

Specifications

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Environment	S-Video equipment
Devices	DVD, VCR, monitors, LCD projectors, CCD cameras, video switchers, sequencers, multiplexers and other S-Video equipment.
Transmission	Transparent to the user.
Bandwidth	Video: DC to 6 MHz. Audio: 100 Hz to 16 kHz
Impedance – S-Video	75 ohms
Impedance – Audio	600 ohms min.
Max. Input - Audio or Video	1.1Vp-p
Insertion Loss – S-Video	Less than 2 dB per pair over the frequency range
Return Loss	Better than 15 dB over the frequency range
Common Mode Rejection	Greater than 40 dB over the frequency range
Max. Distance	Cat 5 twisted pair cable – 1000 ft. (305 m)
Cable – UTP	24AWG or lower solid copper twisted pair wire Impedance: 100 ohms at 1 MHz Maximum capacitance: 20 pF/ft. Attenuation: 6.6 dB/1000 ft at 1 MHz
Connectors	500016: One (1) 4-pin Mini DIN and one (1) RJ45 500017: One (1) 4-pin Mini DIN, two (2) RCA audio jacks and one (1) RJ45 Up to 12 feet of audio cable (not included) may be used with the 500017.
Pin Configuration – 500016 <i>Reverse Polarity Sensitive</i>	S-Video Luma: pins 7&8 S-Video Chroma: pins 4&5
Pin Configuration – 500017 <i>Reverse Polarity Sensitive</i>	S-Video Luma: pins 7&8 S-Video Chroma: pins 4&5 Audio 1: pins 1&2 Audio 2: pins 3&6
Temperature	Operating: 0° to 55°C. Storage: -20° to 85°C. Humidity: up to 95%
Enclosure	Fire retardant plastic
Dimensions	500016: 1.875" x 1.0" diameter plus 5" S-Video lead 500017: 2.40" x 2.25" x 1.00" plus 5" S-Video lead
Warranty	Lifetime
Order Information	500016 VideoEase S-Video-Only Balun 500017 VideoEase S-Video/Audio Balun



VideoEase S-Video Balun



500016

500017

Installation Guide

Overview

The VideoEase S-Video Balun allows a single S-Video signal to be transmitted via unshielded twisted pair (UTP) cable in a point-to-point connection for more versatile cabling.

The product is available in two models; the S-Video Balun (500016) and the S-Video/Audio Balun (500017). Used in pairs, the S-Video Balun eliminates costly and bulky S-Video cable, allowing S-Video equipment to be connected or moved to any convenient modular outlet. The S-Video Balun works in conjunction with NHC's CCTV-Audio/Video Distribution Hub (500200) to allow S-Video programming to be distributed via UTP.

Applications

The VideoEase S-Video Balun allows pre-existing twisted pair cable to be used in such applications as classroom video distribution, overhead projector systems, PC-training systems and tradeshow PC-demo systems in the S-Video environment.

Installation

To install the VideoEase S-Video Balun, perform the following steps:

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

1. Turn off power and disconnect the S-Video source and S-Video monitor.
2. Make certain that modular outlets and cross connects to which you will connect the VideoEase S-Video Balun are configured properly and labeled appropriately to identify the circuit.

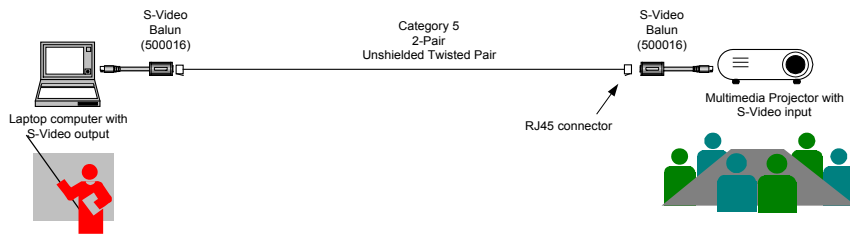
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SE-000268-C

