

UTP Active Receiver ARXD

Applications and Operation Manual



UTP Active Receiver ARXD

- **Introduction**

The ARXD Active Receiver is used in conjunction with the AVE UTP-1500 passive transmitter when extended range and quality is required for a full color signal to 1Km or 3000 ft. with CAT 3,4,5,5e,6 UTP wire. Full surge suppression on both the power and video are standard. Lightning strike suppression on the video input when properly grounded with the isolated earth ground lug. Internal AGC (Automatic Gain Control) automatically compensates for varying line level changes over time so no user adjustments required. Color boost and recovery to regain those brilliant colors even in the worst environment. Video Error LED for low video levels. Low power 12 VDC operation.

- **Specifications**

The ARXD adds to the modular UTP TwistPlex line up to increase quality and distance while still using the passive transmitters installed at the camera end. For extended range or to compensate for extremely poor wire, poor connections, interference, metal conduits and all the other unforeseen problems when using existing structured wiring, the ARXD is the simple solution. Simply add to the receiving end and full color and level compensation is automatic up to 1km or 3000'.

The ARXD includes full surge suppression on the video input so protects not only itself from damaging surges from power spikes but also other devices down the line. When a direct earth ground is connected to the isolated side screw, most lightning surges and spikes are completely filtered out protecting your entire video system.

Full terminated differential input allows color recovery and video level recovery of very low video signals over the UTP cable in the presence of high common mode noise. The AGC stage automatically compensates for degrading video levels over time due to corroding or deteriorating connections, which attenuate the signal.

Note : The ARXD takes a maximum of 10seconds to compensate or stabilize the video for large changes in the video signal. Therefore when changing transmitter levels, powering up the camera or ARXD, connecting video wait 10 seconds for the video output of the ARXD to produce the best image.

The video output driver can drive either one or two loads either terminated or un-terminated maintaining a constant 1 VP-P for quality recording.

Low power 12VDC powers the ARXD either via the convenient 2.1mmx5.5mm DC Coax connector or the two terminal push connector to accept bar wires or loop in or out to other devices. Full surge suppression on the power input is standard.

1. UTP Filter Input
2. Full Differential Video Inputs
3. Terminated Inputs
4. Video Surge Suppression
5. Video Lightning Suppression with external ground lug to earth ground
6. Power Surge Suppression
7. Color Burst Recovery and Boost
8. AGC (Automatic Gain Control)
9. Video Output Driver 1V P-P Term or Un-term, can drive two 75 ohm loads at 1V P-P

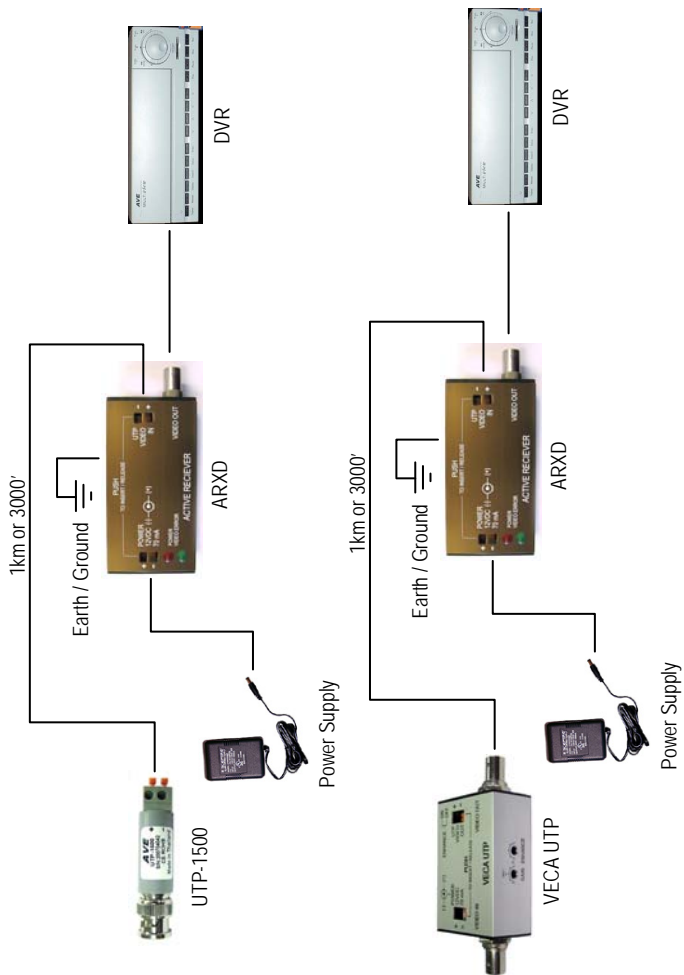
10. 12 VDC (-10% / +20%) 2.1mmx5.5mm DC Coax and Push Terminal Wire connector 70mA
11. Power LED (Green)
12. Video Error LED for low or no video input (Red)
13. Weight lbs / kg
14. Dimensions inches / mm

- **Applications**

Video Cameras either is rated one of two ways. The 1st method is 1V P-P Terminated or Un-terminated, which means that no matter if the video output is connected to a terminated device like a DVR or not the video output level is 1V P-P.

The 2nd method is 1V P-P Terminated and 2VP-P Un-terminated which means when not connected to a DVR terminated device or un-terminated device the output is 2VP-P but when connected to the terminated DVR the output is 1VP-P.

This fact is important for UTP passive transmission for the higher the output voltage from the camera the longer the distance the passive transmitter will be effective. The UTP-1500 is basically un-terminated so if your camera is of the 2nd method you will see better performance. If you camera is of the 1st method you might want to use the VECA UTP which will give the video level a boost along with the color signal to improve the distance with either the UTP-1500 passive receiver or the ARXD Active Receiver.



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