

# VTT001 & VTR001 Series

TWISTED PAIR TRANSMITTERS & RECEIVERS FOR VGA OR RGBHV

- Transmit and receive high resolution computer-video signals 300 feet (90 meters) or more over CAT 5 UTP cable
- Compatible with VGA-UXGA signals
- Compact tabletop, MAAP, and AAP versions available
- Remote power capability
- LED power indicator on front panel
- External international power supply included, part # 70-055-01



VTT001



VTR001



VTT001 MAAP



VTR001 MAAP



VTT001 AAP



VTR001 AAP

VTT001 and VTR001 Series transmitters and receivers are affordable, high performance products for transmitting and receiving high-resolution video signals long distances. The VTT001 & VTR001 Series lets A/V system designers and installers leverage the many benefits of signal distribution over UTP cabling and offers a broad selection of mounting options to support any application.



## Extron® Electronics

[www.extron.com](http://www.extron.com)

# DESCRIPTION

The Extron **VTT001 & VTR001** Series of Twisted Pair Transmitters and Receivers work together to send high resolution VGA/RGBHV signals 300 feet (90 meters) or more over any CAT 5, 5e, or 6 twisted pair cable or Extron Enhanced Skew-Free™ A/V UTP cable. Compatible with RGBHV or RGBS signals at resolutions up to 1600 x 1200, the VTT001 & VTR001 Series is perfect for boardrooms, large training facilities, or other applications that require a compact, economical solution for sending computer-video signals long distances over UTP cable.

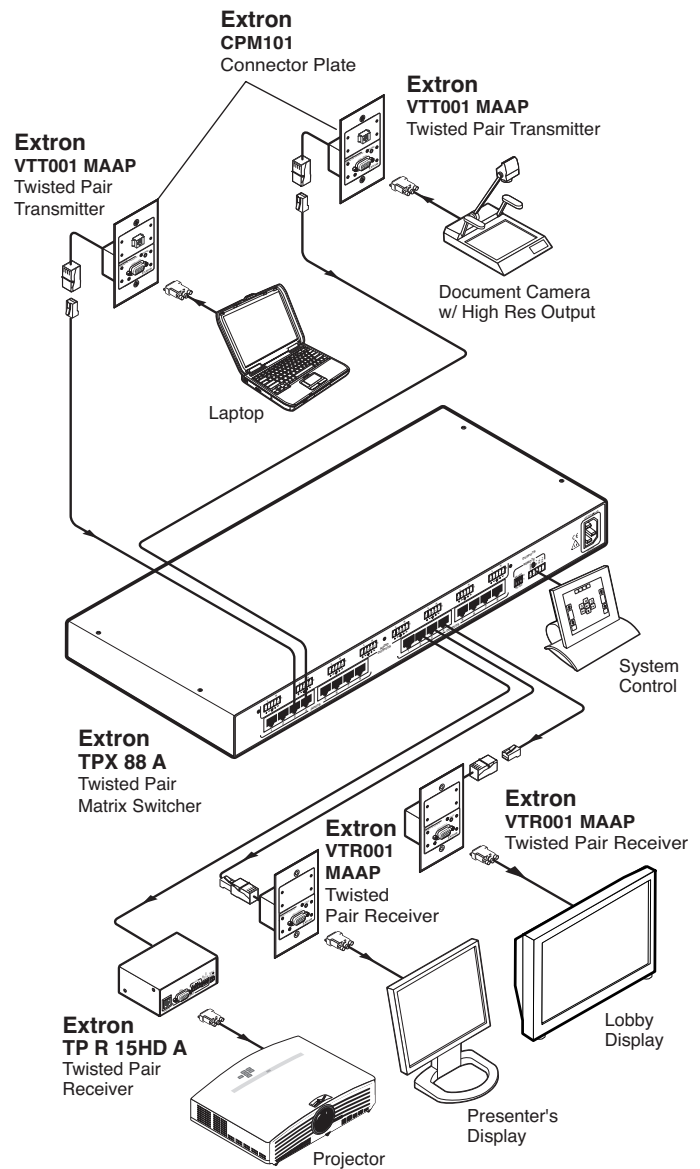
VTT001 & VTR001 Series transmitters and receivers are available in three styles:

- The VTT001 and VTR001 are extremely compact tabletop models that can be placed in any convenient location.
- The VTT001 MAAP and VTR001 MAAP are double space MAAP - Mini Architectural Adapter Plates that can be installed into Extron CPM Series wall mount, floor mount, table mount, and rack mount modular connector plates and are available in black, white, or RAL9010 white.
- The VTT001 AAP and VTR001 AAP are double space AAP - Architectural Adapter Plates that can be wall-mounted in a standard one-gang box or into any Extron product with AAP openings. AAP versions are available in black, white, or RAL9010 white.

