FOX T UWP 302

TWO INPUT FIBER OPTIC TRANSMITTER - DECORATOR-STYLE WALLPLATE

- **Transmits HDMI or analog video and stereo audio signals very long distances over fiber optic cabling**
- **Provides pixel-for-pixel performance with signals up to 1920x1200, including HDTV 1080p/60**
- **Digital conversion of analog video**
- **Auto-input switching**
- **HDCP compliant**
- **Key Minder® continuously verifies HDCP compliance**
- **EDID Minder® automatically manages EDID communication between connected devices**
- **Audio embedding with gain and attenuation control**
- **LED indicators for signal presence, HDCP, and power**
- **Mounts in an included three-gang decorator-style wallplate**
- **Available as 850 nm multimode and 1310 nm singlemode models**

The Extron FOX T UWP 302 Fiber Optic Transmitter is a two input decorator-style switcher for long haul transmission of HDCP-compliant HDMI, RGBHV, or HD component video and stereo audio over fiber optic cabling. With support for digital and analog video signals in a wall-mountable design, the FOX T UWP 302 is ideal for signal switching and long haul transmission in a wide range of applications.

DESCRIPTION

The Extron **FOX T UWP 302** Fiber Optic Extender is a two-input decorator-style switcher for long haul transmission of HDCP-compliant HDMI, RGBHV, or HD component video and stereo audio over fiber optic cabling. Engineered for reliability and exceptional high resolution image performance, it uses Extron all-digital technology to provide perfect pixel-for-pixel transmission of signals up to 1920x1200, including HDTV 1080p/60. Analog signals are digitized to ensure a high quality digital video signal is transmitted to the output destination. The FOX T UWP 302 also provides a host of integrator-friendly features, such as EDID Minder®, Key Minder®, automatic input switching, audio embedding, gain and attenuation adjustment, and real-time system monitoring. The FOX T UWP 302 occupies a three-gang space, and is available in multimode and singlemode models.

As part of the extensive FOX Series of fiber optic products from Extron, the FOX T UWP 302 is compatible with FOX Series HDMI, DVI Plus, DVI, and VGA receivers. This transmitter provides signal switching and extension over long distances for two sources: one digital and one analog. It can be used for simple point-to-point applications or in combination with FOX Series matrix switchers to support enterprise installations.

This two input switcher is ideal for a wide range of applications requiring long distance transmission of high resolution content with the highest quality. Because transmission of content is inherently secure and immune to outside interference, fiber applications are favored in government, military, and medical environments. The FOX T UWP 302 features industry standard LC-type connectivity.

To simplify integration and system operation, the FOX T UWP 302 features two Extron technologies: EDID Minder and Key Minder. EDID Minder automatically manages EDID by maintaining continuous EDID communication with the source, ensuring that sources power up properly and reliably output content for display. For HDMI signals with protected content, Key Minder authenticates and maintains continuous HDCP encryption to support quick and reliable switching in professional AV environments while enabling simultaneous distribution of a single source signal to one or more displays.

The transmitter accepts and digitizes unbalanced stereo audio. This allows the embedding of an audio signal into the output stream, reducing the number of cable runs to the destination. Additionally, the FOX T UWP 302 offers audio input gain and attenuation control, eliminating noticeable volume differences when switching between sources.

The included decorator-style wallplate is designed to provide a convenient AV connection point that blends in with the environment. The wall-mount design and reduced cabling needs of the FOX T UWP 302 allow for discreet placement in space-constrained applications.

FEATURES

- **Transmits HDMI or analog video and stereo audio signals very long distances over fiber optic cabling** – Provides high reliability and maximum performance over fiber optic cabling.
- **All digital technology provides pixel-for-pixel performance with signals up to 1920x1200, including HDTV 1080p/60** – Delivers pixel-for-pixel transmission of video signals to ensure optimal image quality at resolutions up to 1920x1200.
- **Digital conversion of analog video** – Analog signals are digitized, ensuring that a reliable, high quality digital video signal is sent to the output destination.
- **Auto-input switching** – Automatically switches to highest priority input with an active video signal for simplified operation.
- **HDCP compliant**
- **Key Minder® continuously verifies HDCP compliance** – Key Minder authenticates and maintains continuous HDCP encryption between input and output devices to ensure quick and reliable switching in professional AV environments, while enabling simultaneous distribution of a single source signal to one or more displays.
- **EDID Minder® automatically manages EDID communication between connected devices** – EDID Minder ensures that all sources power up properly and reliably output content for display.
- **Audio embedding** – When the analog input is selected, analog stereo audio signals are converted to digital HDMI audio.
- **Audio gain and attenuation adjustment**
- **LED indicators for signal presence, HDCP, and power** – Provides a visual indication of system status for real-time feedback and monitoring of key performance parameters.
- **Mounts in an included three-gang decorator-style wallplate** – The three-gang decorator-style wallplate is available in black or white to blend with a wide range of environments.
- **Available as an 850 nm multimode model for moderate-range transmissions up to 2 km (1.25 miles), and a 1310 nm singlemode model for extreme distances up to 30 km (18.75 miles)**
- **Industry standard LC connectors provide reliable physical connectivity and precise fiber core alignment**
- **Compatible with Extron FOX Matrix Switchers to create HDCP-compliant signal distribution systems up to 1000x1000 and larger**
- **Compatible with Extron FOX Series HDMI, DVI Plus, DVI, and VGA receivers**
- **Front panel USB configuration port**
- **Includes LockIt® HDMI cable lacing bracket**
- **Energy-efficient external universal power supply included, replacement part # 70-775-01** – Provides global compatibility, low power consumption, and reduced operating costs.

