

# FOX II T/R DP • Setup Guide

**IMPORTANT:**  
Go to [www.extron.com](http://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 fiber optic extenders.

**WARNING: Vision hazard** — This unit outputs continuous laser 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.

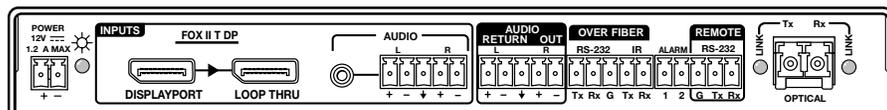
**CLASS 1 LASER PRODUCT**, see the *FOX II T/R DP User Guide*, available at [www.extron.com](http://www.extron.com).

## Installation

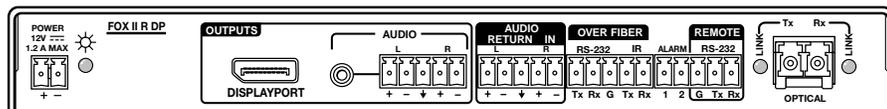
### Step 1 – Mounting

Turn off or disconnect all equipment power sources and mount the transmitter and receiver as required.

**ATTENTION:** This unit is very warm in operation. Allow proper spacing for ventilation



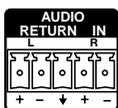
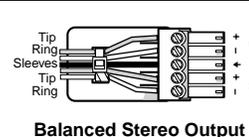
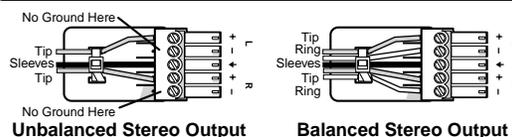
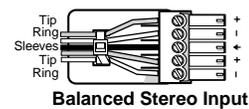
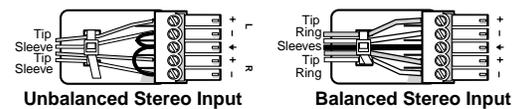
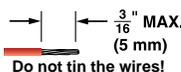
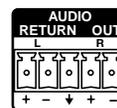
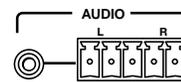
FOX II DP Transmitter Rear Panel



FOX II DP Receiver Rear Panel

### Step 2 – Input and Output Connections

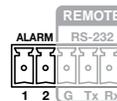
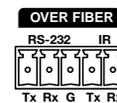
- Connect a DisplayPort video source to the transmitter DisplayPort input connector.
- If desired**, connect a DisplayPort video display to the transmitter Loop-Thru connector for a local display.
- Connect a DisplayPort video display to the receiver DisplayPort output connector.
- Connect an audio input device to either the Audio 3.5 mm mini jack or the Audio 5-pole captive screw connector on the transmitter. See the drawing to the right of 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 to the right of 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 right 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 above to make connections on the captive screw connector.



**ATTENTION:** For unbalanced audio output, connect the sleeves to the ground contact. **DO NOT** connect the sleeves to the negative (-) contacts.

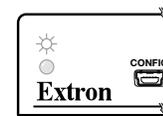
**NOTE:** For returned audio, above, and RS-232 and IR responses (from the receiver to the transmitter), below, you must install the Receiver-Tx-to-transmitter-Rx cable in [step 3b](#) and leave the receiver in the return link (default) configuration (see [Return Link Mode](#) on the next page).

- If you want the FOX II DP 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 secondary device to the receiver via the Over Fiber 5-pole captive screw connectors on **both** units.
- 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 left Alarm 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.

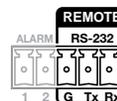
- For remote control of a unit and loading firmware, connect a host device, such as a computer or control system, to either of the following ports on the unit to be controlled:



**Configuration port** — A front panel mini USB connector.

**Remote RS-232 port** — The rear panel Remote RS-232 3-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



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

## Step 3 – Throughput Connections

**NOTE:** See the two fiber cable connection drawings below. You can connect the transmitter and one or more receivers in one of two ways:

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

- Connect the fiber between the Tx port on the transmitter and the Rx port on the receiver.
- If you want the receiver to return serial data (such as responses from a controlled device) to the transmitter, connect a cable between the Tx port on the receiver and Rx port on the transmitter.

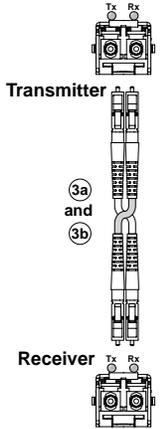
## Operation

After the receiver, 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.

## Return Link Mode

The receiver can operate in a Return link mode, in which the receiver outputs data on its Tx connector for return to the transmitter. Use SIS commands to toggle between return mode on and off. Connect a PC to the receiver and issue the following command: `66*0*n#`, where  $n = 0$  = disable and  $1$  = enable return link (**default mode**).

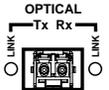
**NOTE:** The disable return link function is primarily used and recommended when the transmitting device is a FOX 500 DA6 and the receiver is connected to any of outputs 2 through 6 on the DA.



## Indications

**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.



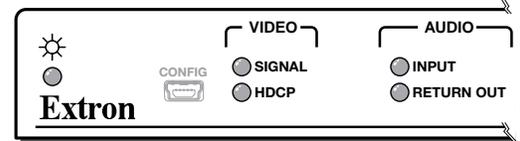
**Power LED** — Indicates that power is applied to the unit.

**Video Signal LED** — Lights on both units when the transmitter detects a signal on its video input.

**HDCP LED** — Lights on both units when the input signal is HDCP encrypted.

**Audio Input LED** — Lights on both units when the transmitter detects a low level audio signal for a short period of time.

**Audio Return Out (transmitter) and In (receiver) LEDs** — These LEDs light when the unit detects a low level analog audio signal for a short period of time.



## EDID

**EDID Select rotary 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 been captured from a connected display.

**Position 1** — The EDID is selected via the remote or USB port on the transmitter **only**, using an SIS command or the Extron Product Configuration Software.

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

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

**Positions 4 through F** — Specify a resolution. The table at right identifies the resolutions associated with the switch positions. All resolutions are at 60 Hz.

Pos.	Source or resolution	Pos.	Resolution	Pos.	Resolution
0	User recorded EDID	6	1280 x 800	C	1920 x 1080
1	Selected via RS-232	7	1366 x 768	D	1920 x 1200
2	Display on Rx output	8	1400 x 1050	E	2048 x 1536
3	Display on Tx loop-through	9	1440 x 900	F	2560 x 1600
4	1024 x 768	A	1600 x 1200		
5	1280 x 720	B	1680 x 1050		

Extron USA - West Headquarters	Extron USA - East	Extron Europe	Extron Asia	Extron Japan	Extron China	Extron Middle East
+800.633.9876 Inside USA/Canada Only +1.714.491.1500 +1.714.491.1517 FAX	+800.633.9876 Inside USA/Canada Only +1.919.863.1794 +1.919.863.1797 FAX	+800.3987.6673 Inside Europe Only +31.33.453.4040 +31.33.453.4050 FAX	+800.7339.8766 Inside Asia Only +65.6383.4400 +65.6383.4664 FAX	+81.3.3511.7655 +81.3.3511.7656 FAX	+400.883.1568 Inside China Only +86.21.3760.1568 +86.21.3760.1566 FAX	+971.4.2991800 +971.4.2991880 FAX