

# VTT001 & VTR001 Series

TWISTED PAIR TRANSMITTERS &  
TWISTED PAIR RECEIVERS FOR RGBHV

- Compatible with high resolution computer-video signals with resolutions up to 1600 x 1200
- Compatible with RGBHV, RGBS, and RGsB
- Remote power capability
- Multiple mounting options
- MAAP & AAP models available with black, white, or gray (AAP only) faceplate
- Compact tabletop models available



VTT001



VTR001



VTT001 MAAP



VTR001 MAAP



VTT001 AAP



VTR001 AAP

The Extron VTT001 Twisted Pair Transmitters and VTR001 Twisted Pair Receivers work together to create a cost-effective and high performance system for sending high resolution VGA/RGBHV signals up to 500 feet (152 meters) over Extron Skew-Free™ A/V UTP or any other CAT 5, 5e, or 6 cable.

Available from

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## Extron® Electronics

www.extron.com

# DESCRIPTION

The Extron **VTT001 Twisted Pair Transmitters** and **VTR001 Twisted Pair Receivers** are cost-effective, high performance products for transmitting and receiving high resolution video signals up to 500 feet (152 meters) over Extron Skew-Free™ A/V UTP or any other CAT 5, 5e, or 6 unshielded twisted pair cable. Compatible with resolutions up to 1600x1200 (UXGA), the VTT001 and VTR001 are perfect for such applications as boardrooms, large training facilities or other applications that require a compact economical solution for sending RGBHV, RGBS, and other high resolution video signals long distance over UTP cable.

The VTT001 and VTR001 Series operate with an external DC power supply connected to just the transmitter (receiver remote power) or just the receiver (transmitter remote power). This provides system design flexibility, since the transmitter or receiver module can be installed in the most convenient location, even if local power is not available.

Because VTT001 and VTR001 transceivers utilize UTP cable for the distribution of high resolution RGBHV signals over long distances, they offer considerable advantages in cost, performance, and ease of installation. UTP cable is a fraction of the size of coaxial cable, and much lighter, more flexible, and less expensive, thus providing A/V system designers and installers with an economical, space efficient solution for a variety of applications.

## VTT001/VTR001 Image Quality Recommended Distance vs. Resolution

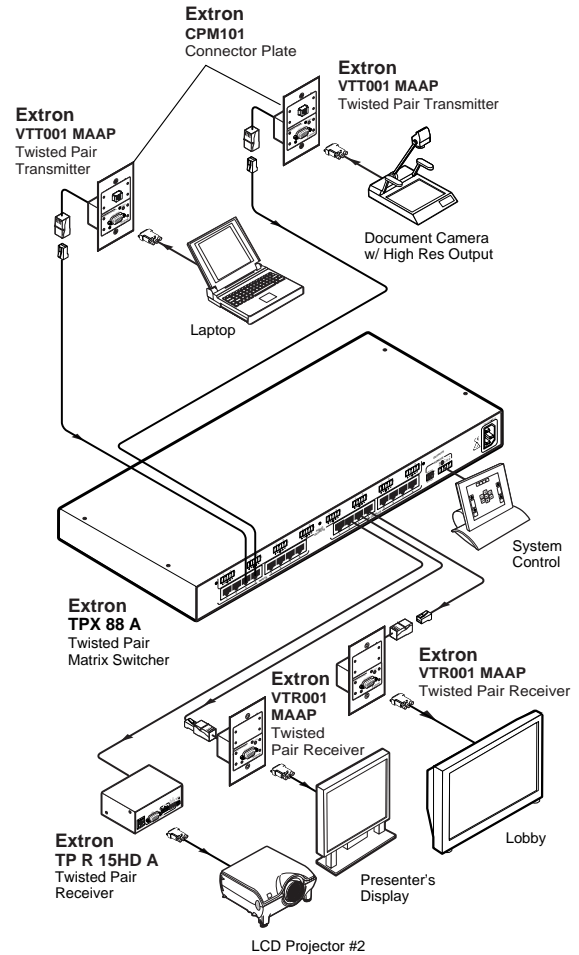
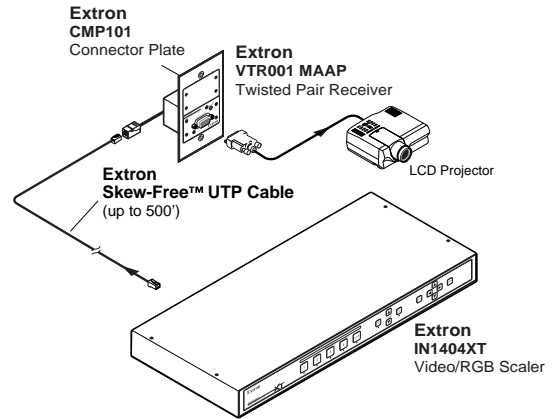
	50'	100'	150'	200'	300'	400'	500'
640 X 480 @ 60HZ							
800 X 600 @ 60HZ							
1024 X 768 @ 60HZ							
1280 X 1024 @ 60HZ							
1600 X 1200 @ 60HZ							

Highest quality (suitable for all applications)
  Variable quality (depends on image content)
  Not recommended

## The Complete Twisted Pair System Solution

The VTT001 and VTR001 Series are available in three models: 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 Mini Architectural Adapter Plates (MAAPs) that can be installed into Extron CPM Series wall, floor, table, and rack mount modular connector plates and are available in black or white. The VTT001 AAP and VTR001 AAP are double space AAPs that can be installed in any product with AAP openings. AAP versions are available in black, white, or gray.