SPECIFICATIONS

NOTE: These units are class 1 laser products. They meet the safety regulations of IEC-60825.

OPTICAL FIBER INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER	
Number/type	1 or 2 fiber optic
Connectors	2 LC connectors
Operating distance	
Singlemode	30 km (18.75 miles) with singlemode (SM) cables
Multimode	300 m (984') with 62.5 µm OM1 multimode (MM) cables 1 km (3280') with 50 µm OM2 multimode (MM) cables 2 km (6561') with 50 µm OM3/OM4 2000/4700 MHz bandwidth laser optimized multimode cables
Nominal peak wavelength	850 nm for MM, 1310 nm for SM
Data rate	4.25 Gbps
Maximum pixel clock	165 MHz
Transmission power	
Singlemode	-5 dBm, typical
Multimode	-5 dBm, typical
Maximum receiver sensitivity	
Singlemode	-18 dBm, typical
Multimode	-12 dBm, typical
Optical loss budget	
Singlemode	13 dB, maximum
Multimode	7 dB, maximum

VIDEO	
Digital	
Resolution range	640x480 up to 1920x1200, 480p, 576p, 720p, 1080i, 1080p @ 60 Hz sampled pixel for pixel; higher resolution 2K (2048x1080) @ 60 Hz undersampled
Resolution range	640x480 to 1920x1200*, 480p, 576p, 720p, 1080i, 1080p sampled pixel for pixel
Formats	RGB and YCbCr digital video
Standards	DVI 1.0, HDMI compliant, HDCP 1.1, CEA-861E
Analog	
Maximum resolution	Up to 1920x1200 or 1080p @ 60 Hz pixel for pixel
Signal type	VGA-UXGA RGBHV, RGBS, component video
Gain	Unity
Pixel data bit depth	8 bits per channel, 3 channels (R, G, B; or YUV)

VIDEO INPUT	
Digital	
Number/signal type	1 single link HDMI (HDCP compliant)
Connectors	1 female 19-pin HDMI Type A
Equalization	Up to 50' of cable
Analog	
Number/signal type	1 VGA-UXGA RGBHV, RGBS, component video (YUVp/HDTV)
Connectors	1 female 15-pin HD
Nominal level	1 Vp-p for Y of component video 0.7 Vp-p for RGB and for R-Y and B-Y of component video
Minimum/maximum levels	Analog: 0.3 V to 0.75 Vp-p with no offset, terminated
Impedance	75 ohms
Horizontal frequency	30 kHz to 100 kHz
Vertical frequency	24 Hz to 120 Hz
Return loss	<-40 dB @ 5 MHz

SYNC	
Input type	RGBHV, RGBS, bi-level and tri-level component video (480p, 576p, 720p, 1080i, 1080p)
Input level	2.5 V to 5.0 Vp-p for RGBHV or RGBS 0.6 Vp-p for component video with tri-level sync 0.3 Vp-p for component video with bi-level sync
Input impedance	510 ohms
Polarity	Positive or negative (follows input or can be set by user)

AUDIO	
Gain	
Range	Adjustable, -18 dB to +10 dB
Default	Unbalanced output: -6 dB
Frequency response	20 Hz to 20 kHz ±0.5 dB
THD + Noise	0.10% @ 1 kHz at nominal level
S/N	>80 dB at maximum output (unweighted)
Audio bits per sample	18 bits per channel, 2 channels (L, R)
Sampling rate	48 kHz

AUDIO INPUT	
Number/signal type	1 unbalanced stereo
Connectors	(1) 3.5 mm mini stereo jack
Impedance	>10k ohms unbalanced
Nominal level	-10 dBV (316 mVrms)
Maximum level	+7 dBV unbalanced

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu

COMMUNICATIONS	
Serial control port	
Control	1 RS-232, 3.5 mm captive screw connector, 5 pole (3 pins are used, "Remote RS-232", shared with alarm port), side panel
USB control port	1 front panel female mini USB B

