

# 16CH Power & HD Video UTP Transceiver Kit – TVI, CVI, AHD, CVBS

## Model: VPHP15-16K

16CH power & HD video UTP transceiver can transfer real-time HD video and power up to 280m/900ft through Cat5/5e/6 cable. It provides power for the distance of the camera, meantime returns video signal. It supports traditional analog video: CVBS and HD video: HD TVI, HD CVI and AHD; 16CH power & HD video UTP transceiver adopt high quality and high capacity AC-DC power supply; each power channel have over-current \ Short circuit \ over-temperature protection and over-current abnormal LED indication; it adopts DB15 to BNC composition extender design which is easy for engineering installation; Small and delicate appearance is suitable for home, office, supermarket, hotel etc.



The 1CH Power & HD Video UTP Receiver device is passive (non-amplified) video balun that allows transmission of real-time HD TVI/CVI/AHD/CVBS video and low voltage power over UTP cable. In practical applications, the product used in pairs. Both of them have BNC-M and RJ45 jack for video signal. In addition, the product features a female DC plug to connect power adapter and features a male DC plug to output power for camera.

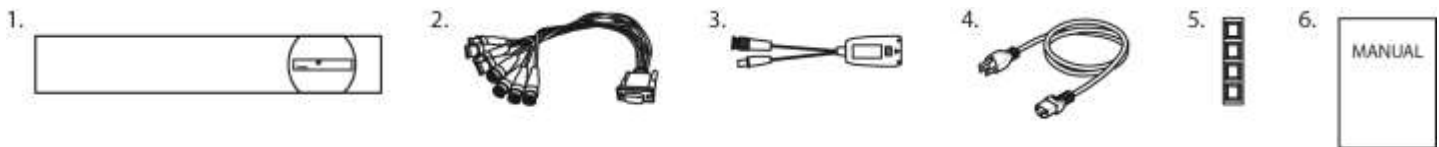
### Features

- Transfer real-time video and power through one Cat5/5e/6 cable
- HD TVI/HD CVI/AHD/CVBS 4 in 1 Compatible design
- High quality and high capacity AC-DC power supply, providing up to 12W 15V DC for each channel
- Over-current/Short circuit/over-temperature protection and over-current abnormal LED indication
- Excellent ESD protection
- DB15 to BNC composition extender kits, easy for engineering installation

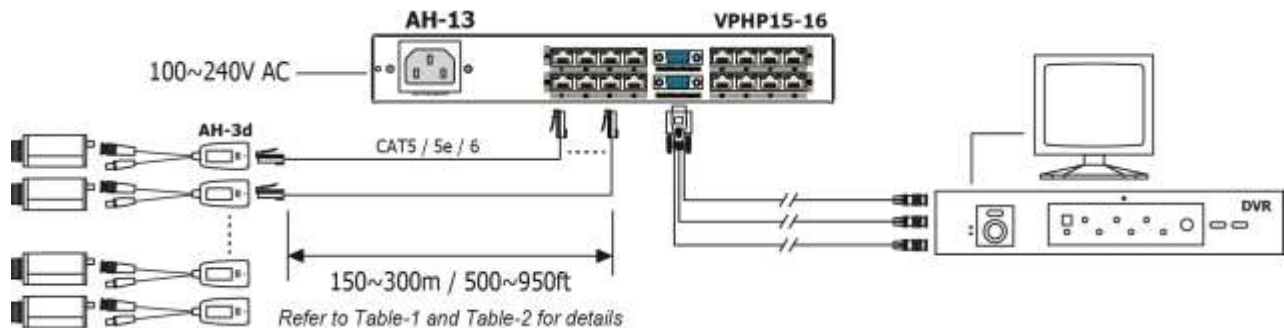
### Package Contents

1. One (1) 16CH Power & HD Video UTP Transceiver
2. Two (2) DB15 to BNC Cable
3. Sixteen (16) AH-3d 1CH Power & HD Video UTP Receiver
4. One (1) Power Cord
5. One (1) 4pcs Rubber Pad
6. One (1) User Manual

For any returns, please include all components listed above with original packaging in **Resalable Condition**. **Absolutely No Returns** will be accepted if any component is missing/damaged.

