

TP316-101 4K HDMI OVER ANYWIRE TRANSMITTER User's Guide

Welcome!

Everyone at Altinex greatly appreciates your purchase of the TP316-101. We are confident that you will find it to be reliable and simple to use. If you need support, please do not hesitate to call us at 714-990-2300.

At Altinex, we are committed to developing unique and state of the art Signal Management Solutions® for demanding audiovisual installations. Welcome to the Altinex family of satisfied customers around the world!

1. Precautions and Safety Warnings

- Please read this manual entirely before using your TP316-101. You can download a full version of this manual at www.altinex.com. These instructions are to ensure the reliable operation of your switcher and to prevent fire and shock hazards. Please read them carefully and heed all warnings.

1.1 General

- Qualified Altinex service personnel or their authorized representatives must perform all service.

1.2 Installation Precautions

- To prevent fire or shock, do not expose this unit to water or moisture. Do not place the TP316-101 in direct sunlight, near heaters or heat-radiating appliances, or near any liquid. Exposure to direct sunlight, smoke, or steam can harm internal components.
- Handle the TP316-101 carefully. Dropping or jarring can cause damage.

- Do not pull any cables attached to the TP316-101.

1.3 Cleaning

- Clean the TP316-101 with a dry cloth only. Never use strong detergents or solvents such as alcohol or thinner.

1.4 FCC Notice

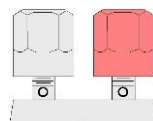
- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 2 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions found herein, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.
- Any changes or modifications to the unit not expressly approved by Altinex, Inc. could void the user's authority to operate the equipment.

2. Installation Procedures

Note: Download and read the entire online manual to become familiar with the TP316-101 and for detailed installation instructions.

Step 1: Connect the TP316-101 Transmitter to the TP316-102 Receiver using any 2 wires or 2-conductor cable. If you use the cable shield as a conductor, make sure the shield is not grounded. For best results, use 24 to 12 gage wire; the 12-gage limitation is due to the opening in the terminal connector.

The terminals are red and black, but there is no polarity. Connect either wire to either terminal.

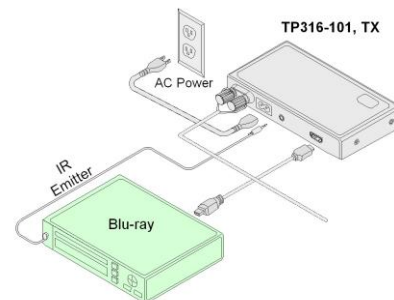


Step 2: Connect the TP316-101 to AC power using the cord provided.

Step 3: Connect the source HDMI video (computer, Blu-ray, videoconference, etc.) to the HDMI input on the TP316-101 using the HDMI cable provided.

Step 4. The Anywire transmitter is now operating. Once the receiver is detected, video is displayed automatically.

Step 5. The Anywire Transmitter/Receiver pair allows IR pass-through from the receiver (far side) to the transmitter (near side). An IR emitter is included with the TP316-101 and may be connected to the HDMI source allowing control from a remote control connected to the receiver on the far side of the Anywire installation. The Anywire receiver includes an IR receiver.



3. Warranty and Return Policies

Please visit the Altinex website at www.altinex.com for details on warranty and return policies. In the case of a unit needing repair, please complete an RMA (return material authorization) form by clicking the Warranty link located on the bottom of the Altinex homepage. Once completed, please email the form to support@altinex.com.

4. Technical Specifications

Specifications are subject to change due to design improvements. Please see www.altinex.com for up to date information.

