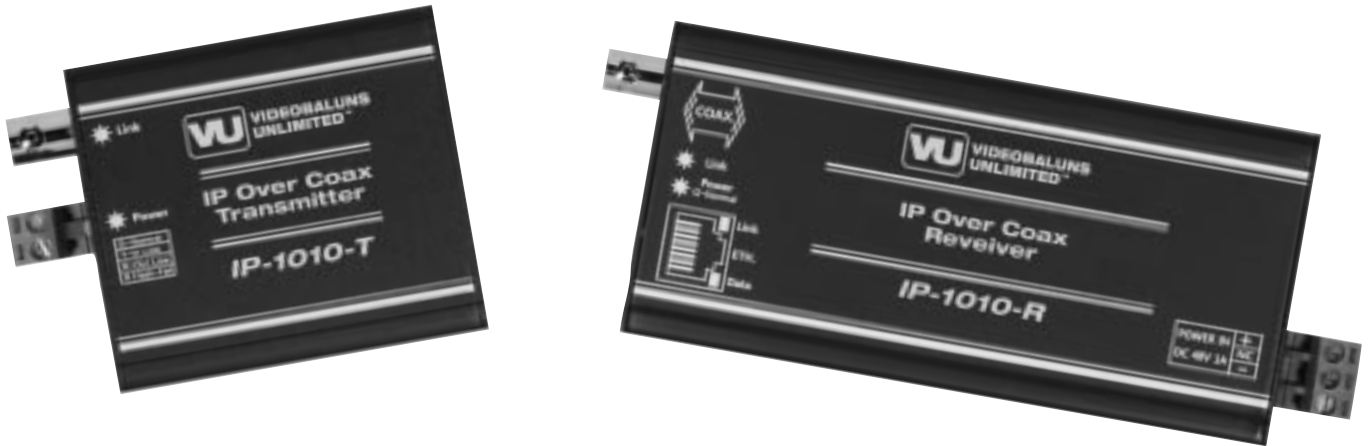


IP over Coax Transmission Solution



Videobaluns Unlimited, LLC

Thank you for purchasing our product.

Please read this manual carefully to fully understand the details of the installation and operating instructions prior to installing and using this product.


If any part of the installation instructions are not clear, or if a problem arises during the installation or while the products are in use, please contact your distributor.


Reproduction of this instruction manual or any part thereof without permission is strictly prohibited.

You must read the precautions required for safe operation prior to using it and operate it correctly.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

 The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

 The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Overview

INTRODUCTION

The IP-1010 model is comprised of one IP-1010-T (Transmitter) and one IP-1010-R (Receiver).

The IP-1010 extends your transmission distance for video up to 6000 feet instead of 300 feet with standard Ethernet.

The IP-1010 can also supply power to the camera up to 3000 feet on the same coax cable.

Significant savings in time and cost are possible by using existing coaxial cable installations to transmit IP video signals from the camera, as well as sending power to the camera over the same coax cable.

FEATURES

- Transmitting the digital data signal and supplying the power via 1 coaxial cable
- Supplying the power for IP CAMERA (DC 12V/8W)
- Transmission Bandwidth

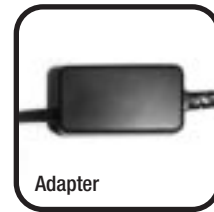
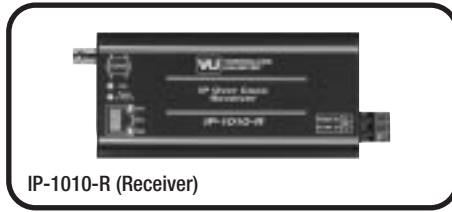
Max. PHY Rate (Physical Layer Speed)	200 Mbps
UDP Rate	90 Mbps
TCP Rate	75 Mbps

- Transmits digital data and supplies power using RG-6 coaxial cable up to 3000 feet.
- Allows the use of existing coaxial cable installations for new IP camera systems.
- Provides an alternative to more costly fiber-optic cable.
- Self diagnosis for cable status and safe power supply function.
- Surge protected.
- Can use up to three transmitters with each receiver.

