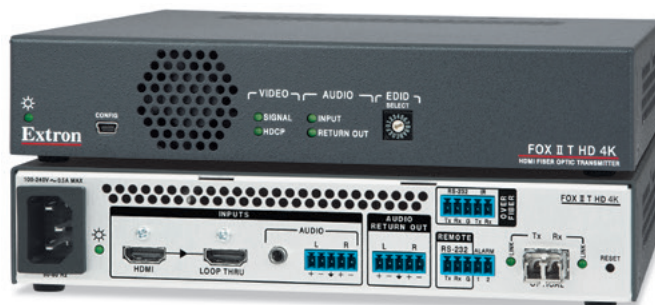


# FOX II T HD 4K

FIBER OPTIC TRANSMITTER FOR  
HDMI, MULTI-CHANNEL AUDIO,  
RS-232, AND IR



- ▶ Transmits HDMI video, multi-channel audio, RS-232 control, and IR control signals over fiber optic cabling
- ▶ Supports lossless 4K video up to 4096x2160 at 30 Hz with a 4:4:4 color space over one fiber
- ▶ HDCP compliant
- ▶ Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- ▶ EDID Minder® automatically manages EDID communication between connected devices
- ▶ Buffered HDMI input loop through
- ▶ Compatible with the Extron FOX II R DP 4K receiver
- ▶ Easy setup and commissioning with Extron's PCS - Product Configuration Software
- ▶ 850 nm multimode and 1310 nm singlemode models available



The Extron FOX II T HD 4K is a transmitter for long haul extension of HDMI video, multi-channel audio, RS-232 control, and IR control signals over fiber optic cabling. It provides a variety of new integrator-friendly capabilities, including support for 4K resolutions. Use of the FOX II T HD 4K simplifies the integration of 4K HDMI sources in a fiber optic AV system.



**Extron Electronics**  
INTERFACING, SWITCHING AND CONTROL

## DESCRIPTION

The Extron **FOX II T HD 4K** Fiber Optic Transmitter provides long haul extension of HDMI video, multi-channel audio, RS-232 control, and IR control signals over fiber optic cabling. Engineered with uncompromising quality and proven performance, it uses Extron all-digital technology to deliver lossless HDMI video signals at resolutions up to 4096x2160. This HDCP-compliant transmitter brings new features to the FOX II Series, including support for 4K video along with input loop-through for a local monitor. The FOX II T HD 4K also includes many integrator-friendly features such as Key Minder®, EDID Minder®, audio embedding, audio gain and attenuation, an internal test pattern, as well as real-time system monitoring.

The FOX II T HD 4K supports resolutions up to 4K to ensure that content is delivered with the highest quality possible over a fiber optic cable. A single transmitter is capable of sending 4K video images up to 4096x2160 at 30 Hz with a 4:4:4 color space over one fiber. It also features vertical sync lock, enabling video images up to 4096x2160 at 60 Hz with a 4:4:4 color space to be transmitted over two fibers using two transmitters and receivers.

## KEY FEATURES

- ▶ Transmits HDMI video, multi-channel audio, RS-232 control, and IR control signals over fiber optic cabling
- ▶ Supports lossless 4K video up to 4096x2160 at 30 Hz with a 4:4:4 color space over one fiber
- ▶ Vertical sync lock enables lossless video transmission up to 4K at 60 Hz with a 4:4:4 color space using two transmitters
- ▶ HDCP compliant
- ▶ User-selectable HDCP authorization
- ▶ Key Minder continuously verifies HDCP compliance for quick, reliable switching
- ▶ EDID Minder automatically manages EDID communication between connected devices
- ▶ Buffered HDMI input loop-through
- ▶ Bidirectional RS-232 and IR signals over fiber optic cabling
- ▶ Compatible with Extron FOX Series matrix switchers to create HDCP-compliant signal distribution systems up to 1000x1000 and larger
- ▶ Available in multimode and singlemode models

	Maximum Resolution	Maximum Frame Rate	Color Sampling	Bits Per Pixel
1 Fiber	4096x2160	30	4:4:4	24
2 Fibers	4096x2160	60	4:4:4	24

\* Two transmitters are configured to send left and right video images, each at 2048 x 2160 at 60 Hz.

## SPECIFICATIONS

<b>NOTE:</b> These transmitters are class 1 laser products. They meet the safety regulations of IEC-60825.		
<b>OPTICAL FIBER INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER</b>		
Connectors	2 LC connectors	
Nominal peak wavelength	850 nm for multimode, 1310 nm for singlemode	
<b>Optical loss budget</b>		
Singlemode	13 dB, maximum	
Multimode	7 dB, maximum	
<b>VIDEO</b>		
Maximum pixel clock	300 MHz	
Maximum resolution	640x480 up to 4096x2160 @ 30 Hz, including 2K, and 1920x200, including 480p, 576p, 720p, 1080i @ 25/30 Hz, 1080p @50/60Hz	
Formats	RGB and YCbCr digital video	
Standards	DVI 1.0, HDMI, HDCP 1.1, CEA-861E	
<b>VIDEO INPUT AND LOOP THROUGH – TRANSMITTERS</b>		
Number/signal type	1 HDMI input 1 HDMI loop-through	
<b>AUDIO INPUT</b>		
Connectors	1 female HDMI (shared with video input) (1) 3.5 mm stereo jack (1) 3.5 mm captive screw connector, 5 pole	
Source formats	PCM, Dolby TrueHD, Dolby Digital Plus, Dolby Digital EX, Dolby® Digital 2/0, Dolby Digital 2/0 Surround, Dolby Digital 5.1, DTS-HD Master Audio, DTS-HD, DTS Digital Surround 5.1, DTS-ES Matrix 6.1, DTS-ES Discrete 6.1	
<b>AUDIO RETURN OUTPUT</b>		
Number/signal type	1 stereo/mono, balanced or unbalanced	
<b>CONTROL/REMOTE</b>		
Serial control port		
Control	1 female mini USB port B (front panel) 1 RS-232, 3.5 mm captive screw connector, 5-pole (3 pins are used), rear panel	
Pass-through	1 RS-232, 3.5 mm captive screw connector, 5-pole (3 pins are used), rear panel	
IR control port	(1) 3.5 mm captive screw connector, 5 pole (connector is shared with RS-232 pass thru) TTL level (0 to 5V) modulated infrared control from 30kHz to 40 kHz	
<b>GENERAL</b>		
Power supply	Internal Input: 100-240 VAC, 50-60 Hz	
Regulatory compliance		
Safety	CE, c-UL, UL	
EMI/EMC	CE, C-tick, FCC Class A, ICES, VCCI	
Environmental	Complies with the appropriate requirements of RoHS, WEEE.	
Warranty	3 years parts and labor	
<b>NOTE:</b> All nominal levels are at ±10%.		
<b>Model</b>	<b>Version Description</b>	<b>Part number</b>
FOX II T HD 4K MM	HDMI Transmitter - Multimode	60-1351-11
FOX II T HD 4K SM	HDMI Transmitter - Singlemode	60-1351-12

For complete specifications, please go to [www.extron.com](http://www.extron.com)  
Specifications are subject to change without notice.

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