Features/Description	TP316-101
Input Connectors	
Digital Video + Audio	HDMI F, Type A (1)
AC Power	C7 M (1)
Output Connectors	
Anywire Video	Terminal Post F (2)
IR (from receiver side)	3.5 mm Audio F (1)
Compatibility	
Signal types	HDMI
Signal resolutions	720p, 1080i, 1080p, 4Kx2K (3840 x2160, 24/25/30Hz)
Accessories Included	
HDMI Cable	n/a
AC Power Cord, NEMA 1-15P to IEC C7	n/a
IR Emitter	n/a

Table 1. TP316-101 General

Mechanical	TP316-101
Material	Aluminum
Color	Black
Height	1.05 in (27 mm)
Width	6.73 in (171 mm)
Depth	3.51 in (89 mm)
Weight	1.0 lbs. (0.45 kg)
T° Operating	10°C-45°C
Humidity	90% non-condensing
MTBF (calc.)	38,000 hrs.

Table 2. TP316-101 Mechanical

Electrical	TP316-101
Video Input Signals	
Digital Video + Audio	HDMI Standard
Video Output Signals	
Digital Video + Audio	Anywire
Power	
100~240 VAC	7 W max. 100 VAC at 70 mA 240 VAC at 30 mA

Table 3. TP316-101 Electrical

5. About Your TP316-101

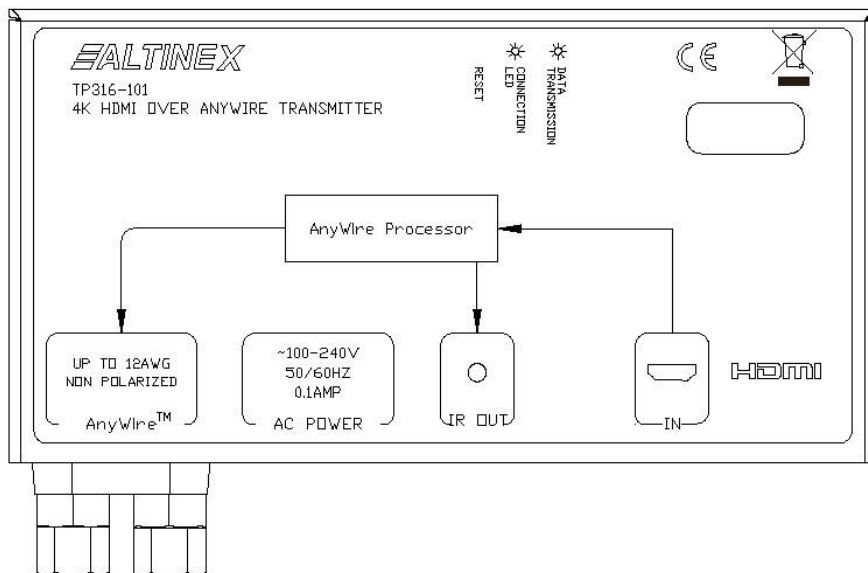
- HDMI over 2-conductor cable
- Automatic input/receiver detection
- HDMI resolutions 720p, 1080i, and 1080p ,4Kx2K (3840 x2160, 24/25/30Hz)
- Transmission up to 300 m
- IR pass-through control

The TP316-101 HDMI over Anywire transmitter allows the transmission of 4Kx2K (3840 x2160) HDMI signals up to 300 m using a simple 2-conductor cable.

The TP316-101 is an economical solution for many audiovisual installations. The two wires solution makes installation easy without the need to cut and splice wires and install expensive connectors or purchase costly cables. Simply route your wires, cut and trim the installation and connect to the terminals. That's it!

The unique design of the Anywire Transmitter provides stable video transmission over greater distances than other designs. IR pass-through for receiver side to transmitter side control is provided without corrupting the HDMI signal during transmission of IR signals.

Operation does not require any user control or interaction. Simply connect the HDMI input and the transmitter scans for the receiver and when detected automatically pairs to the receiver and begins video transmission.