Additionally, the VTR001 can function as a receiver for the Inline **IN1404XT Video/RGB Scaler** with twisted pair output and seamless switching. 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.



## VTT001CM & VTR001CM Models

Model	Faceplate	Input	Output	Power
VTT001	No Faceplate	Female 15-pin HD	Shielded female RJ-45 connector on back panel	Round 1-pin power connector
VTT001 MAAP	Black or White	Female 15-pin HD	Female RJ-45 connector on 3" pigtail	Square 2-pin power connector
VTT001 AAP	Black, White or Gray	Female 15-pin HD	Female RJ-45 connector on 3" pigtail	Square 2-pin power connector
VTR001	No Faceplate	Shielded female RJ-45 on back panel	Female 15-pin HD	Round 1-pin power connector
VTR001 MAAP	Black or White	Female RJ-45 on 3" pigtail	Female 15-pin HD	Square 2-pin power connector
VTR001 AAP	Black, White or Gray	Female RJ-45 on 3" pigtail	Female 15-pin HD	Square 2-pin power connector

# FEATURES

## VTT001 - UTP Transmitter for RGBHV

- Send high resolution computer-video signals up to 500 feet (152 meters) over CAT 5 UTP cable
- Remote power capability
- Compatible with RGBHV, RGBS, and RGsB
- RJ-45 output on 3" (7.6 cm) pigtail for installation flexibility (MAAP and AAP models only)
- LED power indicator on front panel
- Compact tabletop, MAAP, and AAP versions available
- External international power supply included (part number 70-056-01)

## VTR001 - UTP Receiver for RGBHV

- Receive high resolution computer-video signals from up to 500 feet (152 meters) over CAT 5 UTP cable
- Remote power capability
- Compatible with RGBHV, RGBs, and RGsB
- Video peaking control (sharpness)
- RJ-45 input on 3 inch (7.6 cm) pigtail for installation flexibility (MAAP and AAP models only)
- LED power indicator on front panel
- Compact tabletop, MAAP, and AAP versions available
- External international power supply included (part number 70-056-01)

# SPECIFICATIONS

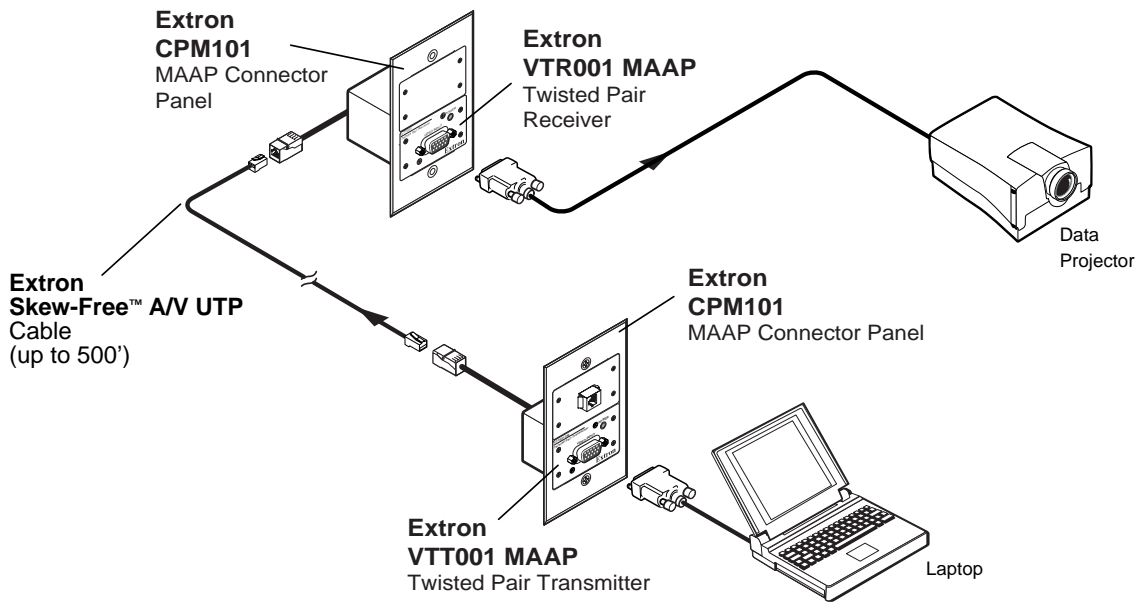
VIDEO	
Number/signal type.....	1 set of proprietary analog signals
Connectors .....	1 RJ-45 female on a 3" (7.6 cm) pigtail
VIDEO INPUT	
Number/signal type	
VTT001 .....	RGBHV, RGBS
VTR001 .....	1 set of proprietary analog signals from a VTT001CM or an IN1404XT
Connectors	
VTT001 .....	(1) 15-pin HD female
VTR001 .....	1 RJ-45 female jack or 1 RJ-45 female jack on a 3" (7.6 cm) pigtail (-1 and -2 models)
Nominal level.....	0.7V p-p for RGB
Minimum/maximum levels .....	Analog: 0.3V to 1.45V 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 .....	1 set of proprietary analog signals
VTR001 .....	RGBHV, RGBS
Connectors	
VTT001 .....	1 RJ-45 female on a 3" (7.6 cm) pigtail
VTR001 .....	(1) 15-pin HD female
Nominal level.....	0.7V p-p for RGB
Minimum/maximum levels .....	0.3V to 1.45V p-p
Impedance.....	75 ohms