The VTT001/VTR001 Series operates with an external power supply connected to just the receiver or just the transmitter. This provides system design flexibility since the transmitter module can be installed in a convenient location, even if local power is not available.

When using data grade twisted pair cable for sending high-resolution video signals long distances, a problem called skew can cause a distortion in the image, resulting in visible color separation. Extron offers two options for solving this problem and restoring image quality. The first option is to place an SEQ 100 BNC Skew Equalizer at the receiving end of any cable run where skew is a problem. The second option is to use Extron's Enhanced Skew-Free™ A/V UTP cable to make system connections.

All models can be used in conjunction with the Extron TPX 88 Matrix Switcher to create a complete, high performance A/V signal routing system. Up to eight twisted pair transmitters and eight twisted pair receivers can be connected to the TPX 88 for simplified switching and control.



## VTT001 & VTR001 Models

Model	Faceplate	Input	Output	Power
VTT001	Black	Female 15-pin HD	Shielded female RJ-45 connector on back panel	Round 1-pin power connector
VTT001 MAAP	Black, White or RAL 9010 white	Female 15-pin HD	Female RJ-45 connector on 3" pigtail	Square 2-pin power connector
VTT001 AAP	Black, White or RAL 9010 white	Female 15-pin HD	Female RJ-45 connector on 3" pigtail	Square 2-pin power connector
VTR001	Black	Shielded female RJ-45 on back panel	Female 15-pin HD	Round 1-pin power connector
VTR001 MAAP	Black, White or RAL 9010 white	Female RJ-45 on 3" pigtail	Female 15-pin HD	Square 2-pin power connector
VTR001 AAP	Black, White or RAL 9010 white	Female RJ-45 on 3" pigtail	Female 15-pin HD	Square 2-pin power connector

## FEATURES

### VTT001 - Twisted Pair Transmitters for RGBHV

- Transmit high resolution computer-video signals 300 feet (90 meters) or more over CAT 5 UTP cable
- Compatible with VGA-UXGA signals
- Compact tabletop, MAAP, and AAP versions available
- Output connector on 3" (8 cm) pigtail for installation flexibility, MAAP and AAP models only
- Remote power capability
- LED power indicator on front panel
- External international power supply included, part # 70-055-01

### VTR001 - Twisted Pair Receivers for RGBHV

- Receive high resolution computer-video signals 300 feet (90 meters) or more over CAT 5 UTP cable
- Compatible with VGA-UXGA Signals
- Compact tabletop, MAAP, and AAP versions available
- Input connector on 3" (8 cm) pigtail for installation flexibility, MAAP and AAP models only
- Remote power capability
- LED power indicator on front panel
- External international power supply included, part # 70-055-01

