

IMPORTANT:
Go to www.extron.com for the complete user guide, installation instructions, and specifications before connecting the product to the power source.

This guide provides quick start instructions for an experienced installer to set up and operate the Extron FOX II T/R DP 4K fiber optic extenders.

WARNING: These units output continuous invisible light, which may be harmful to the eyes; use with caution. For additional safety, plug the attached dust caps into the optical transceivers when the fiber optic cable is unplugged.

CLASS 1 LASER PRODUCT, see the *FOX II T/R DP 4K User Guide*, at www.extron.com.

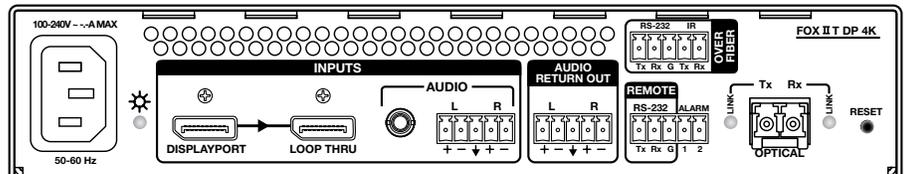
AVERTISSEMENT : Le FOX II T/R DP 4K émet une lumière invisible en continu (conforme à la classe 1) qui peut être dangereux pour les yeux, à utiliser avec précaution. Branchez les protections contre la poussière dans l'ensemble émetteur/récepteur lorsque le câble fibre optique est débranché.

Produit laser de classe 1, voir le *FOX II T/R DP 4K User Guide* sur www.extron.com (en anglais).

Installation

Step 1 – Mounting

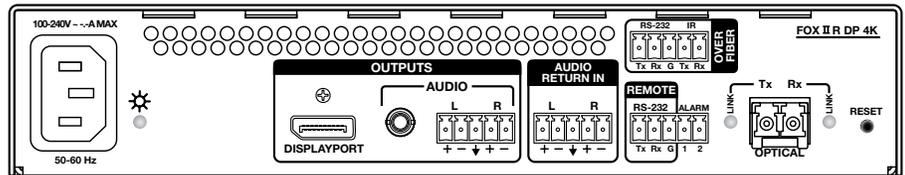
Turn off or disconnect all equipment power sources and mount the transmitter as required. For mounting details and considerations, see the *FOX II T/R DP 4K User Guide* at www.extron.com.



FOX II DP 4K Transmitter Rear Panel

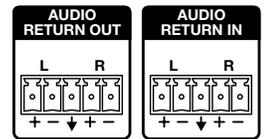
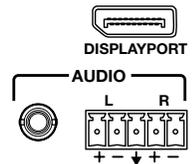
Step 2 – Input and Output Connections

- Connect a DisplayPort video source to the transmitter DisplayPort input connector.
- If desired, connect a DisplayPort video display to the transmitter Loop-Thru connector for a local display.



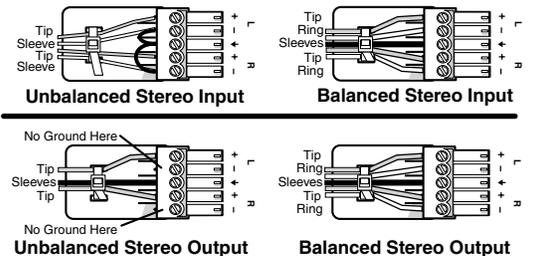
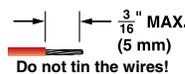
FOX II DP 4K Receiver Rear Panel

- Connect a DisplayPort video display to the receiver DisplayPort output connector.
- Connect an audio input device to either the Audio 3.5 mm mini jack or the Audio 5-pole captive screw connector on the transmitter. See the drawing below step 2g to make connections on the captive screw connector.
- Connect an audio output device to either or both the 3.5 mm mini jack or the Audio 5-pole captive screw connector on the receiver. See the drawing below step 2g to make connections on the captive screw connector.
- For optional returned audio, connect an audio output device to the Audio Return Out 5-pole captive screw connector on the transmitter. See the drawing below step 2g to make connections on the captive screw connector.
- For optional returned audio, connect an audio input device to the Audio Return In 5-pole captive screw connector on the receiver. See the drawing below to make connections on the captive screw connector.



ATTENTION:

- For unbalanced audio, connect the sleeves to the ground contact. **DO NOT** connect the sleeves to the negative (-) contacts.
- Pour l'audio asymétrique, connectez les manchons au contact au sol. **NE PAS** connecter les manchons aux contacts négatifs (-).

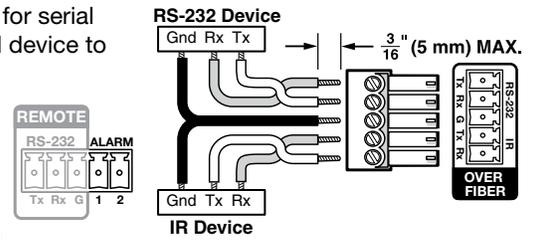


NOTE: For returned audio, above, you must also do the following:

- Connect an audio input device to the Audio Return In 5-pole captive screw connector on the receiver.
- Install the optional Receiver-Tx-to-transmitter-Rx cable in [step 3b](#).