6. Application Diagrams

Diagram 1: Typical Setup

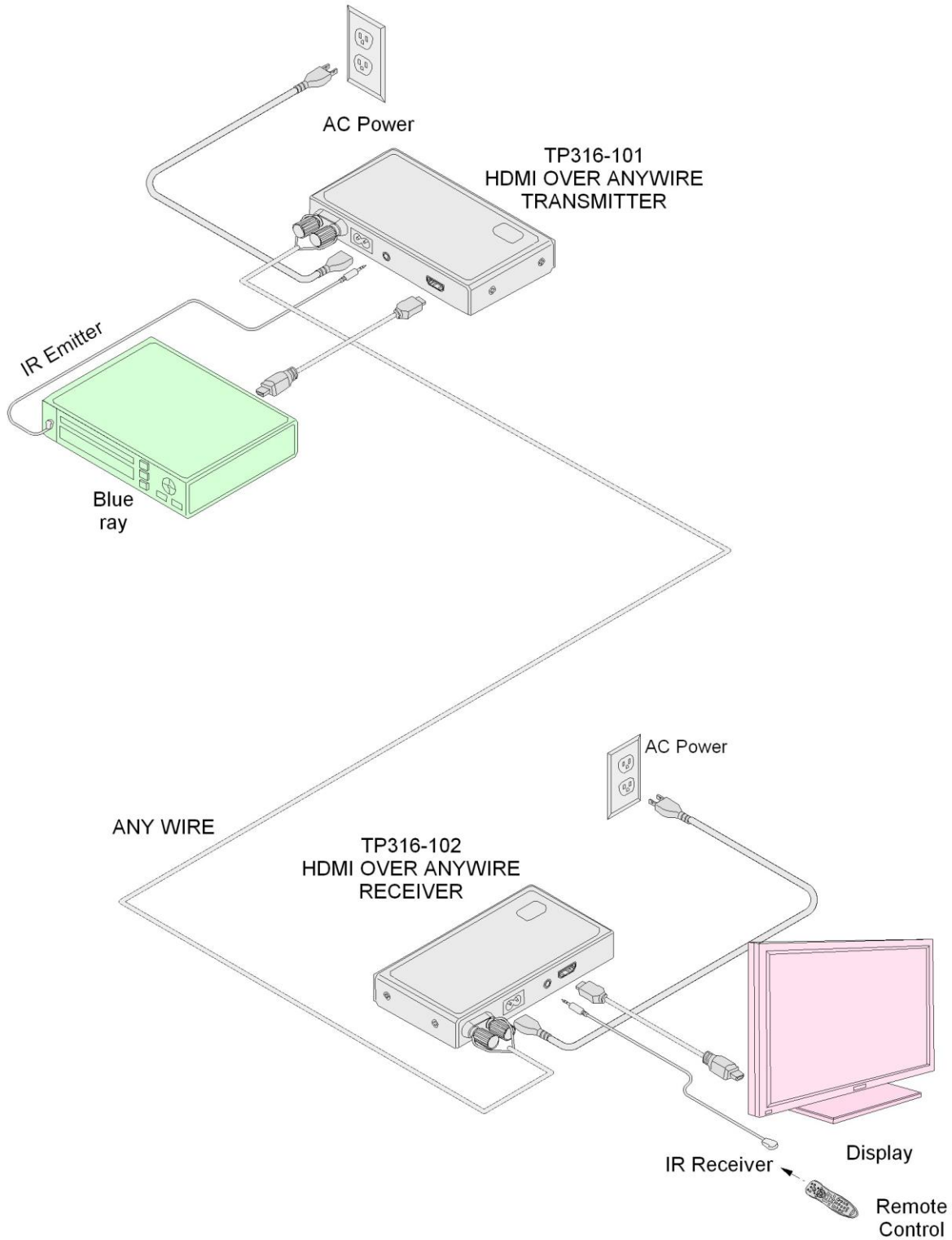


