



MANUAL PART NUMBER: 400-0431-001

TP115-110

**VGA/COMPONENT+ AUDIO
TWISTED PAIR (UTP)
TRANSMITTER**

ALTIMEX



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PRECAUTIONS / SAFETY WARNINGS 1

Please read this manual carefully before using your **TP115-110**. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your **TP115-110** 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

- To prevent fire or shock, do not expose this unit to rain or moisture. Do not place the **TP115-110** 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 **TP115-110** carefully. Dropping or jarring can damage the unit.
- Do not pull the cables that are attached to the **TP115-110**.

1.3 CLEANING

- Clean only with a dry cloth. Never use strong detergents or solvents, such as alcohol or thinner. Do not use a wet cloth or water to clean the unit. Do not open the unit to clean.

1.4 FCC / CE 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 A digital device, pursuant to Part 15 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 instruction manual, 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 his 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.

ABOUT YOUR TP115-110 2

TP115-110 VGA + AUDIO TO TWISTED PAIR (UTP) TRANSMITTER

The **TP115-110** provides a means of transmitting Computer video and audio signals over Twisted Pair (UTP) type cable when used together with an ALTINEX UTP video receiver, such as the **TP115-111**.

The **TP115-110** is compact and easy to use. The **TP115-110** is able to transmit VGA or Component video type sources and audio over UTP cable.

The **TP115-110** offers a female 15-pin HD input with the native Plug & Play compatibility. The 3.5mm Stereo Audio jack is used for audio input. The female RJ-45 main output provides distributed drive to the UTP cable. This unit also offers video equalization for up to 400 feet. The signal detect feature shows when a signal is present.

TECHNICAL SPECIFICATIONS 3

FEATURES/ DESCRIPTION	TP115-110
GENERAL	
Inputs	
RGBHV/YPbPr	15-pin HD female
Stereo Audio	3.5mm female
Output	
Video+ Audio	RJ-45 female
Compatibility	
Signal types	Altinex – UTP Standard for TP Series
Signal resolutions	VGA through UXGA or 480p, 567p, 720p, 1080i

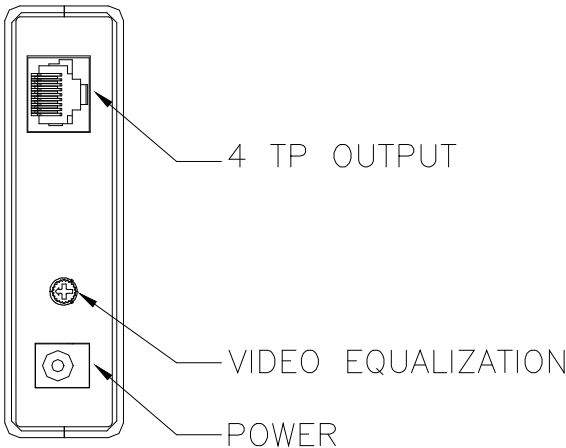
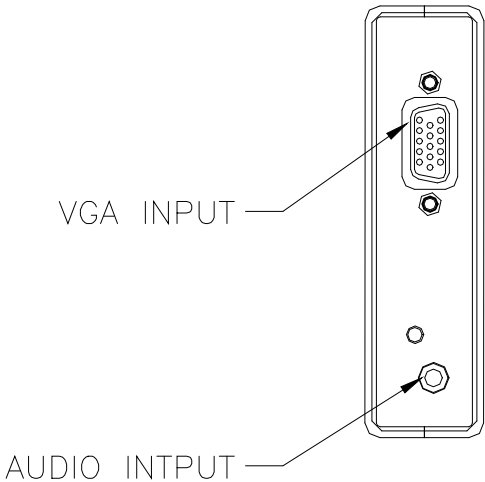
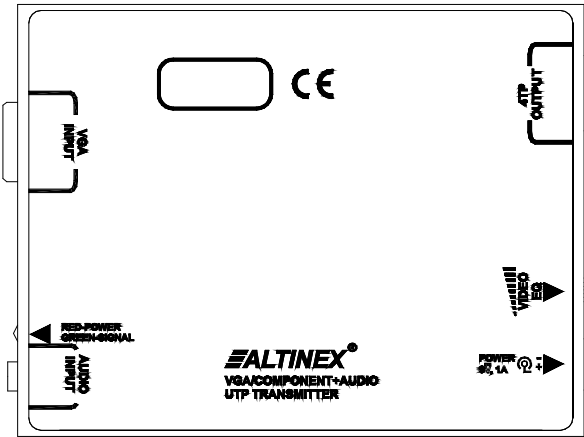
Table 1. **TP115-110** General

