

Smart-**AVI**

Smart Audio Video Integration

User Manual

SLI-100



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MNSLI100 VER 2.0

Use a single CAT5 to broadcast Video, Stereo Audio, IR Control and Power up to 1000ft away (333m)

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Notice

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1. SmartAVI warrants to the end-user customers that SmartAVI product specified above will be free from defects in materials and workmanship for the duration of 1 year, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.
2. SmartAVI (limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:
 - a. Improper or inadequate maintenance or modifications
 - b. Operations outside product specifications
 - c. Mechanical abuse and exposure to severe conditions
3. If SmartAVI receives during applicable warranty period notice of defect SmartAVI will at its discretion replace or repair defective product. If SmartAVI is unable to replace or repair defective product covered by the SmartAVI warranty within reasonable period of time SmartAVI shall refund the cost of the product.
4. Smart-AVI shall have no obligation to repair, replace or refund unit until customer returns defective product to SmartAVI.
5. Any replacement product could be new or like new, provided that it has functionality at least equal to that of the product being replaced.
6. SmartAVI's limited warranty is valid in any country where the covered product is distributed by SmartAVI.

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TO THE EXTENT ALLOWED BY LOCAL LAW, SMARTAVI NOT ITS THIRD PARTY SUPPLIERS MAKE ANY OTHER WARRANTY OR CONDITION OF ANY KIND WHETHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE SMARTAVI PRODUCT, AND SPECIFICALLY DISCLAIM IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE.

C. Limitations of liability

To the extent allowed by local law the remedies provided in this warranty statement are the customer's sole and exclusive remedies.

TO THE EXTENT ALLOWED BY LOCAL LAW, EXCEPT FOR THE OBLIGATIONS SPECIFICALLY SET FORTH IN THIS WARRANTY STATEMENT, IN NO EVENT WILL SMARTAVI. OR ITS THIRD PARTY SUPPLIERS BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES WHETHER BASED ON CONTRACT, TORT OR ANY OTHER LEGAL THEORY AND WHETHER ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

D. Local law

To the extent that this warranty statement is inconsistent with local law, this warranty statement shall be considered modified to be consistent with such law.

Troubleshooting

Should the product not perform as expected, basic troubleshooting may help to resolve some common installation difficulties.

The SLI-100 is a straight forward product and troubleshooting is limited to checking that the correct cables are used and the units are properly connected. If the problem you are trying to resolve persists and you are not able to resolve it, please call us during normal working hours at 818-565-0011 (SmartAVI) for technical support.

PROBLEM	SOLUTION
Video not present	Verify that the transmitter Video input is connected to Video output and that the receiver output is connected to the TV input ports.
Audio not present	Verify that the audio portion of the signal is properly connected.
IR Remote does not operate properly	Verify that the IR works with the device directly. Make sure the IR LED is securely attached to the IR window and the LED is pointing into the IR window. Verify that the cable is plugged in the right port of the IR transmitter. Check that the Remote control is pointing at the IR window of the IR Receiver.

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What is in the box?

Thank you for buying SLI-100 Extender Link! Your box contains the following items:

Item	Description
SLI-100	Video, Audio, IR Transceiver (SLI-TX100, SLI-RX100 and power supply)
SLI-TX100	Video, Stereo Audio, IR Transmitter (including power supply)
SLI-RX100	Video, Stereo Audio, IR Receiver
SLI-LED	IR LED Cable (optional)
SLI-EYE	Optional IR Eye

If any of these items are missing from your box talk to your SmartAVI dealer or customer support at: (818) 565-0011

What is SLI-100?

The SLI-100 range of products allow the extension of Video, Stereo Audio and Infra Red control signals using single CAT-5 UTP (category 5, unshielded twisted pair) cable. The SLI-100 is the first product for this application.

SLI-100 uses a unique method of transparent data transfer, which allows a device, such as set-top box to be situated up to 1000 ft (333m) away from the controller TV or point of control.

Fully compliant with standard 38 kHz modulated IR or higher, the IR Extender Link will provide a transparent path for all protocols and data transfers. The extender uses one pair for IR data/power transmission and the other 3 pairs for composite video and stereo audio transmission.

Effective equalization techniques are used to compensate for losses in the cable for the data, video and audio signals.

