



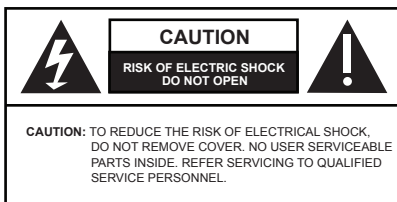
The Vigitron Vi15001 is an advanced active device that receives HD video and transmits data and power over unshielded twisted pair wires. It is compatible with HD-TVI, HD-CVI and AHD video formats. The Vi15001 uses Cat 5/6 UTP cables and can provide quality HD video up to 2000 feet (610 m) depending on the video format when it is paired with Vigitron Vi15000 active transmitter.

The Vi15001 sends 48VDC power to the Vi15000 transmitter provides regulated 12VDC power to the HD camera. This feature eliminates the need to local power supply at the camera location. The Vi15001 is compact in size and very easy to install. It does not require any adjustments. Vigitron's Vi150xx series is tested and certified to assure operational specification performance.

The Vi15001 innovative design offers exceptional quality video and system flexibility that makes it ideal for a wide variety of CCTV applications and makes a cost-effective alternative to expensive Coax or fiber optic solutions.

## Important Safety Warning

- Read and keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Install in accordance with the manufacturer's instructions.
- This installation should be made by a qualified service person and should conform to all local codes.
- DO NOT bundle UTP or Coax signals in the same conduit as high-voltage wiring.
- To reduce the risk of fire or electrical shock, do not expose these products to rain, moisture, dripping or splashing.
- No objects filled with liquids, such as vases, shall be placed on Vigitron equipment.
- DO NOT install the unit in a place where the operating ambient temperature exceeds 70°C or is below - 10°C.
- Make sure that the external power supply output voltage is in the recommended range.
- Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus that produce heat.
- Protect the power cord from being walked on or pinched particularly at power source, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when a power supply cord or plug is damaged, liquid has been spilled, objects have fallen inside the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- The main plug is used as the disconnect device and shall remain readily operable.

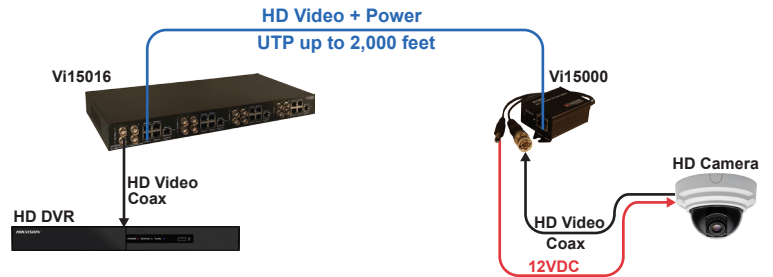
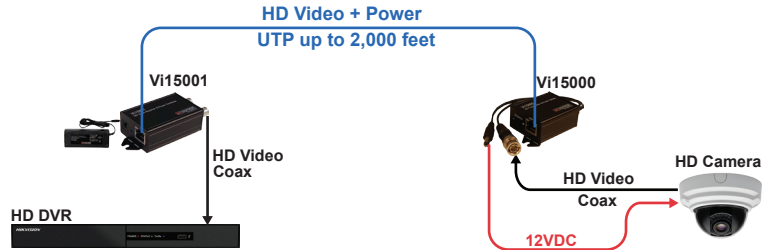


**WARNING!** - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.

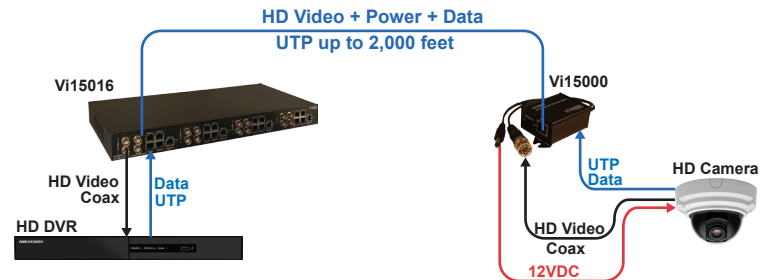
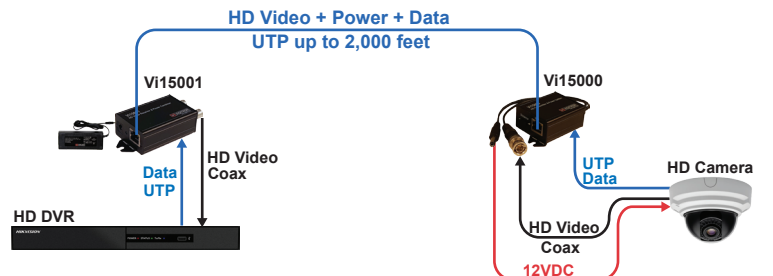
**WARNING!** - This apparatus is a Class I product. This product must be connected to a mains socket outlet thru an AC to DC Power supply.