MECHANICAL	TP115-110
Weight	1.0 lb (0.45 kg)
Enclosure	0.09" Aluminum, Black Semi Gloss
Length	4.58in (116mm)
Width	3.50in (89mm)
Height	0.96in (24mm)
T° Operating	10°C-50°C
T° Maximum	75°C
Humidity	90% non-condensing
MTBF (calc.)	38,000 hrs

Table 2. **TP115-110** Mechanical

ELECTRICAL	TP115-110
Input	
Video Analog Signal	1.0Vp-p max.
Video Sync Level	TTL
Audio Signal Level	0dBu
Output	
Video+ Mono Audio	Altinex – UTP Standard for TP Series
Power	
9V Power	3.6Watts

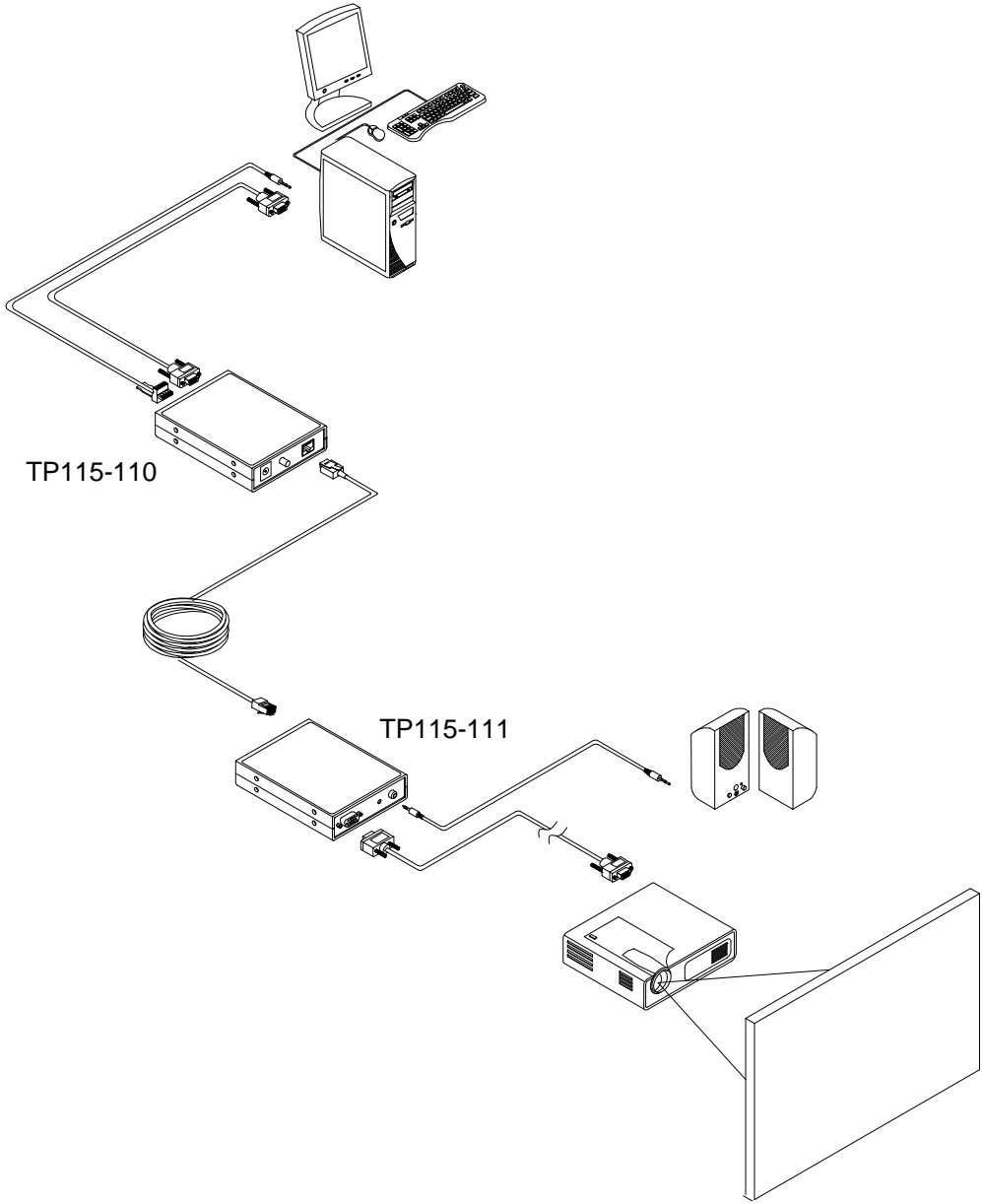
Table 3. **TP115-110** Electrical



APPLICATION DIAGRAMS

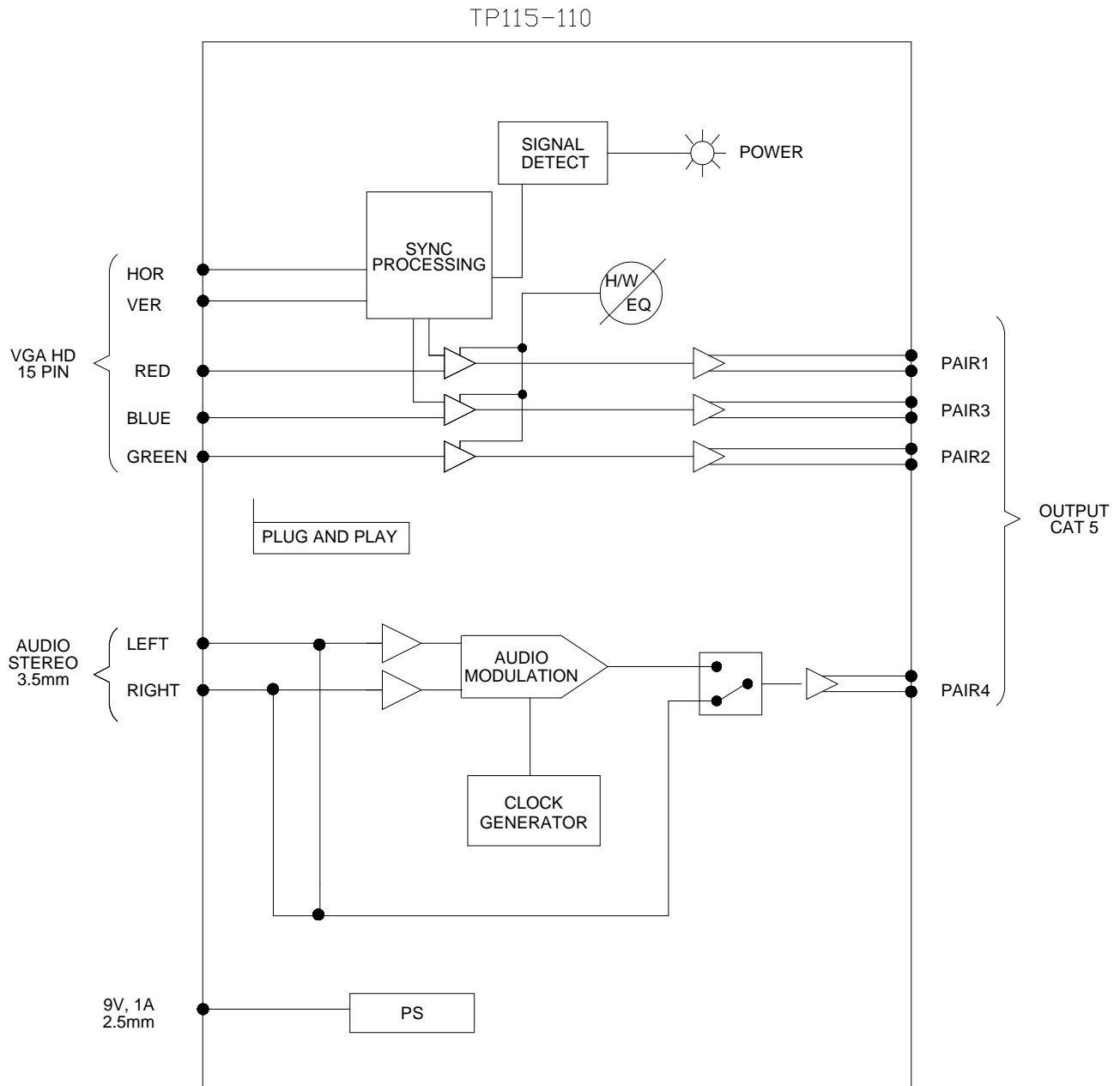
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DIAGRAM 1: TYPICAL SETUP



