

# Intelix S-V1ST

## Installation Manual

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### **Introduction**

The Intelix S-V1ST transmits composite video over a single twisted pair cable, such as Cat 5 or Cat 6. The S-V1ST features a male BNC connector for direct connection to source and destination devices, as well as screw terminal connectors for quick twisted pair connection. Used in pairs, S-V1ST baluns replace bulky coaxial video cable and utilize a building's existing structured cabling network.

The S-V1ST conforms to IEC 61000-4-2:1995 protection standards and features exceptional interference rejection. S-V1ST baluns are ideal for security and monitoring applications with such equipment as CCTV cameras, monitors, DVRs, video sequencers, video multiplexers, quads, switchers, and servers.

**When signal quality matters, choose Intelix.**

# Installation

**Caution:** Do not attempt to disassemble or alter the balun housing. There are no user-serviceable parts inside the unit. Doing so will void your warranty.

**Warning:** The S-V1ST is not waterproof and should not be used in areas exposed to liquid. Do not operate or install the unit with wet hands.

1. Power off the source and destination devices which will be connected to the baluns.
2. Verify the modular outlets and cross connects to which you will connect the S-V1ST baluns are configured properly and labeled appropriately to identify the circuit.

**Caution:** To minimize the possibility of equipment damage from electrostatic discharge (ESD), all source and destination equipment must be powered off during installation. This includes signal extenders, splitters, and switches.

3. Verify the desired twisted pairs are not being used for other LAN or telephone equipment.

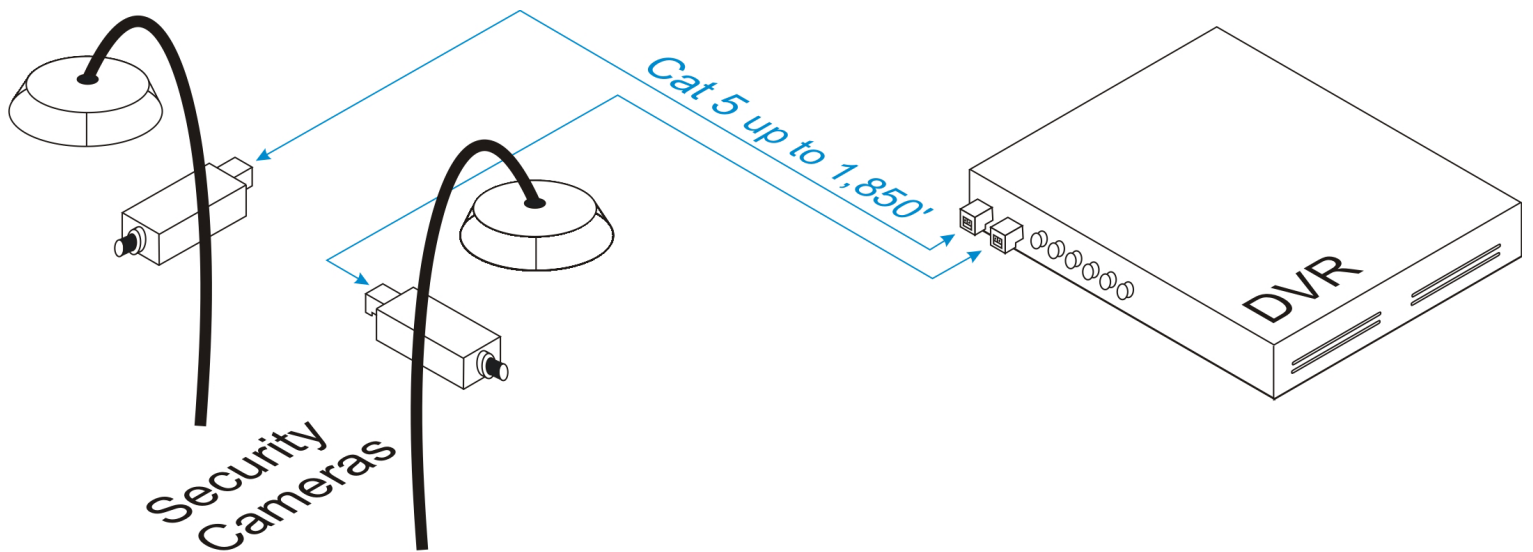
**Caution:** Do not connect the balun to a telecommunication outlet wired to unrelated equipment. Doing so may damage the unit or any connected equipment. Ensure all connected twisted pair cabling is straight-through (point-to-point).

4. Connect one S-V1ST to the video port of the source equipment.
5. Connect one end of the twisted pair cable to the S-V1ST.
6. Connect a second S-V1ST to the video port on the destination equipment.
7. Connect the other end of the twisted pair cable to the second balun.
8. Power on the source and destination equipment.

**Note:** For your convenience, it is recommended that you uniquely mark the ends of the twisted pair cable before pulling them through a wall or conduit.

# Troubleshooting

Symptom	Probable Causes	Possible Solutions
Image not stable	Defective link or equipment	Verify source and destination equipment and cabling
Unusual colors	Reversed polarity	Verify screw terminal pinout is the same on both ends
Smearing or weak video contrast	Exceeded cable distance	Verify cable grade and total cabling distance
Horizontal bars moving upward in background	Ground loop problem	Verify the source and destination equipment are at the same ground potential. Ground the source and destination equipment.
Shaking image	Ground loop problem	Verify the source and destination equipment are at the same ground potential. Ground the source and destination equipment.
Variance in hue	EMI interference	Identify possible radiating frequency sources and isolate them from the cabling. Use shielded twisted pair cabling.
Background pattern	EMI interference	Identify possible radiating frequency sources and isolate them from the cabling. Use shielded twisted pair cabling.



**Typical System Drawing**

## Technical Specifications

<b>Maximum Distance</b>	Passive system: 1,000 feet Active system: 1,850 feet
<b>Recommended Devices</b>	CCTV cameras, monitors, DVRs, video sequencers, multiplexers
<b>Bandwidth</b>	DC to 5 MHz
<b>Maximum Input</b>	1.1 Vp-p, 75 ohms
<b>Insertion Loss</b>	Less than 2 dB over the frequency range
<b>Return Loss</b>	Greater than 15 dB over the frequency range
<b>Protection</b>	2KV (10/700 $\mu$ s) IEC6100-4-5/1955 (GB/T 1726,5-1999)
<b>Attenuation</b>	1.5 dB max
<b>Interference Rejection</b>	greater than 60 dB
<b>Cable</b>	Unshielded Cat 5, Cat 5e, Cat 6 or better
<b>Compatible Intelix Units</b>	S-BB4 S-V16P S-V16AR
<b>Temperature</b>	Operating: 0 to 55 C. Storage: -20 to 85 C. Humidity: up to 95% non-condensing
<b>Warranty</b>	2 years
<b>Order Information</b>	S-V1ST: one balun in bulk packaging S-V1ST-PAC: two baluns in retail packaging

Distances and picture quality may be affected by cable grade, cable quality, source and destination equipment, RF and electrical interference, and cable patches. Intelix specifications are based on straight-through cabling with standard-grade Cat 5.

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