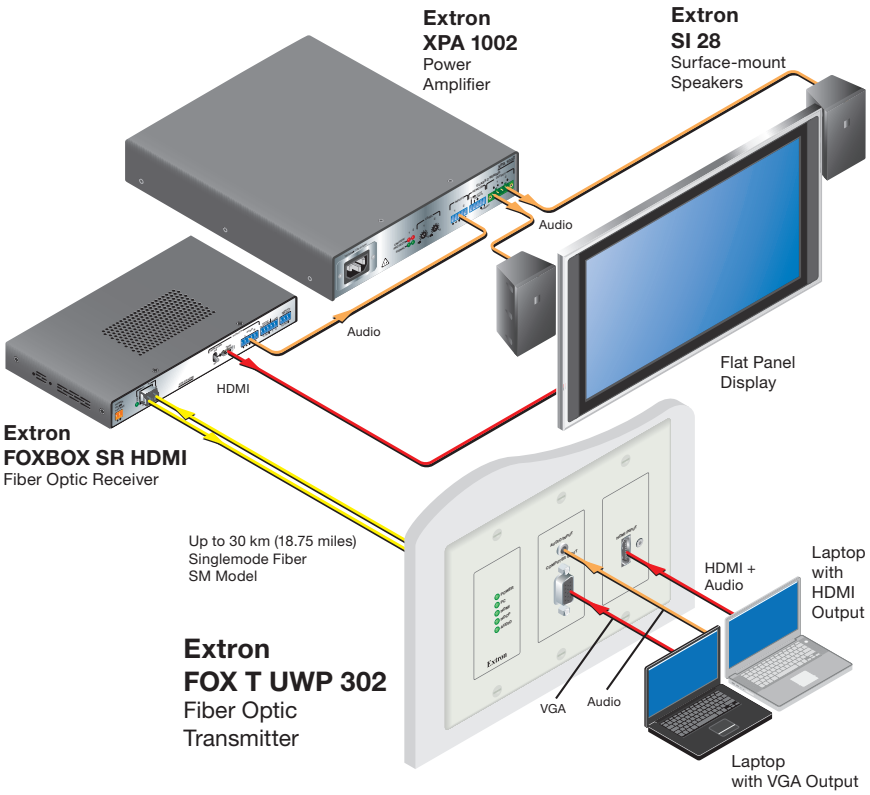
GENERAL	
Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +104 °F (0 to +40 °C) / 10% to 90%, noncondensing
Cooling	Convection, vents on the rear and sides
Thermal dissipation	
Device	20.6 BTU/hr
Device and power supply	26.2 BTU/hr
Mounting	
Furniture or wall mount	Yes, with standard decorator-style wall plate
Enclosure type	Metal
Enclosure dimensions	
Faceplates	Three [2.6" H* x 1.3" W x 0.3" D (6.6 cm H* x 3.3 cm W x 0.6 cm D)] (Depth excludes connectors. Fits the openings in a 3 gang decorator-style wallplate.) *Overall height is 4.1" (10.4 cm) including mounting tabs.
Device	4.1" H x 5.36" W x 2.21" D (3-gang wide)
Product weight	0.7 lbs (0.3 kg) per unit
Vibration	ISTA (International Safe Transit Association)
Regulatory compliance	
Safety	CE, c-UL, UL
EMI/EMC	CE, C-tick, FCC Class A, ICES, VCCI Class A
Environmental	Complies with the appropriate requirements of RoHS, WEEE
Warranty	3 years parts and labor

NOTE: All nominal levels are at ±10%.

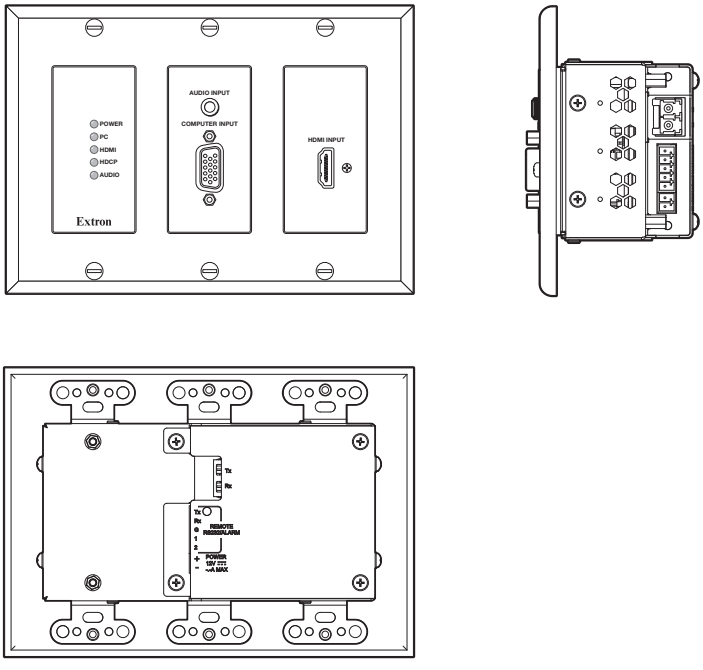
Model	Version Description	Part number
FOX T UWP 302 MM	Multimode - Wallplate Transmitter Black	60-1232-11
FOX T UWP 302 SM	Singlemode - Wallplate Transmitter Black	60-1232-12
FOX T UWP 302 MM	Multimode - Wallplate Transmitter White	60-1232-13
FOX T UWP 302 SM	Singlemode - Wallplate Transmitter White	60-1232-14

For complete specifications, please go to www.extron.com
Specifications are subject to change without notice.

APPLICATION DIAGRAMS



PANEL DRAWINGS



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