TECHNICAL SPECIFICATIONS

RGB VIDEO INPUT			
Connector	1-HD-15 female connector		
Signal Type	1 RGBHV, RGBS, RGsB, RsGsBs,Component, S-video or Composite		
Maximum Resolution	1920 X 1080 (1080P)		
Impedance	75Ω		
Level (nominal)	Analog 0.7V p-p		
Level (maximum)	+-1.0 V		
RGB VIDEO OUTPUT			
Connector	1-HD-15 female connector (Brick models have an additional HD-15 loopback connector)		
Signal Type	Same as input		
Gain	Unity		
Impedance	75Ω		
Sync output	5V into Hi Z, 2.2V into 75Ω		
AUDIO INPUT			
Connector	1-3.5 mm stereo mini jack (wallplates), 3 pin Phoenix plug (bricks)		
Signal type	Stereo unbalanced		
Level (nominal)	0.25V RMS -10dBm		
Level (maximum)	1.1V RMS, +3dBm		
Impedance	50 kΩ		
Encoding	Full stereo 24 bit, 96kHz sample rate		
Frequency response	20Hz-15kHz +-0.5dB		
AUDIO OUTPUT			
Connector	Wallplate model receivers	2 RCA jack connectors	
	Brick model receivers	3 pin pluggable screw terminals	
Signal type	Stereo unbalanced		
Impedance	50Ω (Intended to drive a 600Ω or greater load)		
Gain	Unity +- 1.5dB		
CONTROL ADJUSTMENTS			
Delay Adjust	Independent for R, G and B delay (Skew models only)		
Delay range	0-62 ns (Skew models only)		
Video Boost Switch	Dip switch (OFF 0-800'/ON 200-1000')		
Gain control	Manual combined control for RGB		
RS-232 DATA INPUT			
Number/Type	One DB-9 female connector. (4 pin Phoenix plug on brick models) DCE type connection for direct connection to a PC serial port included on two gang transmitters only. Must order TPRO-Serial DB-9 accessory harness for one gang transmitters.		
Handshaking	Local loopback only (Models with DB-9 connectors only)		
RS-232 type	Unidirectional (data transmission from transmitter to receiver only)		
RS-232 DATA OUTPUT			
Number/Type	One DB-9 male connector. DTE type connection for direct connection to peripheral.		
Data Rate	0-19.2k baud		
INFRARED INPUT			
Number/Type	Both models have internal sensor logically OR'd with hardwired input.		
	T-PRO TX brick models	One 4 pin pluggable Phoenix connector	
	T-PRO-TX wallplate models	One C-grid SL 5-pin connector on the back of the unit.	
Compatibility	Compatible with most IR outputs designed to drive an IR emitter LED.		
INFRARED OUTPUT			
Number/Type	One3.5 mm mini jack, center positive. All TPRO-RX models (Use FSR IR-EC1-6 single or IR-EC2-6 dual emitter accessory.)		
Output Switch	Dip switch (Normal 12 mW/High 60mW)		
Carrier Range	40 kHz, custom frequencies available per request.		
POWER REQUIREMENTS			
TPRO-RX Receivers	24VDC@0.12A (Skew models are 24VDC@0.19A)		
TPRO-TX Transmitters	24VDC@0.09A		
	Power supplies are optional. Use FSR PS-24DC-500MA		
MECHANICAL	Model	Dimensions (inches)	Shipping weight lbs.
Transmitter enclosure	Brick	4.22 X 1.59 X 4.10	
	Wall plate	1.70 X 4.09 X 1.46	
Receiver enclosure	Brick	4.22 X 1.59 X 4.10	
	Wall plate	3.56 X 4.09 X 1.29	
GENERAL			
UTP cable wiring standard/ type	EIA / TIA-568B CAT5, 5E, 6		
Recommended transmission range	0-1000 ft with a single power supply (Up to 600' when powered at transmitter. Up to 1000' when powered at receiver. When using a TPRO-HUB with included power supply: The maximum distance to a transmitter is 1000'. The maximum distance to a receiver is 600' * * A distance of up to 1000' can be achieved by adding an additional power supply at the receiver		

MADE IN THE USA

GREEN

Specifications are subject to change without notice.

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TwisterPro

UTP Transmitter/Receiver System

FSR

Video Products Group

DESCRIPTION

The TwisterPro™ UTP Transmitter / Receiver System allows video, stereo audio, RS-232 data and IR signal transmission over ordinary low cost CAT-5, 5e, 6 and cable. This system offers the highest level of signal integrity. These high quality devices ensure reliable, error free transmission that is immune to interference from electrical noise. Cable runs of up to 1000 feet are within the capabilities of the system (see specs for maximum cable length details).