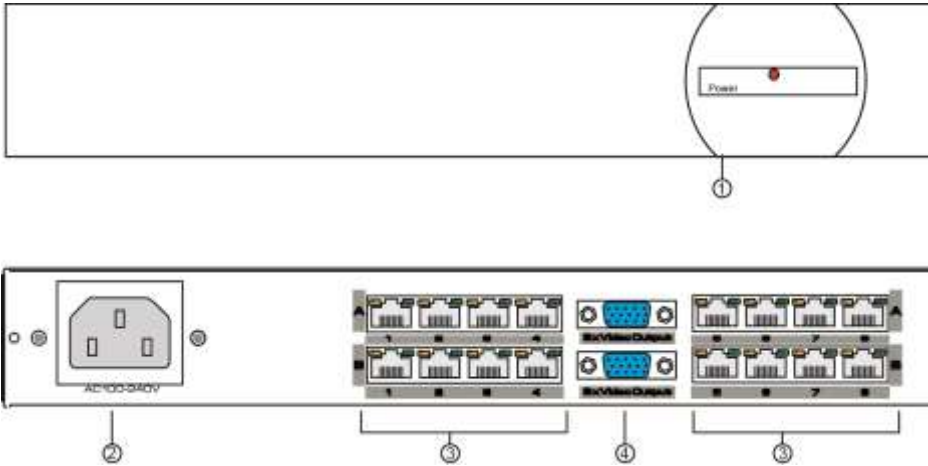


### Application Diagram



## Panel View

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NO.	Component	Description
1	Power LED	Indicate if power supply is normal
2	Power Supply Input	100V~240V 50-60Hz power input connector
3	RJ45	The green LED light on indicates working status The yellow LED light on indicates over-current protection
4	VGA	Video output

## VPH-100T



## Installation

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1. Make sure any signal source (camera) and/or monitor/DVR are turned off during installation.
2. Use DB15 to BNC cable to connect DVR and Transceiver.
3. Use network cable to connect DVR and Transceiver.
4. Connect cameras with receiver.
5. Check whether installation is good and power the device(s).
6. Power camera, DVR, monitor, etc.

## Specification

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16CH Power & HD Video UTP Transceiver		
Model	VPH15-16	
Transmission & Video Properties	Transmission Channel	16 Channels
	Video Output	2x DB15 (DB15 to BNC-M, 30cm Pigtail Cable included)
	Video In / Power Output	16x RJ45
	Transmission Distance	Refer to 'Table-1' and 'Table-2' below
	Power Output	12~15V DC Total <100W (each port <12W)
	Compatible Video Format	HD TVI, HD CVI, AHD / PAL, NTSC, SECAM
	Signal Transmission Band	0~70MHz
	Anti-interference	>60dB
Protection Level	Coaxial Video Connector Surge	2KV per : IEC61000-4-5
	UTP Cable Communication Connector Surge Protection	2KV (different mode) ; 4KV (common mode) per:IEC61000-4-5
	ESD	Contact Discharge: 6000V ; Air Discharge: 8000V Per: IEC61000-4-2 1995
Operation Environment	Operation Temperature	-10°C~50°C / 14°F~122°F
	Storage Temperature	-40°C~85°C / -40°F~185°F
	Humidity	0~95%
Physical Properties	Dimension (L x W x H)	310 x 232 x 45 mm / 12.2 x 9.1 x 1.78 inches
	Housing Material	Iron Metal and Plastic
	Color	Black
	Net Weight	1.76 kg / 3.88 lbs

\*Specifications are subject to change without notice

1CH Power & HD Video UTP Receiver		
<b>Model</b>	<b>VPH-100T</b>	
<b>Function</b>	Channels	1 CH (Video + Camera Power)
	Transmission Distance	0~300m / 0~1000ft
<b>Video &amp; Connectors Properties</b>	Video Connector	BNC-M
	UTP Connector	RJ45
	Compatibility	HD TVI, HD CVI, AHD, CVBS Video
	Signal Transmitting Band	0~70MHz
	Interference Rejection	>60dB
<b>Power</b>	Power Connector	2.1mm / 5.5mm DC Jack
	UTP Cable Connector	RJ45
	Voltage Range	12V ~36V DC
	Maximum Current	1A
<b>Protection</b>	ESD	Contact Discharge: 6KV Air Discharge: 8KV per: IEC61000-4-2
	Surge	2KV (differential-mode), 4KV (common-mode) per: IEC61000-4-5
<b>Environmental</b>	Operation Temperature	0°C~55°C / 32°F~131°F
	Storage Temperature	-40°C~85°C / -40°F~185°F
	Relative Humidity	0~95% (non-condensing)
<b>Physical Properties</b>	Color	Black
	Material	ABS Engineering Plastic
	Size	65 x 36 x 23mm / 2.56 x 1.42 x 0.91 inches Cable Length: 60mm / 2.36 inches