## SPECIFICATIONS

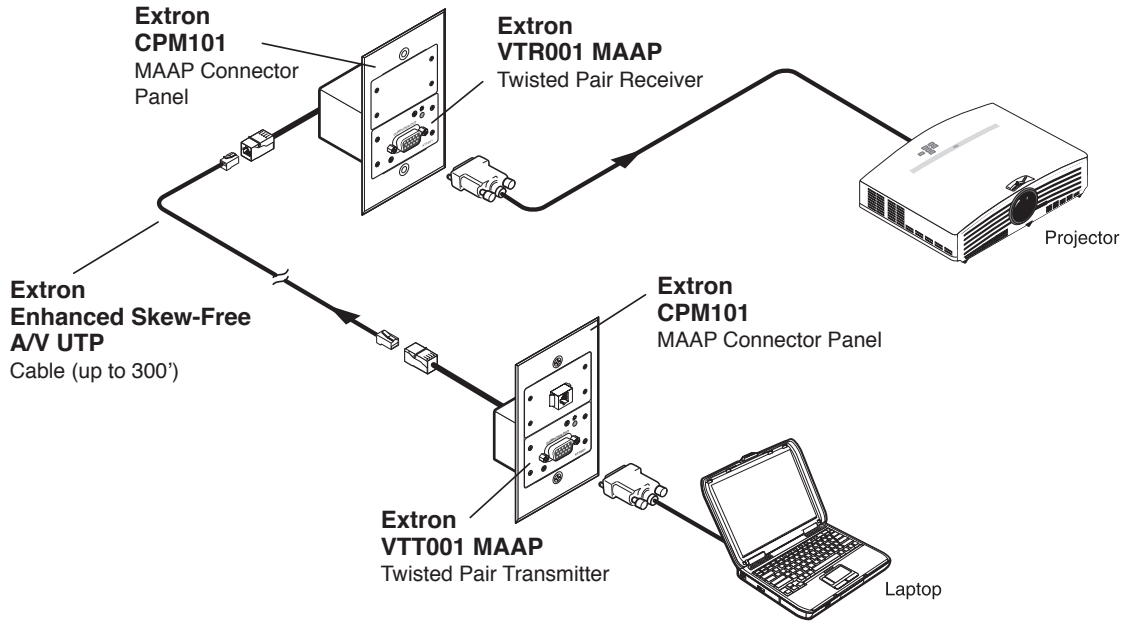
VIDEO	
Number/signal type .....	1 set of proprietary analog signals
Connectors .....	1 RJ-45 female jack or 1 RJ-45 female jack on a 3" (7.6 cm) pigtail
VIDEO INPUT	
Number/signal type	
VTT001 series.....	RGBHV, RGBS
VTR001 series.....	1 set of proprietary analog signals from a VTT001 model or an IN1404XT
Connectors	
VTT001 series.....	(1) 15-pin HD female
VTR001 .....	1 RJ-45 female jack
VTR001 MAAP/AAP .....	1 RJ-45 female jack on a 3" (7.6 cm) pigtail
Nominal level.....	0.7 V p-p for RGB
Minimum/maximum levels.....	Analog: 0.3 V to 1.45 V p-p with no offset at unity gain
Impedance .....	75 ohms
Horizontal frequency.....	15 kHz to 130 kHz
Vertical frequency.....	30 Hz to 150 Hz
VIDEO OUTPUT	
Number/signal type	
VTT001 series.....	1 set of proprietary analog signals
VTR001 series.....	RGBHV, RGBS
Connectors	
VTT001 .....	1 RJ-45 female jack
VTT001 MAAP/AAP .....	1 RJ-45 female on a 3" (7.6 cm) pigtail
VTR001 series.....	(1) 15-pin HD female
Nominal level.....	0.7 V p-p for RGB
Minimum/maximum levels.....	0.3 V to 1.45 V p-p
Impedance .....	75 ohms