There are wall plate style transmitters (1-gang and 2-gang) and receivers (2-gang) offered in three colors; black, white, and ivory. Matching Decora™ trim rings are included for stand alone use, or the units be populated along with FSR's IPS component and plates for a complete interface solution. There are also "brick" style housing versions that can be used on any surface or rack mounted using the accessory rack kits if preferred. (See TwisterPro™ accessories and ordering info).

TPRO receivers with skew compensation adjustments are optional and help adjust for misconvergence of the red, green and blue video signals that can occur as a result of inherent delay caused by differences in cable twist lengths.

The system can be powered at either the transmitter or receiver end by the optional power supply(s). If a TPRO- HUB is used, the hub with it's included power supply, will power the other components in the system. This 1 in 8 out hub allows full expandability for demanding applications. Multiple hubs can be cascaded to achieve a maximum of 512 outputs.

FEATURES

RGB Video Transmission system

- *HD-15 female connectors for video input and output*
- *CAT-5 connections are via RJ-45 Connectors (EIA/TIA-568B)*
- *Video resolutions up to 1920 x 1080 (1080p)*
- *Cable skew compensation adjustments on -S model receiver*
- *Adjustable gain control on front panel*

RS-232 Data Transmission

- *DB-9 female connectors for the inputs and male for outputs (optional for TPRO-TX wallplate models)*
- *UTP connections are via RJ-45 Connectors (EIA/TIA-568B)*
- *Compatible with RS-232 standards*
- *UL and CSA approved external power source (wall plug-in)*
- *Simplex RS-232 up to 19.2k baud*
- *LED indication of RS232 data activity*

IR Control Data Transmission

- *Compatible with most IR devices*
- *Custom carrier frequencies are available per customer request*
- *Extends IR control up to 1000 feet*
- *Normal and high output emitter power level settings*
- *High output power level settings up to 60mW allows for multiple emitter connections - (emitters sold separately)*
- *Transmitters feature integrated IR sensors in addition to hard-wired input options*
- *LED indication of IR data activity*

General

- *Units can be powered at either end or through optional hub*
- *Over-current sensing with LED indication*
- *Video, RS-232 and IR LED indicators*
- *Optional 1 in 8 out TPRO-HUB with power supply available*

APPLICATIONS

- *Boardrooms*
- *Control Rooms*
- *Digital Signage*
- *Temporary Staging and Rental*
- *Houses of Worship*
- *Classrooms*
- *Hotel/Conference Facilities*