Diagram 2: Internal View

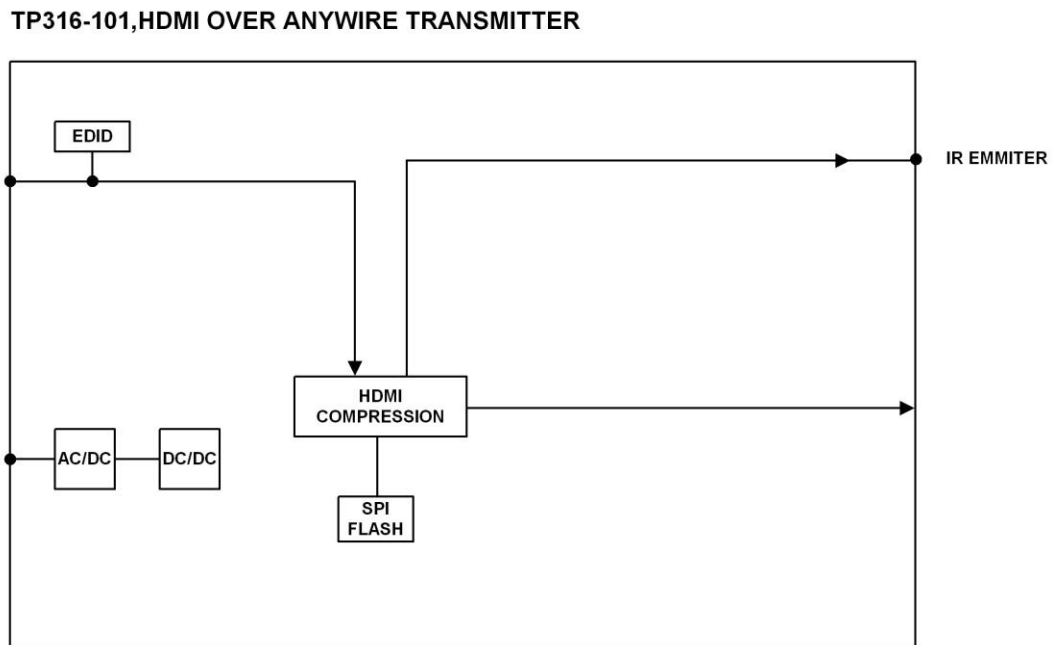
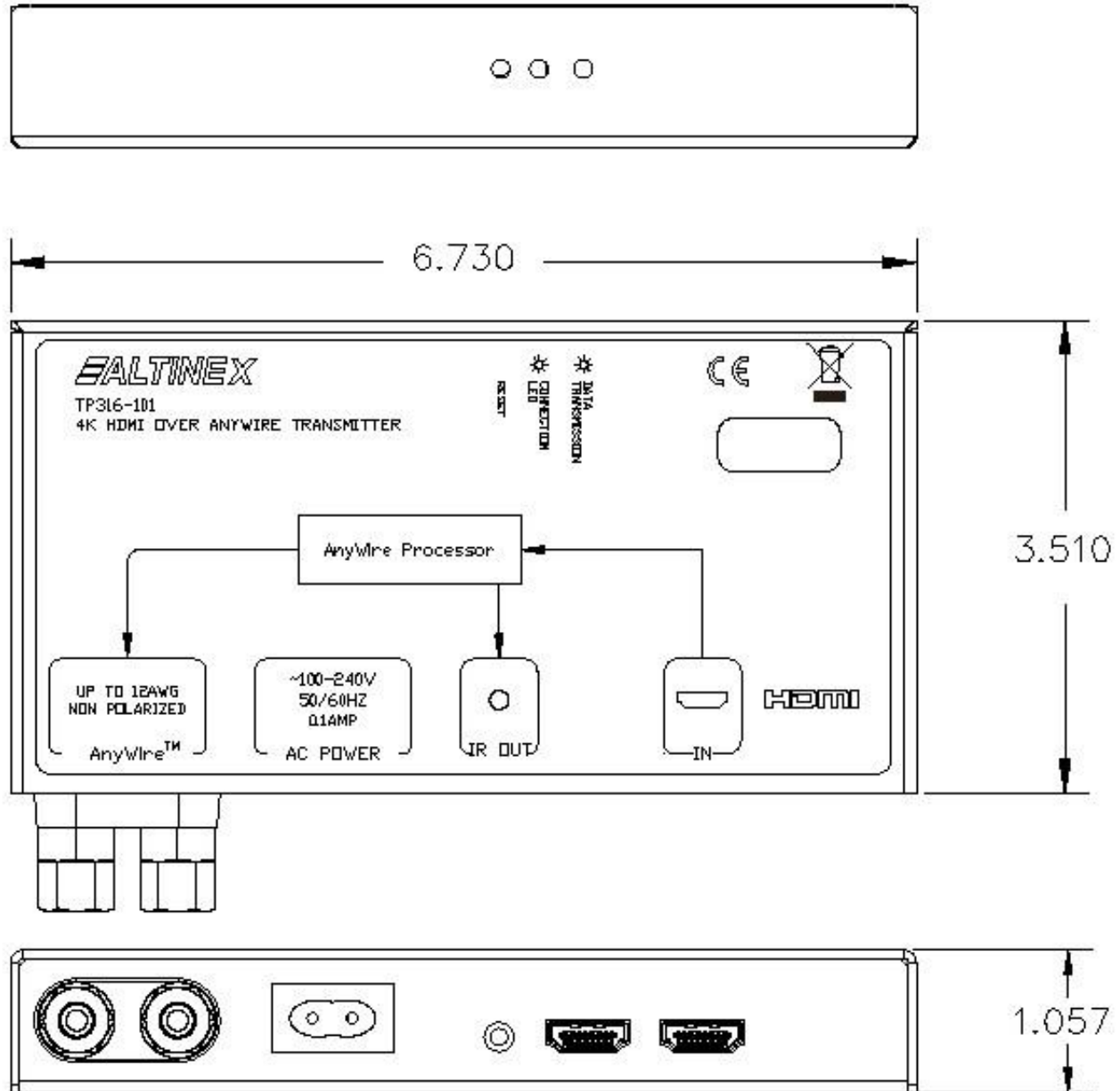