SLI-100

SPECIFICATIONS

ITEM	SLI-100
Range	
AV+IRover CAT5 UTP	1,000 ft (333 m)
Remote Control Range	18 ft (6 m) 60 deg
Video Input	
Signal type	NTSC/PAL/SECAM Composite video 1V p-p
Bandwidth	100 MHz
Impedance	75 Ohm
Connector	RCA, Female
Audio Input	
Signal type	Stereo Audio
Bandwidth	15 MHz, 0 dB
Impedance	100 Ohm
Connector	3.5 mm mini jack, Female
Video Output	
Signal Type	NTSC/PAL/SECAM Composite Video
Bandwidth	100 MHz
Impedance	75 Ohm
Connector	RCA, Female
Audio Output	
Signal Type	Stereo Audio
Bandwidth	15 MHz, 0 dB
Impedance	100 Ohm
Connector	3.5 mm mini jack, Female
IR Input	
Signal Type	30-500 kHz modulated IR
Connector	3.5 mm mini jack, Female
Physical	
Dimensions	2.5" x 2.5" x 1.0" (85 x 84 x 35 mm)
Weight	.1 lb (0.3 Kg)

The SLI-100 range of products allow the extension of Composite Video, Stereo Audio and Infra-Red control signals via a single Category 5 twisted pair cable using a unique method of transparent data transfer.

Features

- Uses easy to install, inexpensive CAT5.
- Output reaches up to 1000 feet (300 m).
- Supports PAL, NTSC and SECAM.
- Video 100 MHz Bandwidth.
- Video cable compensation.
- Sends Composite Video, Stereo Audio, IR and Power signals over single CAT5.
- Compatible with Line Level Stereo Audio Signals.
- High ground loop immunity.
- Built-in lightning, power surge and transient protection.
- Remote Units come with Buffered Outputs.
- Compact Enclosure.
- Optional power supply for remote unit.
- Fully compliant with standard modulated IR and the latest IRDA.
- Fully transparent path for all protocols and data transfers.

Why IR Extenders are necessary?

The IR signal is a line of sight type of signal. If you require control of a device located a long distance away, extension of the IR receiver of the device may be a good option. In some applications the VCR or DVD or Satellite set-top box may be located in a different room, but control must be available for necessary selection.

How does the SLI-100 Work?

The SLI-100 Extender transmits four different signals over a single CAT-5 cable. The Audio, Video, IR Control signals and Power. The Audio and Video signals jointly are referred to as the AV signal and are transmitted from the signal source to the TV display. The IR control signal on the other hand is transmitted from the TV display to the signal source, which is in opposite direction of the AV signal.



The SLI-100 consists of two devices the transmitter, SLI-TX100, and the receiver, SLI-RX100. The transmitter and receiver designation is based on the direction of the transmission of the AV signal.

The SLI-100 transmitter must be located next to the source of the video and audio signals such as satellite receiver, DVD or VCR and is connected to the Video and Audio outputs of these devices. The IR control is accomplished by attaching an IR LED to the IR window of the VCR, DVD or Satellite Receiver and connecting it to the SLI-100 Transmitter IR input port.

The SLI-100 receiver is located next to your TV display and is connected to the Audio and Video ports of the TV. The SLI-RX100 Receiver must be located such that the IR Window has line of sight from your remote control.

The distance between transmitter and receiver is recommended not to exceed 1000 ft (333m).

Installation Instructions

1. Connecting SLI-TX100 (AV transmitter) to the Video Source
 1. Connect the AV transmitter to your DVD, VCR, Satellite Receiver or other source of video signal.
 2. Using RCA M-M cable and 3.5 mm to 2-RCA cable.
 3. Connect IR LED to the IR window on the source device.
 4. Connect power supply to the unit. Observe LED lighting up indicating power present

2. Connect SLI-RX100 (AV Receiver) to the Display
 1. Connect receiver to the display, typically a TV monitor using Video cable (not included) and audio 3.5 mm to 2-RCA included with the unit .

3. Connect the Transmitter to the Receiver

Connect the transmitter to the receiver using Category 5 UTP cable (Purchased separately). The CAT 5 UTP cable, if purchased in bulk, will be wired using 568A or 568B wiring standard as shown in the table 1 on page 4. Once connected, check that the power LEDs on both the receiver and the transmitter are on, IR status LED is on and RX LED is flashing when Remote control is used indicating that communication is in progress.



Operating Instructions

Once installation is completed, verify that the power is present at all devices in the system. The peripheral devices should be ready for use.

CAT 5 Wiring Standards

Pin #	EIA/TIA 568A	EIA/TIA 568B
1	White with green stripe	White with orange stripe
2	Green with white stripe or solid green	Orange with white stripe or solid orange
3	White with orange stripe	White with green stripe
4	Blue with white stripe or solid blue	Blue with white stripe or solid blue
5	White with blue stripe	White with blue stripe
6	Orange with white stripe or solid orange	Green with white stripe or solid
7	White with brown stripe or solid brown	White with brown strip or solid brown
8	Brown with white stripe or solid brown	Brown with white stripe or solid brown