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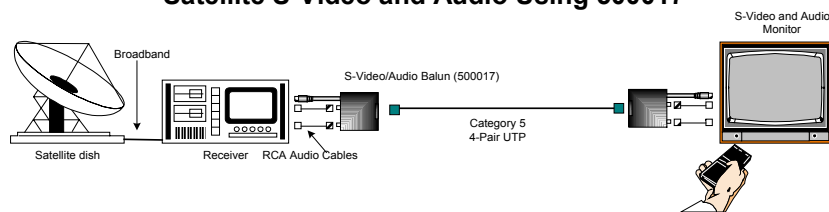
NHC Europe Sales Office
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3. **Caution:** Do not connect the VideoEase S-Video Balun to a telecommunication outlet wired to unrelated equipment. Making such a connection may damage the equipment and/or the balun. Please ensure that all wiring is “straight-through” twisted pair.
4. Verify that the desired twisted pairs are not being used for other LAN or telephone equipment.
5. The VideoEase S-Video Baluns operate in pairs.
6. Connect the S-Video Balun (500016 or 500017) to the S-Video port of the source equipment (i.e. DVD or VCR). If the S-Video/Audio Balun is being installed, connect the audio connectors to the audio source via RCA-type audio/video jumper cables.
7. **Caution:** Do not mount the balun over equipment ventilation openings. Covering the openings may cause the equipment to overheat.
8. Connect a 4-pair Cat 5 cable from the RJ45 8-position modular jack of the VideoEase S-Video Balun to the twisted pair cabling of the building. The 500016 requires two pairs. The 500017 requires four pairs if both S-Video and stereo audio are used.
9. At the destination point, connect an S-Video Balun to the S-Video monitor or projector.
10. Connect a 4-pair Cat 5 cable from the RJ45 connector of the S-Video Balun to the appropriate modular wall outlet. See typical application below. If the S-Video/Audio Balun is being installed, connect the audio connectors to the audio inputs (i.e. loudspeakers) via RCA-type audio/video jumper cables.
11. Power on the S-Video equipment at both ends and adjust the monitor image and audio levels to the desired settings.

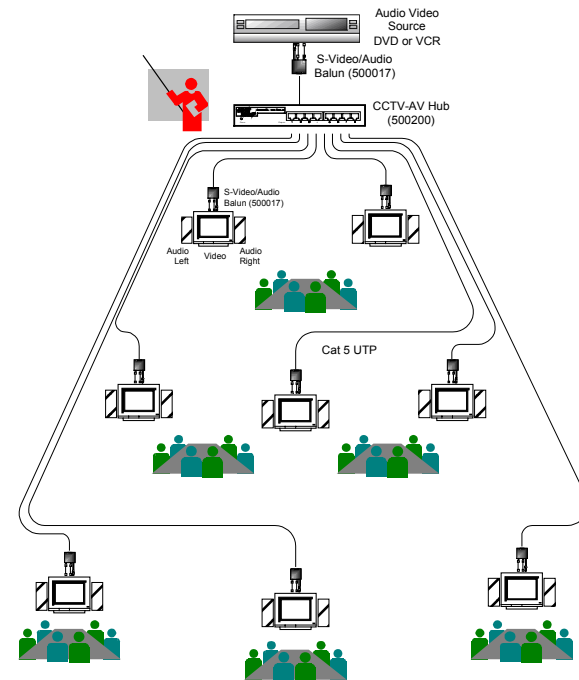
S-Video Projection Using 500016



Satellite S-Video and Audio Using 500017



S-Video and Audio Distribution Using 500200 and 500017



Troubleshooting

If your equipment malfunctions with VideoEase S-Video Baluns in place, follow the troubleshooting procedures below:

1. Perform diagnostics on your video equipment by following the manufacturer’s instructions.
2. Check all the connections and verify the pin configuration.
3. Check for reverse polarity.
4. Check for split pairs, improper splices, broken or partially cut wires, damaged cabling insulation.
5. The maximum distances supported by the S-Video Balun are dependent on the type of UTP cable. Ensure that the maximum recommended operational distances have not been exceeded.
6. Check that only twisted pair patch cords are being used.
7. Replace the S-Video Balun with another VideoEase balun that is known to be working.
8. If you still cannot diagnose the problem, call NHC for support at 800-361-1965 or 514-735-2741.