



Twist Pair Passive

# User Manual

---

Model : TTP111HDP-LK

HD-TVI/AHD/HDCVI/CVBS Video & Power Balun with Pigtail



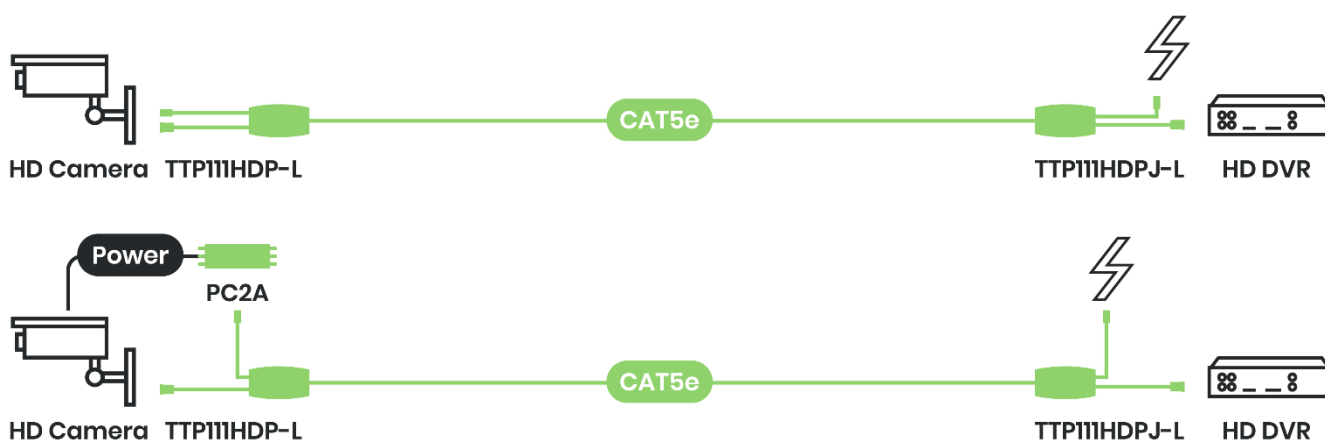
## Introduction

TTP111HDP-LK are video balun that can use a single cost-effective Ethernet cable to extend HD-TVI/ AHD/ HDCVI/ CVBS signal and power, with the transmission distance up to 300M and the resolution up to 4K (8MP). The equipped power plug can also provide power from the local power supply for a remote CCTV camera and the pigtail design allows you to have an easier, faster connection experience. Besides, the balun has built-in ESD, EFT, and surge protection components, allowing the unit to have a longer product lifespan.

## Features

- Resolution up to 4K (8MP)
- Signal extension up to 300M over CAT5e (or greater) cable.
- Built with DC jack for power transmission.
- Male BNC to RJ45 connector with pigtail design.
- Built-in ESD, EFT(impulse noise) and transient protection.

## Installation View



- Remote Power by DC24V/AC24V, please use our model no: PC500/PC1A power converter (AC to DC for regulated DC12V ) at camera side to send regulated DC12V for camera use.

## Transmission Distance

### Video Transmission Distance

HD-TVI	AHD	HDCVI	CVBS
1080P 250M 5MP 200M	1080P 250M 4MP 200M	1080P 300M 4K 200M	400M

The distance may be affected by the quality of cable, camera, DVR. This installation should be made by a qualified service person and should conform to all local codes.

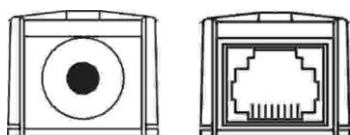
## Power Transmission Distance

### Voltage Drop According to Cable Length (24AWG)

Voltage	DC12V		
	50M	100M	300M
Distance	50M	100M	300M
Camera Power Consumption	2 PAIRS	2PAIR	2 PAIR
50mA	11.8	11.5	10.8
100mA	11.5	10.9	9.6
150mA	11.2	10.4	8.4
200mA	11	9.9	7.2
250mA	10.7	9.4	5.9
300mA	10.4	8.9	4.7
350mA	10.2	8.4	3.5
400mA	9.9	7.9	2.3
450mA	9.6	7.5	1.1
500mA	9.3	7	1.2
1A	6.8	2.7	X
1.5A	4.1	X	X

Voltage	DC24V		
	50M	100M	300M
Distance	50M	100M	300M
Camera Power Consumption	2 PAIR	2 PAIR	2 PAIR
50mA	23.6	23.3	22.8
100mA	23.3	22.7	21.6
150mA	23	22.3	20.4
200mA	22.8	21.8	19.1
250mA	22.5	21.3	17.9
300mA	22.2	20.8	16.7
350mA	21.9	20.3	15.5
400mA	21.7	19.8	14.2
450mA	21.4	19.4	13
500mA	21.1	18.9	11.8
1Amp	18.7	14.7	0.8
1.5Amp	16.1	10	X

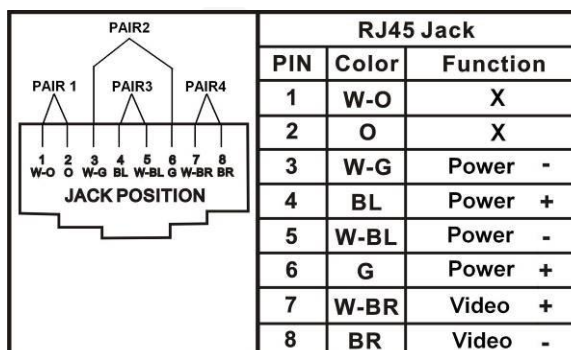
### Panel View



Front

Rear

### RJ-45 Jack Pin Define



### Recommend Cable

Use high quality CAT5e UTP or CAT6 UTP cable. The max working distance is 300M for AHD, CVI camera, HD-TVI maximum distance is 250M. The distance may be affected by the quality of cable, camera, DVR.

### Caution

1. The cabling must be away from any equipment with electromagnetic wave, i.e.: microwave, mobile phone, radio equipment, high voltage power cable.
2. Remote Power by DC24V/AC24V, please use our model no: PC500/PC1A power converter (AC to DC for regulated DC12V) at camera side to send regulated DC12V for camera use.

## Specification

ITEM NO.	TTP111HDP-L	TTP111HDPJ-L
Support		
Max. Video Resolution	8MP (4K)	
Max. Transmission Distance	HD-TVI 100M at 1080p AHD 150M at 8MP HDCVI 100M at 8MP CVBS 300M (NTSC/ PAL)	
Signal Bandwidth	50Hz to 60MHz (-3dB)	
Ports & Interfaces		
Video Input/ Output	1 x BNC (1 Vp-p, 75 Ohm)	
Link Interface	1 x RJ45 (100 Ohm)	
Power Interface	1 x DC Plug (ø2.1 x 5.5mm)	1 x DC Jack
Protection		
ESD Protection	30kV(Air), 15kV (Contact), IEC 61000-4-2	
EFT Protection	40A(5/50ns), IEC 61000-4-4	
Lightning Protection	2A (8/20μs), IEC 61000-4-5	
Response Time	< 1 ns	
Ambient Temperature		
Operation	0 to 55°C	
Storage	-20 to 85°C	
Humidity	Up to 95%	
Physical Characteristics		
Dimensions	52.6 x 25 x 20.7mm & 120mm pigtail cable	
Weight	45g	