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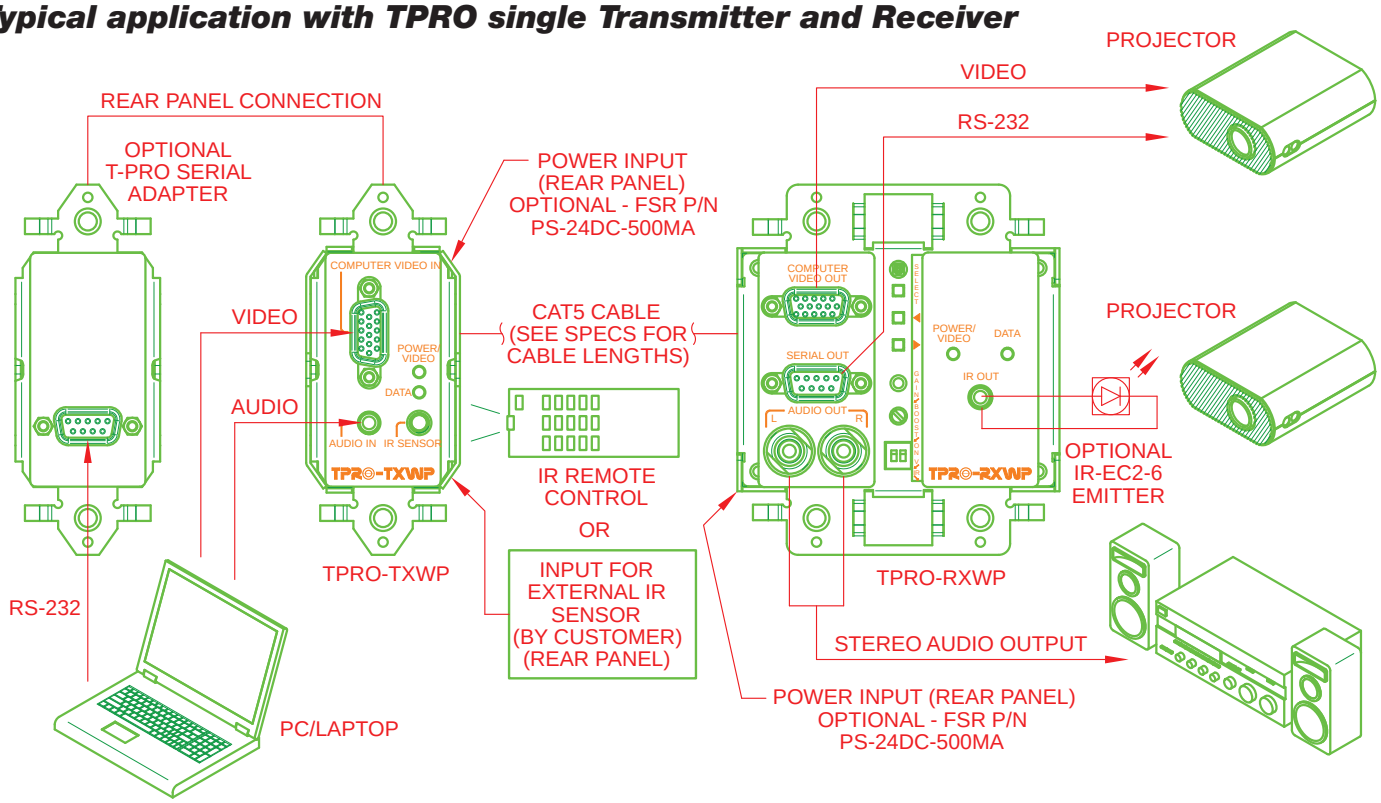
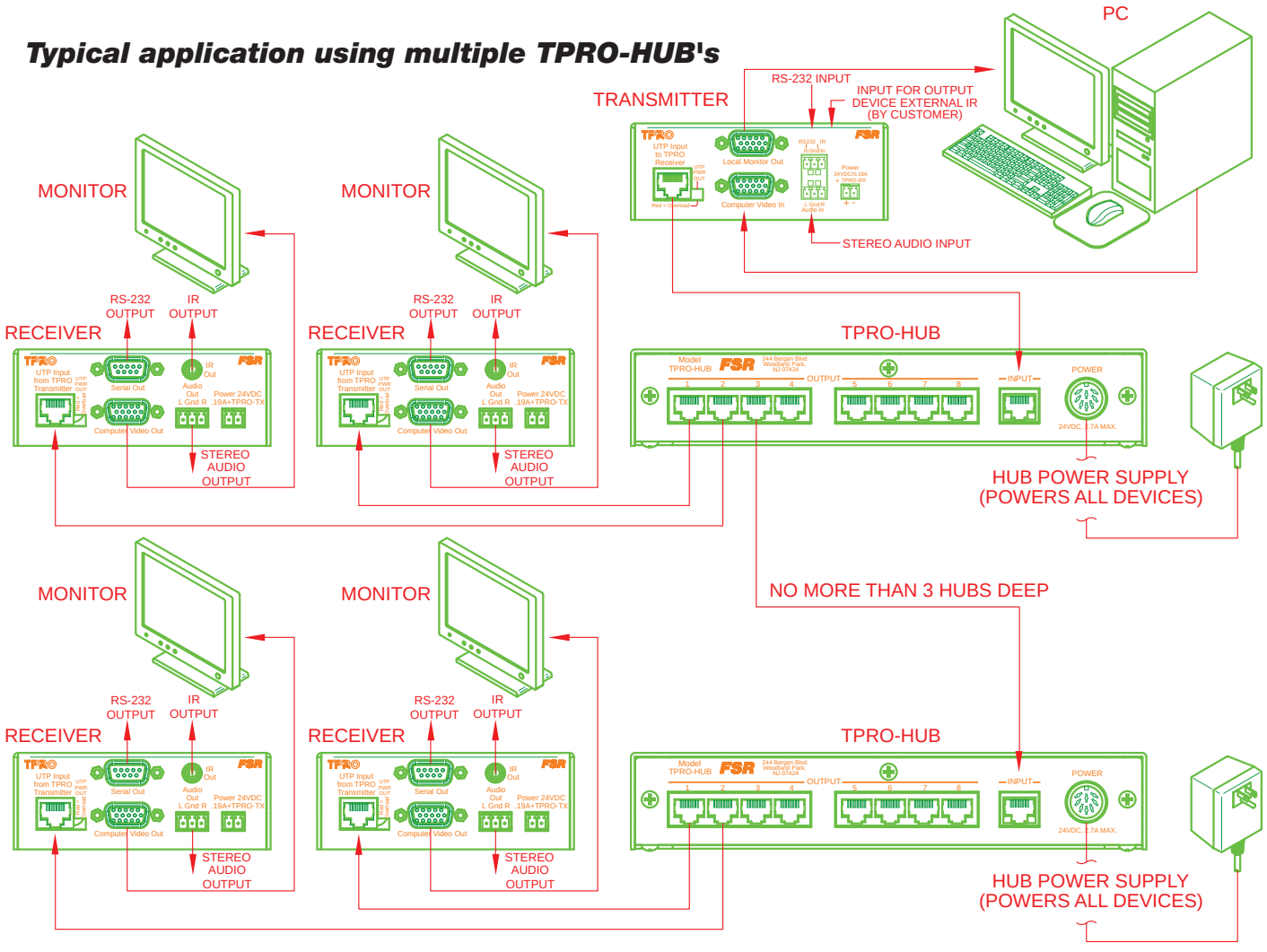
LIT 1283B

