 & 2 and two RCA connectors for audio 1&2 on the equipment side and one RJ45 connector for video/audio 1 & 2 on the UTP building wiring side.

Used in pairs, this balun may be used to allow VCRs, cam-corders, closed-circuit televisions, PC-based teleconferencing and other baseband video/audio equipment to be connected via a building’s structured wiring system. The balun provides the necessary impedance matching and supports two-way baseband video/audio transmission over a four pair UTP cable and is ideal for videoconferencing applications.

Installation

Caution: It is recommended that you turn off all equipment to be inter-connected, following the manufacturer's procedure. Please follow the steps below when installing the Dual Audio-Video Balun.

Dual Audio-Video Balun



1. Note the balun pin assignment, Video 1 & Audio 1 form one set, while Video 2 & Audio 2 form another.
2. Identify the locations where the baluns will be installed, along with all cross connections.
3. In order not to degrade signal quality, connect baluns in a point-to-point fashion (one source side balun connected to one destination side balun). Do not attempt to directly multi-point connect baluns together (one source side balun directly connected to multiple destination side baluns).
4. To avoid electrical noise related problems, keep the equipment, baluns and cables away from neon lights, generators, electric motors, high voltage lines and other high voltage and high frequency signals.
5. Connect the RCA jacks of the balun in location 1 to the equipment in location 1 and those of the balun in location 2 to the equipment in location 2. Verify that video signals go to video connectors, and that audio signals go to audio connectors. In addition, ensure that output connectors of equipment in location 1 are terminated to input connectors of equipment in location 2.
6. Inter-connect the baluns by connecting both ends of the same 4 pair UTP building cable, which terminates in location 1 and 2, to the RJ45 jacks of each balun. UTP patch cords may be used if necessary.

You may now turn on the equipment, again following the manufacturer's procedure.

Troubleshooting

If you experience problems with the video baluns installed please follow the guidelines below:

- ❑ Verify your equipment independently of the baluns.
- ❑ Replace the balun or baluns in question with known working units, to help isolate the problem.
- ❑ Re-check all cables and connections, eliminate any split pair or polarity problems.
- ❑ Re-confirm the quality of the cable and all mating connections.
- ❑ Make sure that distance limitations have not been exceeded.
- ❑ Ensure that the equipment, baluns and cables are well away from neon lights, generators, electric motors, high voltage lines and other high voltage and high frequency signals.
- ❑ If these steps fail to identify the source of your problem, please call an authorized MuxLab Distributor.