APPLICATIONS

- For new IP Camera or Mega Pixel Camera installations.
- When upgrading to an IP Camera System where there is a pre-existing coaxial cable installation.
- Where an IP Camera is needed beyond the Ethernet distance limit.

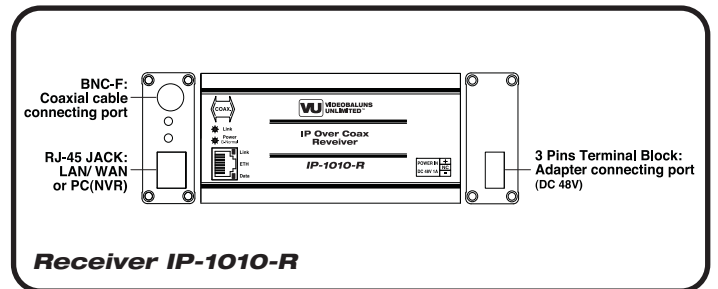
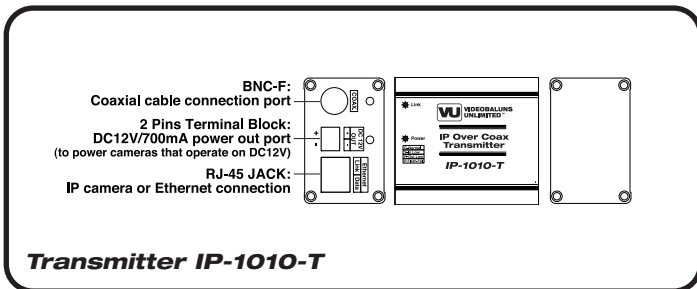
Components



Specifications

Model		IP-1010-T (Tx.)	IP-1010-R (Rx.)
Data Transmission Bandwidth (Max.)		PHY (Physical Layer Speed) 200 Mbps UDP 90 Mbps TCP 75 Mbps	PHY (Physical Layer Speed) 200 Mbps UDP 90 Mbps TCP 75 Mbps
Power	Out Check Distance	DC 12V 0.7A (8W) Green: Normal / Yellow or Red: Voltage drop / Red-Flash: Fail	DC 48V 1.04A Green: Normal / Red-Flash: Fail
Connect Port	Coax Ethernet Power Out Power In	BNC-F RJ-45 with 2 LEDs (Yellow: Link, Green: Data) 10/100 Mbps Ethernet Port with Auto MDI/MDIX 2 PIN T. Block	BNC-F RJ-45 with 2 LEDs (Yellow: Link, Green: Data) 10/100 Mbps Ethernet Port with Auto MDI/MDIX 3 PIN T. Block
Temperature / Humidity		-10°C~+40°C / 0~80%	-10°C~+40°C / 0~80%
Case body / Weight		Aluminum / 4.93 ounces	Aluminum / 5.64 ounces
Dimension (in.)		2.5 (W) x 2.5 (H) x 1.5 (D)	5.0 (W) x 2.5 (H) x 1.0 (D)

Configurations



The LEDs indicate the following:

- Coaxial Connectivity LED
Green: if the transmitter and receiver are communicating correctly via the coaxial cable.
- Power LED
Green: if the unit is powered and supply voltage of DC12V to an external device.
Yellow: if the input voltage from the coaxial cable is under 35V.
Red: if the output voltage is under 11.6V or over 11.0V.
Red Flashing: if the output voltage is overload or is under 11.0V. The output current is cut off and you should reset the Power On to recover it.
- Ethernet Link LED
Yellow: the device is connected to the Ethernet.
- Ethernet Data LED
Green Flashing: indicates data flow.