TwisterPro TYPICAL APPLICATIONS

Typical application with TPRO single Transmitter and Receiver



Typical application using multiple TPRO-HUB's



TwisterPro ORDERING INFORMATION

TwisterPro requires a Transmitter (choose your preference), a Receiver (choose your preference), and Power Supply. No power supply is needed if you are connecting to the TwisterPro Hub.

TwisterPro Wall Plate Transmitters - Includes Decora Trim Ring		
Item #	**Part #**	**Description**
16991	TPRO-TXWP-BLK	1 Gang Decora PC Video, St Aud, IR Transmitter Wall Plate - Black
16992	TPRO-TXWP-WHT	1 Gang Decora PC Video, St Aud, IR Transmitter Wall Plate - White
16993	TPRO-TXWP-IVO	1 Gang Decora PC Video, St Aud, IR Transmitter Wall Plate - Ivory
16994	TPRO-TXWPD-BLK	2 Gang Decora PC Video, St Aud, IR, Serial Transmitter - Black
16995	TPRO-TXWPD-WHT	2 Gang Decora PC Video, St Aud, IR, Serial Transmitter - White
16996	TPRO-TXWPD-IVO	2 Gang Decora PC Video, St Aud, IR, Serial Transmitter - Ivory

TwisterPro 1RU x 1/4 Wide Brick Transmitter		
16998	TPRO-TXD	PC Vid, St Aud, IR and Serial Transmitter 1 RU x 1/4 Wide

TwisterPro Wall Plate Receiver - Includes Decora Trim Ring		
17009	TPRO-RXWPD-BLK	2 Gang Decora PC Video, St Aud, IR, Serial Receiver - Black
17010	TPRO-RXWPD-WHT	2 Gang Decora PC Video, St Aud, IR, Serial Receiver - White
17011	TPRO-RXWPD-IVO	2 Gang Decora PC Video, St Aud, IR, Serial Receiver - Ivory
17012	TPRO-RXWPDS-BLK	2 Gang Decora PC Vid, St Aud, IR, Ser and Skew Comp Rx - Black
17013	TPRO-RXWPDS-WHT	2 Gang Decora PC Vid, St Aud, IR, Ser and Skew Comp Rx - White
17014	TPRO-RXWPDS-IVO	2 Gang Decora PC Vid, St Aud, IR, Ser and Skew Comp Rec - Ivory

TwisterPro 1RU x 1/4 Wide Brick Receiver		
17015	TPRO-RXD	PC Vid, St Aud, IR, Serial Receiver 1 RU x 1/4 Wide
17016	TPRO-RXDS	PC Vid, St Aud, IR, Serial and Skew Comp Receiver 1 RU x 1/4 Wide

TwisterPro Power Supply		
15552	PS-24DC-500MA	24VDC 500ma Power Supply

TwisterPro Hub		
17017	TPRO-HUB	1 in 8 Out Hub with Power Supply

TwisterPro Accessories		
17018	TPRO-Serial	DB-9 and Wiring Harness to connect to TXPro Wall Plate Transmitters
17019	IR-EC1-6	Single Head IR Emitter w/ 3.5mm Jack
17020	IR-EC2-6	Dual Head IR Emitter w/ 3.5mm Jack
15773	SS-P1DB-WHT	White Insert punched w/ 1 9-Pin D-Sub Hole
15774	SS-P1DB-IVO	Ivory Insert punched w/ 1 9-Pin D-Sub Hole
15775	SS-P1DB-BLK	Black Insert punched w/ 1 9-Pin D-Sub Hole
15706	SS-DPLT2-WHT	White Double Gang Decora Wall Plate
15707	SS-DPLT2-IVO	Ivory Double Gang Decora Wall Plate
15708	SS-DPLT2-BLK	Black Double Gang Decora Wall Plate
16808	RK-1	1/4 and 1/2 Rack Mounting Kit
16809	RK-2	1/4 and 1/2 Rack and Module Mounting Shelf