Diagram 3: Dimensions



7. Operation

The TP316-101 requires no adjustments for performance. Once set-up, the TP316-101 Anywire Transmitter will work trouble-free without user intervention.

7.1 Reset Button

A reset button is provided on the side of the unit to allow a forced reset without having to disconnect power. Use this only if there are problems connecting to the receiver; typically, after a new display is installed or after a power outage.

8. Troubleshooting Guide

We have carefully tested and have found no problems in the supplied TP316-101. However, we would like to offer suggestions for the following:

Anywire	
Symptom	Resolution
LEDs on Are Off	<p>The unit may not be receiving power.</p> <ol style="list-style-type: none"> 1. Make sure the unit is plugged into a working AC outlet. Use only the power cord provided. 2. The Connected LED should be on and green.
Data Transmission LED is flashing very slow	<p>The transmitter and receiver are not communicating.</p> <ol style="list-style-type: none"> 1. Check the two wires connection; make sure both wires are connected. 2. Make sure the receiver is powered on. 3. Press the reset button on the side of the unit or reset power to force the transmitter to try and re-establish a connection.
No Display	<p>The HDMI input signal may be missing.</p> <ol style="list-style-type: none"> 1. Check the source and make sure there is a signal present. 2. Make sure the source resolution is set to 720p, 1080i, 1080p or 4Kx2K (3840 x2160). 3. Make sure both the TP316-101 and TP316-102 are powered and the Connected LEDs are both green. 4. Make sure the monitor has power and is turned on. 5. Verify the monitor is connected to the TP316-102 Receiver's HDMI output 6. Make sure the monitor's correct HDMI input number is selected.
Poor Output Image	<ol style="list-style-type: none"> 1. The source resolution may not be compatible with the projector or other display device. Try other resolutions from the source. 2. The source and display may not be compatible. Connect the source directly to the input of the projector or other display device. If the image is poor the devices may be incompatible.