

MTP T 15HD A, MTP R 15HD A, & MTP RL 15HD A

MINI TWISTED PAIR TRANSMITTERS & RECEIVERS
FOR COMPUTER VIDEO & AUDIO

- Compatible with computer-video resolutions up to 1600 x 1200
- Compatible with RGBHV, RGBS, RGSB, component video, S-video, and composite video
- Compatible with HDTV component video (bi-level and tri-level sync)
- Additional buffered UTP output (MTP RL 15HD A)
- Pre-peaking boost on the transmitters (MTP T 15HD A)
- Continuously variable level and peaking controls on the receivers
- Sends and receives summed mono (L+R) audio signal
- Versatile mounting options
- External international power supply included



MTP RL 15HD A



MTP T 15HD A



MTP R 15HD A

The Extron MTP 15HD A Series consists of economical, compact Mini Twisted Pair (MTP) transmitters and receivers for sending high resolution computer-video and audio signals up to 750 feet over a single unshielded twisted pair (UTP) cable.



Extron® Electronics

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DESCRIPTION

The Extron MTP 15HD A series is a versatile family of mini twisted pair transmitters and receivers for transmitting high resolution computer-video and audio sources long distances to presentation displays over a single unshielded twisted pair cable (UTP cable). The MTP T 15HD A transmits RGBHV, RGBS, RGsB, HDTV, and other high resolution video and audio signals to a compatible MTP R 15HD A or MTP RL 15HD A receiver. The MTP 15HD A series can be used with any CAT 5, 5e, or 6 twisted pair cable or with Extron Enhanced Skew-Free A/V UTP cable (patent pending) for cable runs of up to 600 feet (185 meters) with XGA signals, and 450 feet (135 meters) with UXGA signals. MTPs are compact so they can fit just about anywhere: in equipment racks, under tables and desktops, or next to a projector.

Each model accepts computer video and audio inputs on female 15-pin HD connectors and 3.5 mm stereo audio jacks. The transmitter sends computer video and summed mono (L+R) audio signal to a compatible twisted pair receiver. Also, the transmitter features a local monitor output for systems where a local display is required. Compatible with resolutions up to 1600 x 1200 (UXGA), the MTP 15HD A Series is ideal for such applications as large training facilities, museums, airports, movie theaters, and hotels.

Extron MTP 15HD A models precisely optimize image quality for various UTP cable lengths using adjustment controls on both the transmitter and receiver. The transmitters feature a pre-peaking switch that provides additional compensation at the front end for the longest cable runs. The receivers offer continuously variable gain and peaking controls, allowing users to dial in the exact amount of gain and peaking required for each unique cable run.

Because the MTP 15HD A mini transmitters and receivers utilize UTP cable for the distribution of high resolution RGBHV and audio 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.

Part of the VersaTools family of economical, compact products, the MTP 15HD A Series is designed for easy integration into new and existing A/V environments. The entire family of Extron MTP 15HD products sets the price/performance standard for audio/video twisted pair technology. The MTP 15HD series is a complete twisted pair system including transmitters, receivers, and switchers, providing the ability to send, route, and distribute high resolution video, audio, and control signals. The MTP 15HD series is ideal for systems where high resolution video signals must be transmitted long distances to a display, or where space is limited in conduit, or for audio/video systems where cabling might be exposed or visible.

MTP T 15HD A

The Extron MTP T 15HD A mini twisted pair transmitter accepts high resolution computer-video on a female 15-pin HD connector and an unbalanced stereo audio signal on a female (L+R) 3.5 mm mini stereo jack. The female RJ-45 output connector will transmit a computer video and summed mono audio signal to an MTP R 15HD A or MTP RL 15HD A receiver.

DESCRIPTION (CONT.)

MTP R 15HD A

The Extron MTP R 15HD A mini twisted pair receiver accepts video and audio signals on a female RJ-45 connector. Video signals are output on a female 15-pin HD connector while up to two identical balanced or unbalanced mono audio signals are output on a 3.5 mm captive screw connector. The MTP R 15HD A receiver features separate continuously variable level and peaking adjustments that enable users to compensate for any signal degradation associated with long cable runs. A set of dip switches on the rear panel make it easy to configure the output signal and output sync formats.

MTP RL 15HD A

The Extron MTP RL 15HD A mini twisted pair receiver has all of the same features and functionality as the MTP R 15HD A, with an added female RJ-45 output connector. This additional buffered output enables multiple MTP RL 15HD A receivers to be connected in series, reducing the number of parallel cable runs required. (This output does not provide any level or peaking control, so the total distance between the transmitter and the last receiver should not exceed recommended maximum).