LED	Descriptions
Coaxial Connectivity	Green Normal Operation
Power	Green Normal Operation
	Yellow Low Volts in
	Red Excessive Load or Voltage drop
	Red Flashing Power Overload
Ethernet Link	Yellow Data connected
Ethernet Data	Green Flashing Data active

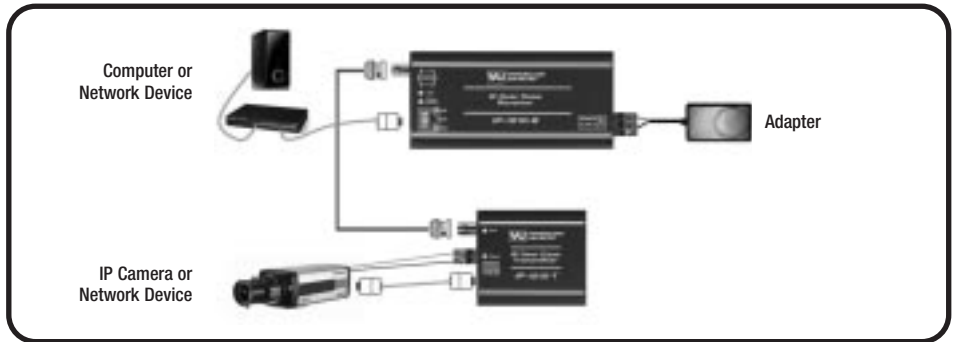
The LEDs indicate the following:

- Coaxial Connectivity LED
Green: if the transmitter and receiver are communicating correctly via the coaxial cable.
- Power LED
Green: if the unit supplies voltage of DC48V properly over coaxial cable.
Red Flashing: if there is a short or open cable connection issue or abnormal load, and the unit is unable to put power out DC 48V via coaxial cable.
- Ethernet Link LED
Yellow: the device is connected to the Ethernet.
- Ethernet Data LED
Green Flashing: indicates data flow.

LED	Descriptions
Coaxial Connectivity	Green Normal Operation
Power	Green Normal Operation
	Red Flashing No transmitter connection
	Yellow Data connected
Ethernet Data	Green Flashing Data active

Connection Diagram

Normal connection



Linear (1: n)

When you connect these units linearly, you can connect three transmitters (IP-1010-T) to each receiver (IP-1010-R).

