

Specifications

Environment	SDI, HD-SDI (1080i)
Devices	SDI equipment
Transmission	Transparent to the user
Insertion Loss Per Balun	<6 dB: 5 – 1000 MHz
Connector	BNC connector – male
RJ45 Pin Configuration	Female RJ45 Pins 7&8
Distance	<p>For 480i (SD speed): Up to 110m (375ft) using Cat 5 & 5E UTP , up to 150m (500ft) for CAT 6 UTP.</p> <p>For resolution 720p & 1080i (HD speed)*: Up to 30m (100ft) using Cat 5 UTP , up to 45m (150ft) for CAT 5E & 6 UTP.</p> <p>Maximum distance is function of the receiving equipment equalizer and cables. Dedicated Cat5e/6 cables are recommended. Patch panels, patch cables and wallplate interconnect are not recommended. The balun will not work with STP cable.</p> <p>*Please note that many new equipment that are referring to HD-SDI are using the 3G speed. The balun will not work at 3G speed.</p>
Isolation	None. There is no voltage isolation between units.
Temperature	Operating: -20° to 50°C. Storage: -30° to 70°C.
Enclosure	Cast Aluminum
Humidity	Maximum 95% (non-condensing)
Dimensions	0.8" x 1.85" x 1.05" (2 x 2.6 x 4.7 cm) L x H x W + extended BNC connector.
Weight	1.5 oz (44 g)
Warranty	Lifetime
Order Information	500701 HD-SDI Balun 500701-2PK HD-SDI Balun, 2 pack



HD-SDI Balun 500701

Quick Installation Guide

Overview

The HD-SDI Balun (500701) allows one SDI signal to be transmitted up to 150 ft (45m) via CAT cable at HD resolution (720p, 1080i) in a point-to-point configuration. The HD-SDI Balun supports transmission of uncompressed, un-encrypted digital video (optionally including embedded Audio and/or Time Code) within television facilities and between professional video equipment. Two identical balun are required.

Applications

Video production, broadcasting, HD camcorder, studio-to-studio, post-production, live events, medical imaging displays, mobile video, HD/SD routing, HD-CCTV, medical imaging.

MuxLab

8495 Dalton Rd, Montreal, Quebec, Canada. H4T 1V5

Tel: (514) 905-0588 Fax: (514) 905-0589

Toll Free (North America): (877) 689-5228

E-mail: videoease@muxlab.com URL: www.muxlab.com

Installation

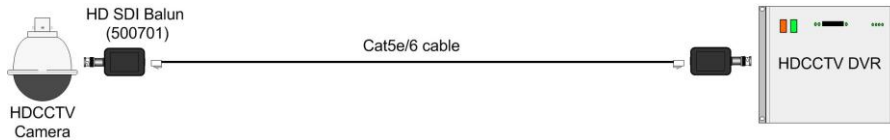
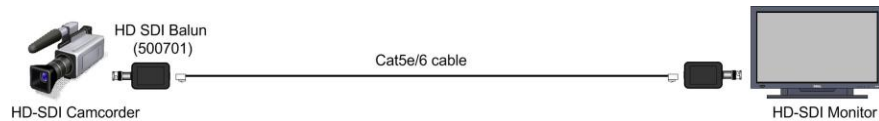
One pair of HD-SDI Baluns is needed to complete one connection via UTP cable. To install the HD-SDI Balun, perform the following steps:

Caution: Do not attempt to open the housing. There are no user-serviceable parts inside the HD-SDI Balun. Opening the unit will void your warranty.

Do not connect the HD-SDI Balun to a telecommunication outlet wired to unrelated equipment. Making such a connection may damage the equipment and/or the balun. Please ensure that all wiring is “straight-through” twisted pair.

1. Verify that the desired twisted pairs are not being used for other LAN or telephone equipment.
2. Connect the Balun (500701) to the HD-SDI video port of the source equipment (i.e., HD camcorder or HD-CCTV camera).
3. Connect a dedicated Cat5e/6 cable between the source-side HD-SDI Balun and the receiver-side HD-SDI Balun.
4. At the destination point, connect the HD-SDI Balun to the HD-SDI receiver (i.e. monitor or DVR).

The following diagrams show a couple of typical configurations.



Troubleshooting

The following tables describe some of the symptoms, probable causes and possible solutions regarding the HD-SDI Balun:

Video Symptom	Probable Cause	Possible Solutions
No video	No continuity in video link	Verify cable continuity between pairs of baluns.
	Power off	Check power supplies of video equipment.
	Improper connection and/or swapped pair	Check that baluns are connected to correct video inputs and outputs.
Part of picture missing or intermittent. Missing frame or freezing.	Exceeded distance	Verify cable length and grade. Use higher-grade cable if necessary.
	SDI is in 3G mode (1080p).	Change to lower speed (max 1080i).
	Unusual link attenuation	Verify cable distance using a cable tester.
Image not stable, noise, incorrect color or sound.	EMI interference	Try turning off (or move) nearby wireless LANs, switching power supplies, radio transmission to see if problem disappear.
	Defective source or receiving equipment	Try swapping source/monitor equipment or verify video equipment interface integrity.
	SDI is in 3G mode (1080p).	Change to lower speed (max 1080i).

If you still can not diagnose the problem, please call MuxLab Customer Technical Support at 877-689-5228 (toll-free in North America) or (+1) 514-905-0588 (International).