SPECIAL APPLICATION

DIAGRAM 2: INTERNAL VIEW



INSTALLING YOUR TP115-110 6

- Step 1.** Determine the best location for the **TP115-110** and TP115-111. Where possible, locate the **TP115-110** as close to the video source as possible and the TP115-111 as close to the receiving component as feasible.
- Step 2.** Apply power to the **TP115-110** using the power adaptor provided. The Power LED should be on and red.
- Step 3.** Connect the video source to the input of the **TP115-110** using a high quality video cable.
- Step 4.** The Power LED should change from red to green indicating a signal is present.
- Step 5.** Connect the audio input source to the audio jack on the **TP115-110**.
- Step 6.** Run a UTP (CAT-5/CAT-5e) type cable from the 4TP OUTPUT of the **TP115-110** transmitter to the 4TP INPUT on the TP115-111 receiver.
- NOTE: Ensure good signal transmission by routing the cable so as to avoid any sharp angles, creases or bends.
- Step 7.** Connect the **TP115-111** video and audio outputs to their receiving devices.
- NOTE: Only the L+, L- and GND outputs on the **TP115-111** terminal block output are active.
- Step 8.** Apply power to the **TP115-111** using the power adaptor provided. The Power LED should be on and red; green if a signal is present.
- Step 9.** The units are now operational.

OPERATION 7

The **TP115-110** requires only one adjustment to be made for optimal performance. The adjustment is video equalization for long cable lengths.

7.1 VIDEO EQUALIZATION

Video equalization is provided to fine tune the displayed image on the remote display. Typically, for short cable runs the equalization will be set to near minimum. Cable lengths up to 400 feet will require near maximum equalization.

The equalization adjustments on the **TP115-110** and TP115-111 work together to provide equalization for maximum cable lengths. For example, for cable runs less than 50 feet, both equalization settings may be set to near minimum. Cable runs of 400 feet will see equalization settings at about the three-quarter position.

TROUBLESHOOTING GUIDE 8

We have carefully tested and have found no problems in the supplied **TP115-110**. However, we would like to offer suggestions for the following:

8.1 NO DISPLAY

Cause 1: The source has a problem.

Solution: Check the source and make sure there is a signal present and all source connections are correct. If the source is working and there is still no display, see Cause 2.

Cause 2: The path has a problem.

Solution: Connect the transmitter directly to the receiver using a short UTP patch cable. If the image is good, there is a problem with the cable. Otherwise, see Cause 3.

Cause 3: Cable connections are incorrect.

Solution: Make sure that cables are properly connected. Also, make sure that the continuity and wiring are good. If there is still no display present, see Cause 4.

Cause 4: Video equalization required.

Solution: Adjust the VIDEO EQUALIZATION on the TP115-110. Long cable runs may require adjustment on both the **TP115-110** and TP115-111.

In general, cable runs less than 50 feet require little or no video equalization and should be set to minimum. Cable runs up to 400 feet will require near maximum equalization on both the transmitter and receiver.

Cause 5: The display has a problem.

Solution: Make sure the display has power and is turned ON. If there is still no display, please call Altinex at (714) 990-2300.

8.2 NO SOUND

Cause 1: The source has a problem.

Solution: Check the source and make sure that there is a signal present and all source connections are correct. If the source is working and there is still no sound, see Cause 2.

Cause 2: The volume is too low.

Solution: Increase the gain at the source toward maximum. If there is still no sound present, see Cause 3.

Cause 3: Cable connections are incorrect.

Solution: Make sure that cables are properly connected. Also, make sure that the continuity and wiring are good. If there is still no sound, see Cause 4.

Cause 4: The receiving device has a problem.

Solution: Make sure the receiving device has power and is turned on. If there is still no sound, please call Altinex at (714) 990-2300.

ALTINEX POLICY

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9.1 LIMITED WARRANTY/RETURN POLICY

Please see the Altinex website at www.altinex.com for details on warranty and return policies.

9.2 CONTACT INFORMATION

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