FOX II T/R DP 4K • Setup Guide (Continued)

- h. If you want the FOX II DP 4K units to pass serial or IR data or control signals, such as for serial control of a projector, connect the primary device to the transmitter and the controlled device to the receiver via the Over Fiber 5-pole captive screw connectors on both units.
- i. For remote monitoring of the status of the Rx optical link on either the transmitter or receiver, connect a locally constructed or obtained device to the two rightmost poles of the Alarm and Remote RS-232 5-pole captive screw connector on that unit. The unit shorts both poles together when no light is detected.



NOTE: The transmitter port reports the status of the link from the receiver. The receiver port reports the status of the link from the transmitter.

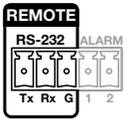
- j. For remote control of a unit and for loading firmware, connect a host device, such as a computer or control system, to either of the following ports on the unit to be controlled:

Configuration port — The front panel USB mini-B connector.

NOTE: Extron recommends performing firmware updates via the Configuration port **only**.

Remote RS-232 port — The rear panel Remote RS-232 port, the 3 leftmost poles of this 5-pole captive screw connector. The protocol for the Remote port is as follows:

- 9600 baud
- no parity
- 8 data bits
- 1 stop bit
- no flow control



Step 3 – Throughput Connections

NOTE: See the two fiber cable connection drawings below. You can connect the transmitter to a compatible receiver in one of two ways:

- One way (transmitter to receiver) only, perform step 3a.
- Two way (transmitter to receiver and return), perform steps 3a and 3b.

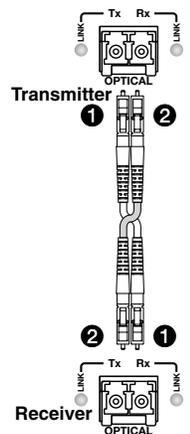
- a. Connect the fiber between the Tx port on the transmitter and the Rx port on the receiver (1, at right).

NOTE: Ensure that the transmitter and connected receiver are the same transmission mode, singlemode (SM) or multimode (MM) and that you use the correct SM or MM fiber cable to connect the devices

- b. If you want the receiver to return serial data (such as responses from a controlled device), IR data, or returned audio to the transmitter, connect a cable between the Tx port on the receiver and Rx port on the transmitter (2).

Tx Link and Rx Link LEDs — When lit, the link is active (light is output [Tx] or received [Rx]).

NOTE: The Link LEDs indicate transmission of light only, not whether there is data encoded in the optical link.



Operation

After all receivers, the transmitter, and their connected devices are powered up, the system is fully operational. If any problems are encountered, verify that the cables are routed and connected properly and that all display devices have identical resolutions and refresh rates. If problems persist, call the Extron S3 Sales & Technical Support Hotline at the number that is closest to you. See the contact numbers on the [last page](#) of this guide for the Extron office nearest you.

Indications

NOTE: The figure below right is of a receiver. A transmitter has similar indications.

Power (☼) LED — Indicates that power is applied to the unit.

Video LEDs —

Signal LED — Lights when the unit detects an input video signal.

HDCP LED — Lights when the input signal is HDCP encrypted.

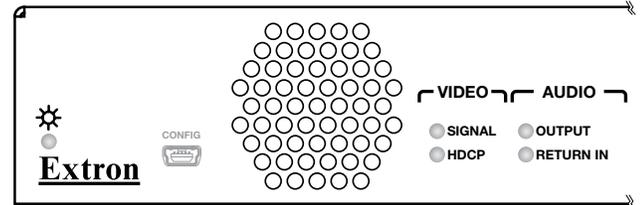
Audio LEDs —

Input LED (transmitter) — Lights when an analog audio or PCM digital audio signal remains above -35 dBV. The LED goes unlit if the audio signal level drops below the threshold for 10 seconds or longer.

Output LED (receiver) — Lights when an analog audio or PCM digital audio signal remains above -35 dBV. The LED goes unlit if the audio signal level drops below the threshold for 10 seconds or longer.

Return Out LED (transmitter) — Lights when analog audio is present on the transmitter Return Audio Output connector.

Return In LED (receiver) — Lights when analog audio is present on the receiver Return Audio Input connector.



EDID

EDID Minder switch — Set this switch to one of the positions at right to select the source of the DDC or a specific resolution.

Position 0 — An EDID that has previously been captured from a connected display or manually imported via an SIS command or the Product Configuration Software.

Position 1 — The EDID is selected via the Remote or USB port, using an SIS command or the Extron Product Configuration Software.

Position

2 — Use the EDID from the display connected to the receiver.