\*Specifications are subject to change without notice

Table-1\*\*:

Voltage Drop According to Transmission Distance			
Transmission Distance (L)	Transmission Voltage (Output 12V DC /0.3A)	Transmission Voltage (Output 12V DC/0.5A)	Transmission Voltage (Output 12V DC/1A)
50m	13V	13.7V	15.5V
100m	14V	15.5V	18.7V
150m	15V	17V	22V
200m	16V	16.7V	25.5V
250m	17V	20.5V	28.7V
300m	18V	22V	32V

Table-2\*\*:

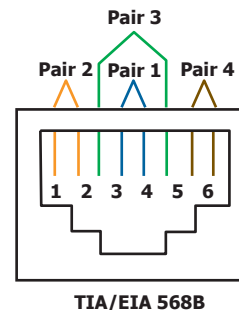
Single Source	HD TVI (720P/1080P)	HD CVI (720P)	HD CVI (1080P)	AHD-L/M (720P/960P)	AHD-H (1080P)	Analog Video
Recommended Distance	150m / 380ft	200m / 500ft	100m / 250ft	300m / 950ft	150m / 380ft	300m / 950ft

\*\*The test data in Table 1 and Table 2 are required under lab environment. In actual case, there may be some differences due to different cable and environment.

## Troubleshooting

If the equipment fails, follow the methods below to troubleshoot.

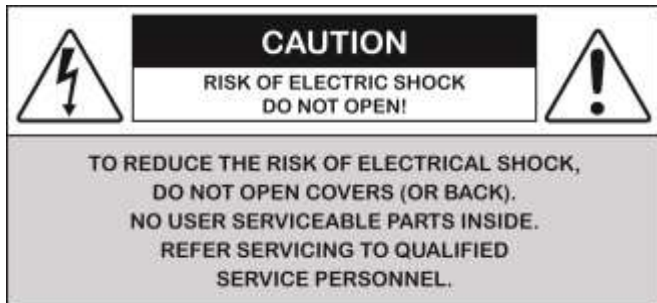
- Make sure equipment installation is according to the manual.
- Check if all connections are correct and if RJ45 is conformed with IA/TIA568A or 568B.
- Maximum transmission distance depends on the quality of the signal source and the transmission cable. Do not exceed the equipment maximum transmission distance.
- If yellow LED for RJ45 is lite on individual channel, cut off power supply and unplug cable to check whether short circuit or power consumption overload.
- Check whether connection is correct. Charge the device when there is no image.
- Replace device to see if failed device is defective.



Pin	Pair	Color
1	2	Orange / White
2	2	Orange
3	3	Green / White
4	1	Blue
5	1	Blue / White
6	3	Green
7	4	Brown / White
8	4	Brown

### LIMITED ONE (1) YEAR WARRANTY AND EXCLUSIONS

Manufacturer warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Manufacturer is free of defects in materials and workmanship under normal and proper use for one (1) year from the purchase date. Manufacturer's only obligation is to correct such defects by repair or replacement, at its option, if within such one (1) year period the product is returned prepaid, with proof of purchase date, and a description of the problem. This warrant excludes and there is disclaimed liability for labor for removal of this product or reinstallation. **This warranty is voided if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other implied warranties of any kind, including merchantability and fitness or a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warrant, including merchantability and fitness of or a particular purpose, is limited to one (1) year. Manufacturer is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, loss sales or profits or delay or failure to perform this warranty obligation.** The remedies, provided therein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.



### **Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems).**

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



### **Caution**

This product has been tested for conformance to safety regulations and requirements. However, like all electronic equipment, this product should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

#### **1. Handle this product with care**

Avoid any shock or bumping of the product. Improper handling could damage the product. Do not handle the unit with wet hands. Provide proper ventilation and air circulation and do not use near water.

#### **2. Requires a proper operating environment**

This product is not waterproof and is designed for indoor use. The allowable temperature range for operation of this product is between -10°C~50°C / 14°F~122°F.

#### **3. Check the power source voltage**

The power source voltage should be within the specified range. (Product must meet the specifications).

#### **4. Objects and liquid entry**

Never push objects of any kind into this product as this may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill any kind of liquid on the product.

#### **5. Cleaning**

Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

#### **6. Servicing**

Do not attempt to service this product by yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all service to qualified servicing personnel.