FEATURES

- **Multiple signal types supported** – Compatible with RGBHV, RGBS, RGsB, component video, S-video, and composite video
- **High resolution compatibility** – Supports resolutions up to 1600 x 1200 (UXGA)
- **HDTV compatibility** – Compatible with HDTV component video (bi-level and tri-level sync)
- **Additional buffered (UTP) output** – Enables looping of multiple receivers to reduce parallel cable runs (MTP RL 15HD A) only.
- **Pre-peaking switch** – Compensates for long cable runs (MTP T 15HD A only)
- **Continuously variable level and peaking** – Optimizes the output signal for any cable length (MTP R 15HD A and MTP RL 15HD A only)
- **Buffered RJ-45 output** – Multiple receivers can be linked together serially, reducing cable requirements and simplifying installation (MTP RL 15HD A only)
- **Compact metal enclosure** – 1U, quarter rack width metal enclosure (MTP T 15HD A, MTP R 15HD A, and MTP RL 15HD A)
- **Versatile mounting options** – Rack, under-desk, and projector-mountable
- **Power indicator** – Front panel LED for easy troubleshooting
- **Power supply** – External international power supply included (part number 70-055-01)

MTP Series	Transmission Distances																		
	50' 15 m	100' 30 m	150' 45 m	200' 60 m	250' 75 m	300' 90 m	350' 105 m	400' 120 m	450' 135 m	500' 150 m	550' 165 m	600' 185 m	650' 200 m	700' 215 m	750' 230 m	800' 245 m	900' 275 m	1000' 300 m	
Composite Video																			
S-Video & Component																			
640 x 480 (VGA)																			
800 x 600 (SVGA)																			
1024 x 768 (XGA)																			
1280 x 1024 (SXGA)																			
1600 x 1200 (UXGA)																			

Highest Image Quality
 Variable Image Quality
 Not Recommended

VIDEO — ALL MODELS

Number/signal type..... 1 set of proprietary analog signals
Connectors 1 female RJ-45

VIDEO INPUT AND LOOP THROUGH — MTP T 15HD A TRANSMITTER

Number/signal type..... 1 analog RGBHV, RGBS, RGsB (selectable), component video; or 1 S-video and 1 composite video; or 3 composite video 1 buffered RGBHV, RGBS, RGsB local monitor loop through
Connectors 2 female 15-pin HD
Nominal level..... 1 V p-p for Y of component video and S-video, and for composite video 0.7 V p-p for RGB 0.3 V p-p for R-Y and B-Y of component video, and for C of S-video
Minimum/maximum levels 0.3 V to 1.45 V p-p
Impedance..... 75 ohms
Horizontal frequency 15 kHz to 130 kHz
Vertical frequency 30 Hz to 150 Hz
Return loss <-30 dB @ 5 MHz
DC offset (max. allowable)..... 250 mV

VIDEO OUTPUT — MTP R 15HD A, MTP RL 15HD A RECEIVERS

Number/signal type..... 1 set of proprietary analog signals (MTP RL 15HD A only) 1 analog RGBHV, RGBS, RGsB (selectable), component video; or 1 S-video and 1 composite video; or 3 composite video
Connectors 1 female RJ-45 (MTP RL 15HD A only) 1 female 15-pin HD
Nominal level..... 1 V p-p for Y of component video and S-video, and for composite video 0.7 V p-p for RGB 0.3 V p-p for R-Y and B-Y of component video, and for C of S-video
Minimum/maximum levels 0.3 V to 1.45 V p-p
Impedance..... 75 ohms
Return loss <-30 dB @ 5 MHz
DC offset <±20 mV with input at 0 offset

SYNC

Output type..... RGBHV, RGBS, RGsB
Standards..... NTSC 3.58, NTSC 4.43, PAL, SECAM
Input level (transmitter) 3.5 V to 5.5 V p-p, unterminated
Output level (receivers) 4.0 V to 5.0 V p-p, unterminated
Input impedance (transmitter).... 510 ohms
Output impedance (receivers) 75 ohms
Max. input voltage (transmitter) .. 5.5 V p-p
Polarity
Transmitter Positive or negative (follows input polarity)
Receivers Positive or negative (switch-selectable)

AUDIO — ALL MODELS

Number/signal type..... 1 set of proprietary analog signals
Connectors 1 female RJ-45
Gain..... ±0.75 dB
Frequency response 20 Hz to 20 kHz, ±1 dB
THD + Noise 0.15% @ 1 kHz, 0.3% @ 20 kHz at nominal level

S/N >70 dB at maximum output (unweighted)
CMRR >43 dB @ 20 Hz to 20 kHz

AUDIO INPUT — MTP T 15HD A TRANSMITTER

Number/signal type..... 1 stereo, unbalanced
Connectors (1) 3.5 mm mini stereo jack
Impedance..... >10k ohms, unbalanced
Nominal level..... +4 dBu (1.23 Vrms), -10 dBV (316 mVrms)
Maximum level +18dBu, (unbalanced) at 1%THD+N
NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu

AUDIO OUTPUT — MTP R 15HD A, MTP RL 15HD A RECEIVERS

Number/signal type..... 2 mono, balanced/unbalanced
Connectors (1) 3.5 mm captive screw connector, 5 pole
Impedance..... 50 ohms unbalanced, 100 ohms balanced
Nominal level..... +4 dBu (1.23 Vrms), -10 dBV (316 mVrms)