**WARNING!** - The mains plug is used as the disconnect device and shall remain readily operable.

## Application Drawings



The Vi15000 series can provide HD video and power transmission over UTP at distances up to 2,000 feet eliminating the need for camera local power supply.



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## HD Camera-end Installation

The Vi15000 is the HD video transmitter and RS485 receiver that should be powered remotely by Vi150xx receiver at the headend.

**Video:** Connect the Video signal output of the HD camera to the BNC pigtail on the Vi15000.

**Data:** Connect the Data from the terminal plug (Red/Black) of the Vi15000 to the data connector of the camera.

**UTP Port (RJ45):** Connect the long Cat5e cable from the head-end to the RJ45 port of the Vi15000. Note: Please make sure that the pin-out of the RJ-45 connector matches the Vigitron color code of the Cat5e wires.

**Power:** Connect the Power plug pigtail of the Vi15000 to the power connector of the HD camera.

**Distance Slide Switch:** Depend on the distance and Video quality; select the right position of the Slide Switch.

## HD DVR-end (Vi15001 Installation)

The Vi15001, Vi15008 or Vi15016 can be used as the HD video receiver and RS485 transmitter at the head end. All these receivers are plug and play devices and do not require any set up.

**Video:** Use Coax jump cables to connect the BNC video output of the Vi15001 to the video input of your video receiving unit such as a DVR or Matrix Switch.

**Data:** Connect the Data from the terminal connector of the Vi15001 to the PTZ controlling unit such as DVR.

**UTP Port (RJ45 Port):** Connect the long distance Cat5e cable coming from cameras to the UTP port on Vi15001. Note: Please make sure that the pin-out of the RJ-45 connector matches the following color code of the Cat5e wires.

**Power:** Connect a proper 48VDC power supply to the input DC jack of Vi15001.

## HD DVR-end (Vi15008/Vi15016 Installation)

**Video:** Use provided Coax jump cables to connect the BNC video output of the Vi15008 or Vi15016 to the video input of your video receiving unit such as a DVR or Matrix Switch.

**Power:** Connect the AC power cord to the unit and AC power outlet. Make sure that the power requirement is in the recommended range.

**Data:** Connect the Data connector of the Vi15008 or Vi15016 to the PTZ controlling unit such as DVR.

**UTP# Ports (RJ45):** Connect the long distance Cat5e cable coming from cameras to the appropriate RJ-45 port on Vi15008 or Vi15016.

**Important Notes:** make sure that the pin-out of the RJ-45 connector matches the following color code of the Cat5e wires. Do not overload the power supply.

After the wiring is completed view the image and set the Distance switch of the Vi15000 to the position that provide the best picture.

## Technical Specifications\*

### Electrical

Video Format	HD-TVI, HD-CVI and AHD
Data	Pass Through
UTP	100 Ohm +/- 20% HD-TVI: 1,200 feet (365m) HD-CVI: 1,300 feet (396m) AHD: 2,000 feet (610m)
Coax	75 Ohm RG59
Power Source	48VDC provided by the receiving-end
Status LEDs	Power: Power On
Connectors	UTP Interface: RJ-45 Connector Data: RJ-45 Connector Power Input: Pluggable Terminal Block (for camera)

### Regulatory

Safety	CE
Environmental	RoHS, WEEE

### Environmental

Humidity	0 to 95%, non-condensing
Temperature	Operating: 0°C to +70°C Storage: -40°C to +85°C

### Mechanical

Dimensions	0.97x1.76x2.15 in., 2.5x4.5x5.5 cm (HxWxL)
Weight	0.18 lb (82 g)
Housing	Aluminum

\*Specifications subject to change without notice.



