

Twisted Pair Active Series

# User Manual

Model: TVIUTPA

**HD-TVI Active UTP Balun Kit** 



### Introduction

TVIUTPA is a video extender that uses a cost-effective UTP cable to send HD-TVI/ AHD/ HD-CVI/standard analog video to a remote video recorder.

#### **Features**

- Supports HD-TVI, AHD, HDCVI video formats
- Resolution up to 4K (8MP).
- HD-TVI Signal extension up to 1312' (400M), depending on cable quality and resolution.
- Built in L, M, and H high frequency video gain.
- Built-in transient protection for ground lifting, voltage spike damage.

#### Installation View



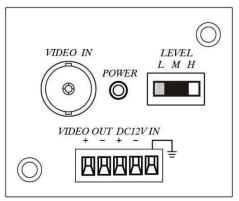
### **Transmission Distance**

| Resolution | HD-TVI       | AHD          | HDCVI        | CVBS         |
|------------|--------------|--------------|--------------|--------------|
| 8MP (4K)   | 984' (300M)  | 1640' (500M) | 820' (250M)  | N/A          |
| 5MP        | 1640' (500M) | 1640' (500M) | N/A          | N/A          |
| 1080p      | 1312' (400M) | 1640' (500M) | 1312' (400M) | N/A          |
| 720p       | 1312' (400M) | 1968' (600M) | 1968' (600M) | N/A          |
| 576i       | N/A          | N/A          | N/A          | 2952' (900M) |
| 480i       | N/A          | N/A          | N/A          | 2952' (900M) |

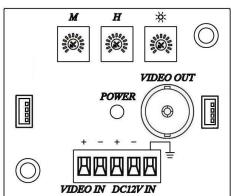
**NOTE:** The transmission distance may vary by connected devices, connectors, cables, and installation...etc. Using high quality 75ohm coaxial RG59/RG6U cable is recommended.

## **Panel View**

#### TVIUTPAT



#### TVIUTPAR



| Model           | Interface     | Description              |  |
|-----------------|---------------|--------------------------|--|
|                 | VIDEO IN      | To connect a CCTV camera |  |
| T. (1) - T. (2) | POWER         | To indicate power status |  |
|                 | LEVEL (L/M/H) | To adjust frequency      |  |
| TVIUTPAT        | VIDEO OUT     | To connect TTA111HDR     |  |
|                 | DC12V IN      | To supply power          |  |
|                 | <u></u>       | To connect to the ground |  |

| Model    | Interface | Description                        |  |
|----------|-----------|------------------------------------|--|
|          | м/ н/ ※   | To adjust frequency and brightness |  |
|          | POWER     | To indicate power status           |  |
|          | VIDEO OUT | To connect a DVR                   |  |
| TVIUTPAR | VIDEO IN  | To connect TTA111HDT               |  |
|          | DC12V IN  | To supply power                    |  |
|          |           | To connect to the ground           |  |

#### **LED Indication**

| LED Indication | LED Color    | Function     |
|----------------|--------------|--------------|
| Power          | Green ON/OFF | Power ON/OFF |

#### Switch Adjustment

| Model    | Interface | Description                 |  |
|----------|-----------|-----------------------------|--|
|          | М         | Medium frequency gain       |  |
| TVIUTPAT | Н         | High frequency gain         |  |
|          | *         | Brightness                  |  |
|          | L         | High frequency gain + 6 dB  |  |
| TVIUTPAR | М         | High frequency gain + 9 dB  |  |
|          | Н         | High frequency gain + 11 dB |  |

- TTA111HDT (transmitter) has to be configured from "L" level, and then start to adjust TVIUTPAR (receiver).
- If the video is not performing well, you can switch the frequency to "M" level on TVIUTPAT and adjust TVIUTPAR again.

## **Trouble Shooting**

- Make sure power and connection between Tx and Rx are wired in the right polarity.
- Make sure both Tx and Rx devices are properly grounded to avoid voltage spikes.
- DO NOT switch to High frequency from the start, since it might cause over-amplification.
- To avoid signal over-amplification, please use a minimum connection distance of 492' (150M.)
- If video is distorted, colors change or no video is shown, please properly adjust frequency and brightness on TVIUTPAR (and note it could change with different distances.)

## Specification

| ITEM NO.                          | TVIUTPAT                                | TVIUTPAR                                |  |
|-----------------------------------|---|---|--|
| Support                           |   |   |  |
| Video Format                      | HD-TVI, AHD, HD-CVI, CVBS               |   |  |
| Max. Video Resolution             | 8MP (4K)                                |   |  |
| Max. HD-TVI Transmission Distance | 1640' (500M)                            |   |  |
| Signal Bandwidth                  | 50Hz to 60MHz ( -3dB )                  |   |  |
| Ports & Interfaces                |   |   |  |
| Video Input                       | 1 x BNC Male (1 Vp-p, 75 Ω)             | 1 x 5 Pin Terminal (100 $\Omega$ )      |  |
| Video Output                      | 1 x 5 Pin Terminal (100 $\Omega$ )      | 1 x BNC Male (1 Vp-p, 75 Ω)             |  |
| Switch                            | 1 x Slide Switch (3 Levels)             |   |  |
| Power                             |   |   |  |
| Power Supply                      | DC 12V 500mA                            | DC12V 500mA                             |  |
| Power Consumption                 | 70mA (Max)                              | 150mA (Typical), 220mA (Max)            |  |
| Ambient Temperature               |   |   |  |
| Operation                         | 32 to 131°F (0 to 55°C)                 |   |  |
| Storage                           | -4 to 185°F (-20 to 85°C)               |   |  |
| Humidity                          | Up to 95%                               |   |  |
| Physical Characteristics          |   |   |  |
| Dimensions                        | 2.3 x 1.9 x 1.6" (57.8 x 49.2 x 41.7mm) | 2.3 x 1.9 x 1.6" (57.8 x 49.2 x 41.7mm) |  |
| Weight                            | 0.2 Lbs (70g)                           | 0.2 Lbs (70g)                           |  |
|                                   |   |   |  |

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