GENERAL

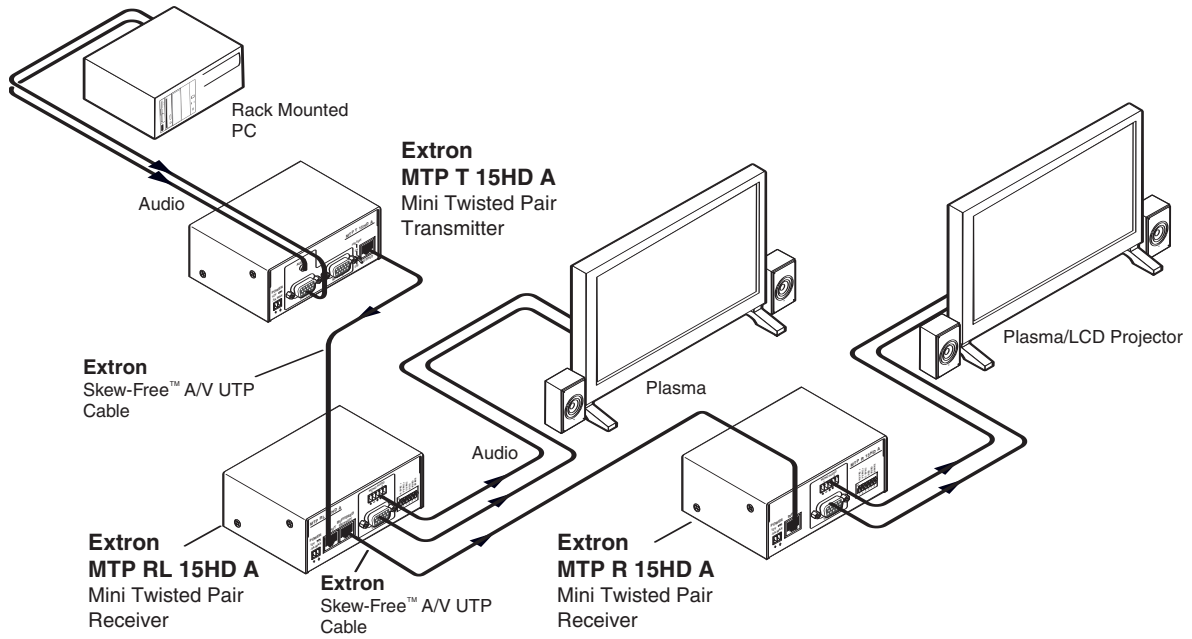
Power Supplied by an external power supply
External power supply 100 VAC to 240 VAC, 50/60 Hz, external, autoswitchable; to 12 VDC, 1 A, regulated
Power input requirements 12 VDC, 500 mA
Rack mount Yes, with optional 1U rack shelf, part #60-190-01 or 60-604-01; or VersaTools® rack shelf, part #60-190-20 or 60-604-20 Also furniture mountable with optional Mini Under-Desk Mounting Kit, part #70-212-01; or projector mountable with optional projector mounting kit, part #70-217-01 or 70-077-04
Enclosure type Metal
Enclosure dimensions..... 1.7" H x 4.3" W x 3.0" D (1U high, quarter rack wide) 4.3 cm H x 10.9 cm W x 7.6 cm D (Depth excludes connectors.)
Product weight 0.4 lbs (0.2 kg)
Shipping weight 2 lbs (1 kg)
Listings UL, CUL
Compliances CE, FCC Class A, VCCI, AS/NZS, ICES
NOTE: All nominal levels are at ±10%

Model	Part Numbers
MTP T 15HD A	60-669-01
MTP R 15HD A	60-670-01
MTP RL 15HD A	60-690-01

Optional Accessories

VersaTools Rack Shelf Kit 60-190-20
1U Universal Rack Shelf Kit 60-190-01
Mini Under-desk Mount Kit 70-212-01

APPLICATION DIAGRAM



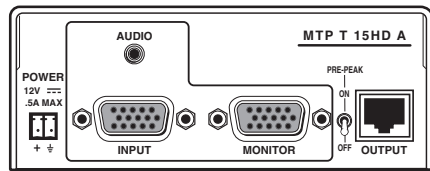
PANEL DRAWINGS



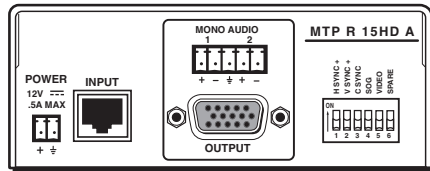
MTP T 15HD A Front



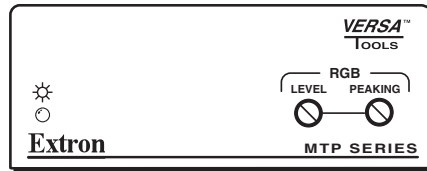
MTP R 15HD A Front



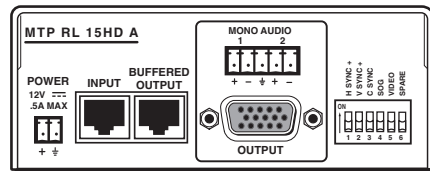
MTP T 15HD A Back



MTP R 15HD A Back



MTP RL 15HD A Front



MTP RL 15HD A Back



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