## RJ-45 Connectors' Pinout

### Long Distance UTP Connections:

Pin#	Video/Power/Data
1	Video +
2	Video -
3	Data +
4	Power -
5	Power +
6	Data -
7	Power +
8	Power -

### Data Connections (Vi15008, Vi15016):

Pin#	Data 1-4	Pin#	Data 5-8	Pin#	Data 9-12	Pin#	Data 13-16
1	Data-1 +	1	Data-5 +	1	Data-9 +	1	Data-13 +
2	Data-1 -	2	Data-5 -	2	Data-9 -	2	Data-13 -
3	Data-2 +	3	Data-6 +	3	Data-10 +	3	Data-14 +
4	Data-2 -	4	Data-6 -	4	Data-10 -	4	Data-14 -
5	Data-3 +	5	Data-7 +	5	Data-11 +	5	Data-15 +
6	Data-3 -	6	Data-7 -	6	Data-11 -	6	Data-15 -
7	Data-4 +	7	Data-8 +	7	Data-12 +	7	Data-16 +
8	Data-4 -	8	Data-8 -	8	Data-12 -	8	Data-16 -

## Ordering Information

Part No.	Description
Vi15000	Active HD Video/data/power transmitter
Vi15001	1-port Active HD Video/data/power Receiver
Vi15008	8-port Active HD Video/data/power Receiver
Vi15016	16-port Active HD Video/data/power Receiver

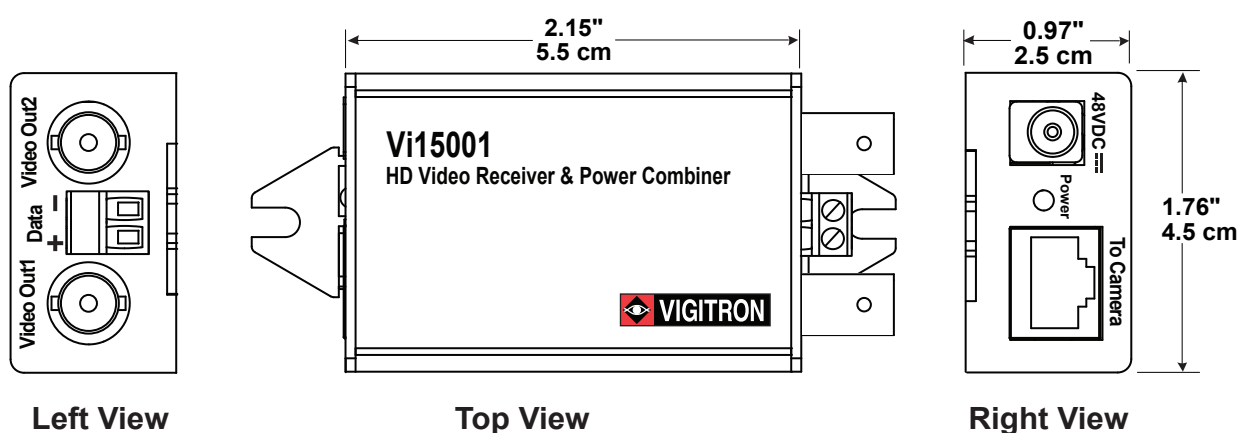
## Limited Lifetime Warranty

Vigatron, Inc. warrants that all Vigatron products ("Product"), if used in accordance with these instructions, will be free of defects in material and workmanship for lifetime defined as the duration period of time until product end of life is announcement. After which Vigatron will continue to provide warranty services for a period of 3 years. Period covering valid warranty will be determined by proof of purchase in the form of an invoice from an authorized Vigatron dealer.

Warranty will only be provided for as long as the original end user purchaser owns the product. Warranty is not transferrable. At Vigatron's option, defective product will be repaired, replaced or substituted with a product of equal value. This warranty does not apply if, in the judgment of Vigatron, Inc., the Product fails due to damage from shipment, handling, storage, accident, abuse or misuse, or if it has been used or maintained not conforming to Product manual instructions, has been modified, or serial number removed or defaced. Repair by anyone other than Vigatron, Inc. or an approved agent will void this warranty. Vigatron, Inc. shall not under any circumstances be liable to any person for any incidental, indirect or consequential damages, including damages resulting from use or malfunction of the product, loss of profits or revenues or costs of replacement goods. The maximum liability of Vigatron, Inc. under this warranty is limited to the original purchase price of the Product only.

Prior to returning any defective Product, the end customer or the reseller from whom the end customer originally purchased the Product must obtain a Return Materials Authorization (RMA) number from Vigatron, Inc. All defective Products should be returned to Vigatron, Inc. with shipping charges prepaid. No collect shipments will be accepted.

## Drawings



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