Pos.	Source or resolution	Pos.	Resolution	Pos.	Resolution
0	User recorded EDID	6	1366x768	C	2048x2160
1	Selected via RS-232	7	1440x900	D	2560x1600
2	Display on Rx output	8	1680x1050	E*	3840x2160
3	Display on Tx loop-through	9	1920x1080	F	N/A
4	1280x720	A	1920x1200		
5	1280x800	B	2048x1536		

* 30 Hz

NOTE: EDID from the display connected to the receiver requires connection of both fiber cables.

Position 3 — Use the EDID from the display connected to the transmitter loop-through.

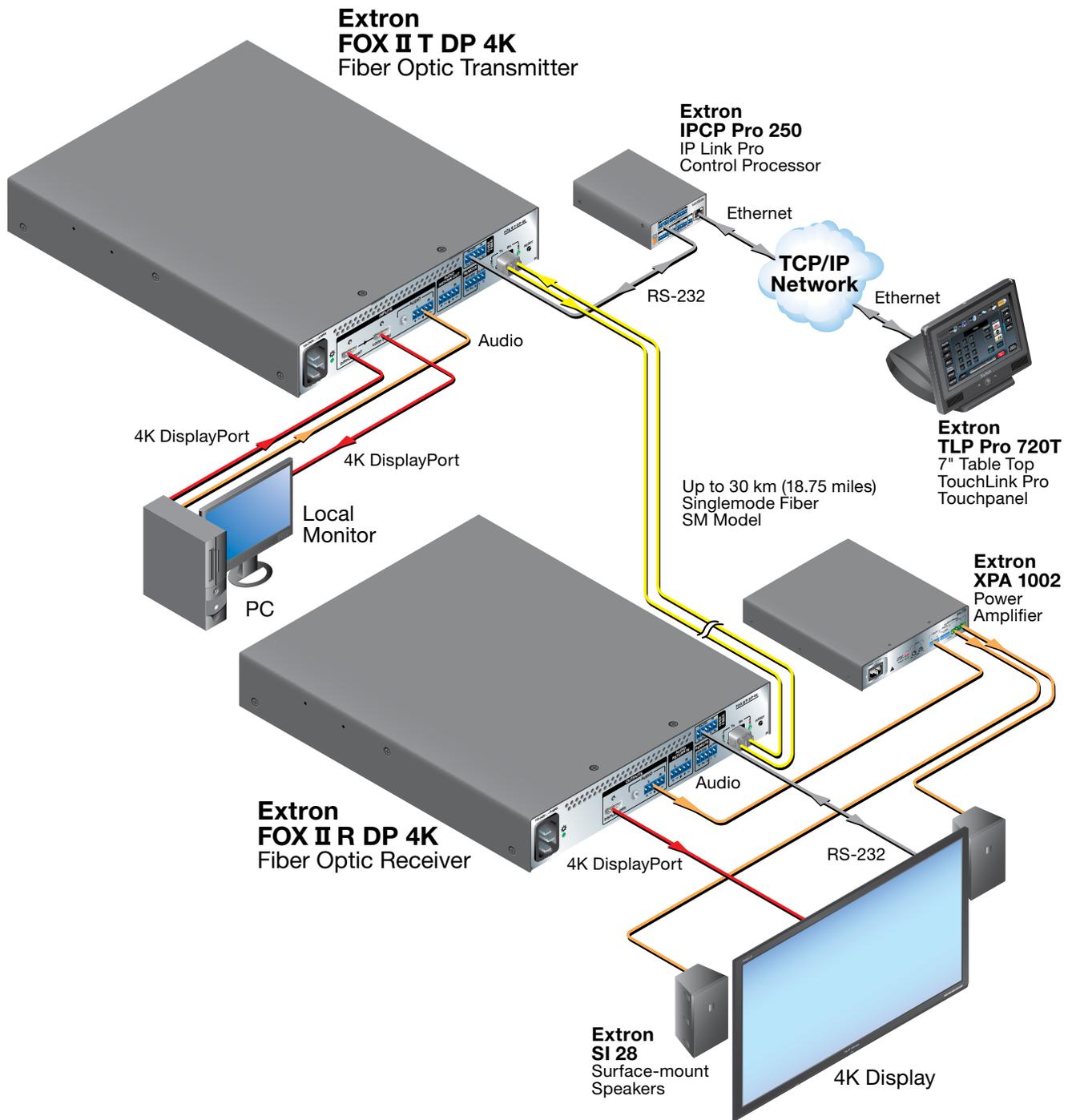
Positions 4 through E — Specify a resolution. The table at right identifies the resolutions associated with the switch positions. All resolutions are at 60 Hz with the exception of 4096x2160 (E), which is 30 Hz.

Position F — No EDID assigned.

Remote Control

See the *FOX II T/R DP 4K User Guide*, available at www.extron.com, for details on operating and monitoring the transmitter using either SIS commands or the Extron Product Configuration Software.

Application Diagram



For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the [Extron Safety and Regulatory Compliance Guide](#) on the Extron website.