## SPECIFICATIONS (Cont.)

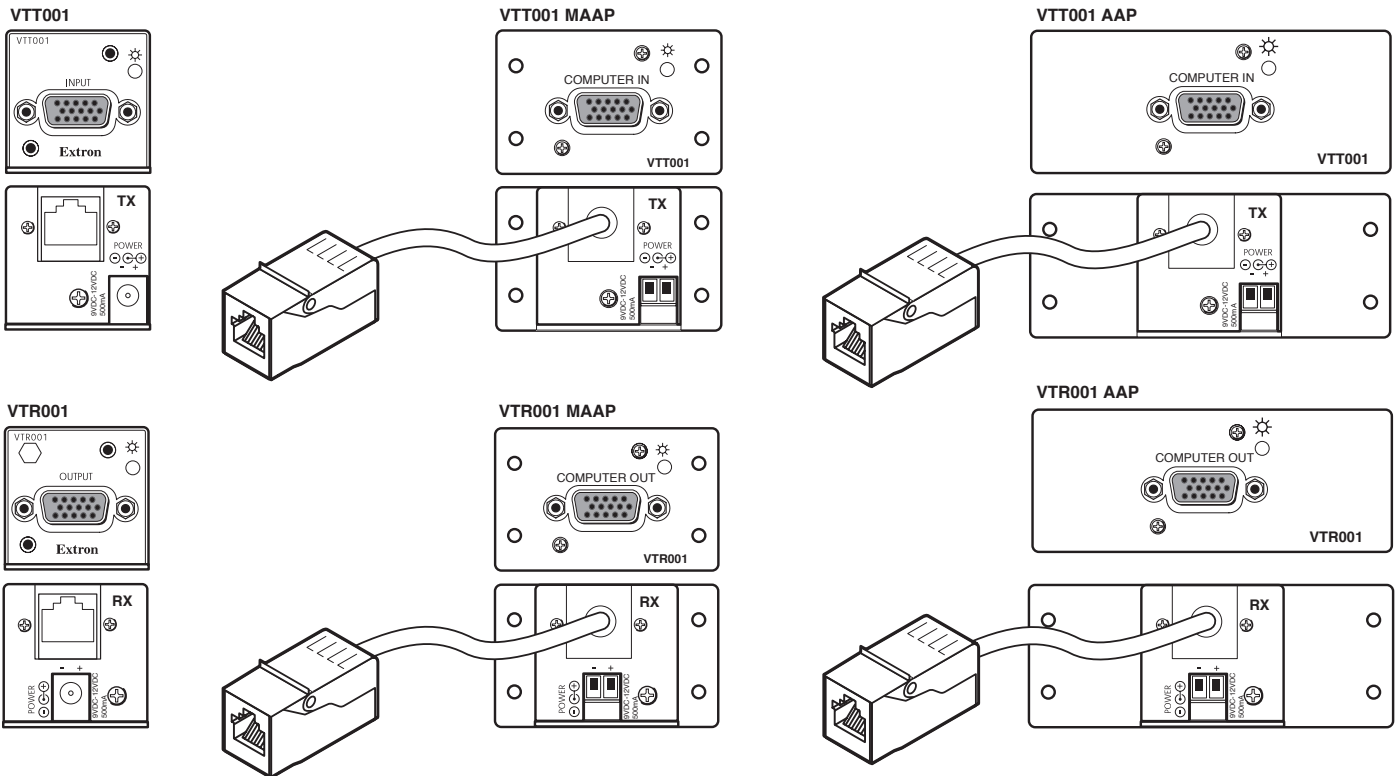
SYNC		
Input type (VTT001 series) .....	RGBHV, RGBS	
Output type (VTR001 series) .....	RGBHV, RGBS	
Input level .....	2.0 V to 5.5 V p-p with $\pm 0.2$ VDC offset max.	
Output level .....	3.0 V to 4.0 V p-p	
Input impedance .....	Hi-Z	
Output impedance .....	75 ohms	
Max input voltage .....	5.5 V p-p	
Max. propagation delay .....	50 ns	
Max. rise/fall time .....	2.5 ns	
Polarity.....	Negative	
GENERAL		
Power .....	Supplied by an external power supply	
External power supply .....	100 VAC to 240 VAC, 50/60 Hz, external, autoswitchable; to 9 to 12 VDC, 1 A, regulated	
Power input requirements .....	12 VDC, 0.2 A	
Temperature/humidity .....	Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, noncondensing Operating +32° to +122°F (0° to +50°C) / 10% to 90%, noncondensing	
Rack mount.....	Yes, also furniture and wall mountable with optional mounting hardware	
Enclosure type .....	Metal	
Enclosure dimensions		
VTT001/VTR001 MAAP .....	Faceplate: 1.4" H x 2.2" W x <0.1" D (3.6 cm H x 5.6 cm W x 0.1 cm D) (double space high MAAP plate)	
VTT001/VTR001 AAP.....	Faceplate: 1.4" H x 3.5" W x 0.1" D (2.8 cm H x 8.9 cm W x 0.3 cm D) (double space high AAP plate)	
VTT001 series.....	Device: 1.4" H x 1.4" W x 1.4" D (3.6 cm H x 3.6 cm W x 3.6 cm D) (Depth excludes connectors.)	
VTR001 series.....	Device: 1.4" H x 1.4" W x 1.75" D (3.6 cm H x 3.6 cm W x 4.4 cm D) (Depth excludes connectors.)	
Product weight .....	1.0 lbs (0.5 kg)	
Shipping weight .....	3 lbs (2 kg)	
Vibration .....	ISTA 1A in carton (International Safe Transit Association)	
Listings.....	UL, CUL	
Compliances .....	CE, FCC Class B	
MTBF .....	30,000 hours	
Warranty .....	3 years parts and labor	
<b>NOTE:</b> All nominal levels are at $\pm 10\%$		
Model	Version Description	Part Number
Twisted Pair Transmitters		
VTT001	RGBHV Transmitter .....	60-581-01
VTT001 AAP	AAP Module - Black .....	70-258-11
VTT001 AAP	AAP Module - White .....	70-258-21
VTT001 AAP	AAP Module - RAL9010 White.....	70-258-51
VTT001 MAAP	MAAP Module - Black .....	70-284-11
VTT001 MAAP	MAAP Module - White .....	70-284-21
VTT001 MAAP	MAAP Module - RAL9010 White .....	70-284-51
Twisted Pair Receivers		
VTR001	RGBHV Receiver .....	60-582-01
VTR001 AAP	AAP Module - Black .....	70-259-11
VTR001 AAP	AAP Module - White .....	70-259-21
VTR001 AAP	AAP Module - RAL9010 White.....	70-259-51
VTR001 MAAP	MAAP Module - Black .....	70-285-11
VTR001 MAAP	MAAP Module - White .....	70-285-21
VTR001 MAAP	MAAP Module - RAL9010 White .....	70-285-51

Specifications are subject to change without notice.

# APPLICATION DIAGRAM



# PANEL DRAWINGS



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