# SPECIFICATIONS (CONT.)

SYNC	
Input type (VTT001CM).....	RGBHV, RGBS
Output type (VTR001CM) .....	RGBHV, RGBS
Input level .....	2.0V to 5.5V p-p with $\pm 0.2$ VDC offset max.
Output level.....	3.0V to 4.0V p-p
Input impedance .....	Hi-Z
Output impedance .....	75 ohms
Max input voltage .....	5.5V p-p
Max. propagation delay.....	50 ns
Max. rise/fall time .....	2.5 ns
Polarity .....	Negative
GENERAL	
Power .....	100VAC to 240VAC, 50/60 Hz, 5 watts, external, autoswitchable; to 12VDC, 1.0 A power supply. Product requires 0.2 A.
Temperature/humidity .....	Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, non-condensing; Operating +32° to +122°F (0° to +50°C) / 10% to 90%, non-condensing
Rack mount .....	-1/-2 models are rack mountable using CPM112R, CPM130, or CPM133 rack mount modular connector panels, and furniture mountable with optional mounting hardware
Enclosure type .....	Metal
Enclosure dimensions.....	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)
Device .....	1.2" H x 1.4" W x 1.4" D (3.0 cm H x 3.6 cm W x 3.6 cm D) (Depth excludes connectors.)
Product weight .....	1.0 lbs (0.5 kg)
Shipping weight .....	3 lbs (1.4 kg)
Vibration .....	ISTA/NSTA 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
Models	
Twisted Pair Transmitters	
VTT001 MAAP (black) .....	70-284-11
VTT001 MAAP (white) .....	70-284-41
VTT001 (black) .....	60-581-01
VTT001 AAP (gray) .....	70-258-01
VTT001 AAP (black) .....	70-258-11
VTT001 AAP (white) .....	70-258-21
Twisted Pair Receivers	
VTR001 MAAP (black) .....	70-285-11
VTR001 MAAP (White) .....	70-285-41
VTR001 (black) .....	60-582-01
VTR001 AAP (gray) .....	70-259-01
VTR001 AAP (black) .....	70-259-11
VTR001 AAP (white) .....	70-259-21

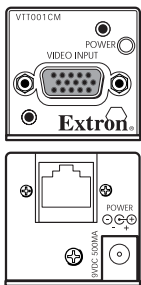
Specifications are subject to change without notice.

# APPLICATION DIAGRAM

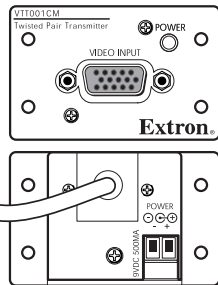


# PANEL DRAWINGS

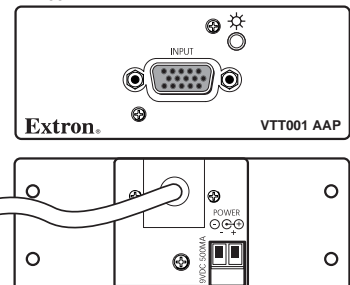
VTT001



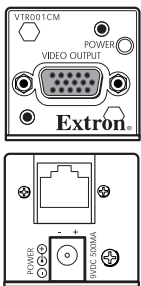
VTT001 MAAP



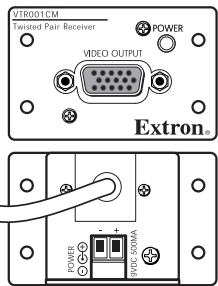
VTT001 AAP



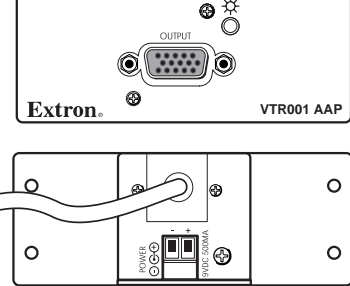
VTR001



VTR001 MAAP



VTR001 AAP



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