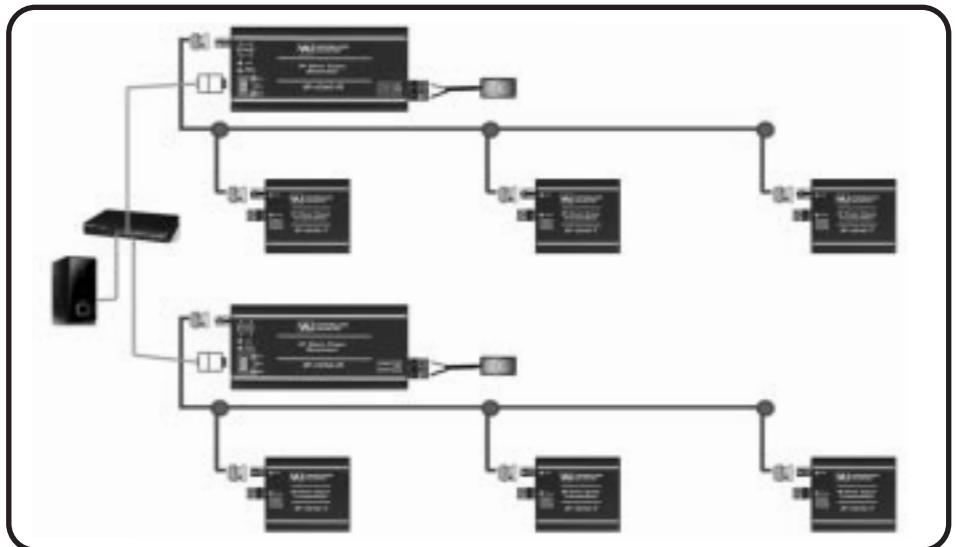
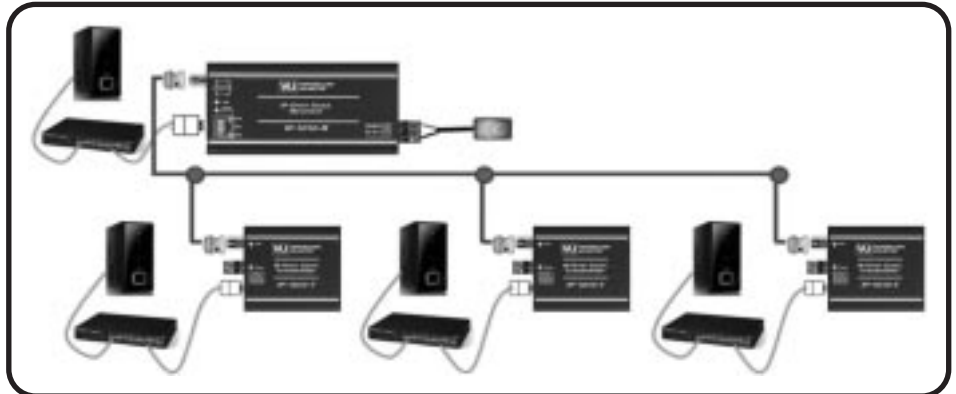
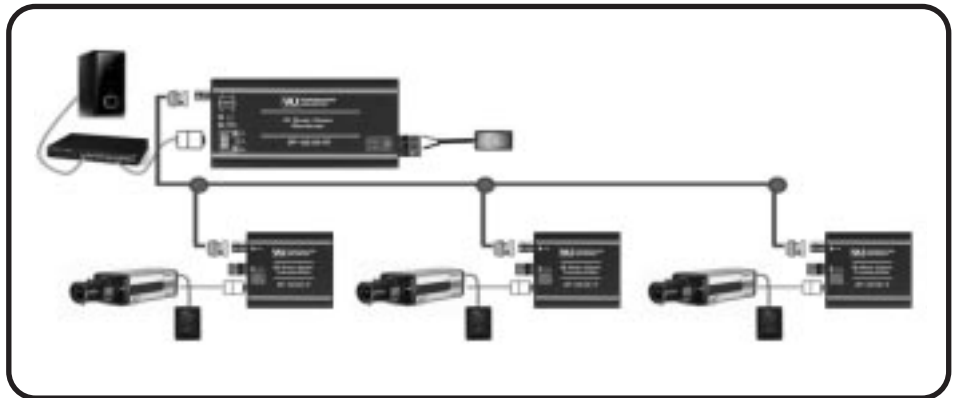
- When you connect three IP cameras using a "T" connector,
- When you connect other Network devices such as PC or Network Hub,

* Please note, In this case, communication is only between each transmitter and the receiver, not among the transmitters. The transmitters share the bandwidth to the receiver.

- When you use several receivers,

* Please note, In this case, communication is only between each set of transmitters and each receiver, not among the transmitters connected to the same receiver. The transmitters share the bandwidth to one receiver.

Communication is possible between transmitters connected to separate receivers.



Precautions and Safety Guidelines

- Do not install or use these units in a humid, hot or hazardous explosive environment without suitable and adequate protection.
- Do not expose these units to magnetic materials or high frequency radio waves.
- These units are not suitable for external installation. Avoid exposing the units to direct sunlight, severe weather conditions or a harsh environment
- This installation should be made by a qualified service person and should conform to all local electrical codes.
- If there is any smell and/or smoke, turn off power immediately and contact your dealer.
- Designed for use with coaxial cable that meets industry standards. Transmission distance may vary depending on the cable's *Loop Resistance* and the diminution of the radio frequency.
- If units do not power on, please check first for proper connection of power cord.
- Verify for the correct polarity when insert the power supplying connection port. Incorrect polarity may damage the devices connected to the receiver (DC48V in) and transmitter (DV12V out) such as the camera and other equipment.

Warranty Certificate

This product has been tested and inspected rigorously but if a problem occurs it is covered by a full 12 month warranty.

Model No.
Serial No.
Distributor
Date you purchased
Place you purchased
Warranty Period (One (1) year from the date of purchase)
Purchaser Name
Purchaser Address

For technical support, please contact:

technicalsupport@videobaluns.com
Tel: (508) 532-0556