

**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 FOX3 T 201 Fiber Optic transmitter. This transmitter can extend resolutions up to 4K @ 60Hz, 4:4:4 video, audio, RS-232, and IR over fiber. The FOX3 T 201 is available in singlemode (SM) or multimode (MM) transmission modes.

**WARNING:** The FOX3 T 201 outputs continuous invisible light (Class 1 rated), which may be harmful to the eyes; use with caution. Plug the attached dust caps into the optical transmitter when the fiber cable is unplugged.

**CLASS 1 LASER PRODUCT**, see the *FOX3 T 201 User Guide*, at [www.extron.com](http://www.extron.com).

**AVERTISSEMENT :** Le FOX3 T 201 émet une lumière invisible en continu (conforme à la classe 1) qui peut être dangereux pour les yeux, à utiliser avec précaution. Associez les bouchons anti-poussière à l'ensemble émetteur optique lorsque le câble fibre optique est débranché.

**Produit laser de classe 1**, voir le *FOX3 T 201 User Guide* sur [www.extron.com](http://www.extron.com) (en anglais).

### Installation

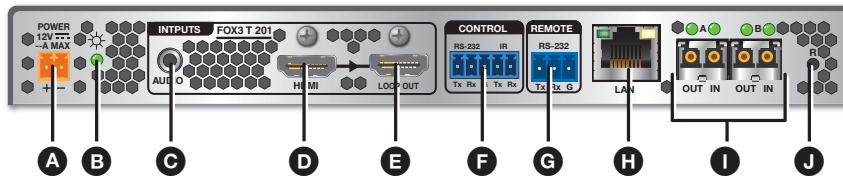


Figure 1. FOX3 T 201 Rear Panel

- A** Power Inlet
- B** Power LED
- C** Audio input
- D** HDMI input
- E** HDMI Loop Out
- F** Control RS-232/IR
- G** Remote RS-232
- H** LAN
- I** SFP module and LEDs
- J** Reset button

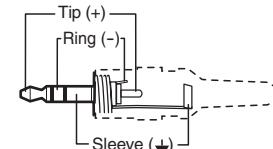
### Step 1 – Mounting

Turn off or disconnect all equipment power sources and mount the transmitter as required. For mounting details and considerations, see the *FOX3 T 201 User Guide* at [www.extron.com](http://www.extron.com).

### Step 2 – Output Connections

- a. Connect an HDMI video source to the HDMI input (see figure 1, **D**) on the transmitter.
- b. **If desired**, connect an HDMI video display to the HDMI Loop Out port (**E**) for a local display.
- c. Connect an audio input device to the Audio 3.5 mm audio jack (**C**) on the transmitter (see figure 2).

**NOTE:** The analog audio input on this connector is in addition to the digital audio embedded in the HDMI inputs. See figure 2 to identify the connector tip, ring, and sleeve when making connections for the transmitter from existing audio cables. A mono audio connector consists of the tip and sleeve. A stereo audio connector consists of the tip, ring, and sleeve.



3.5 mm Stereo Plug Connector (balanced)

Figure 2. Audio Wiring Diagrams

### Step 3 – Control Connections

- a. To pass serial, IR data, or control signals, such as for serial control of a projector, connect the master device to the transmitter and the controlled device to the receiver via the CONTROL RS-232/IR 5-pole captive screw connector (**F**) (see figure 3 for wiring).

**NOTE:** For returned RS-232 and IR responses (from the receiver to the transmitter) install the receiver-Tx-to-transmitter-Rx cable in [step 4b](#) on page 2.

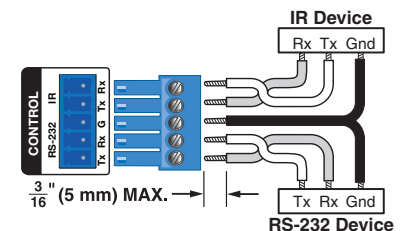


Figure 3. RS-232 and IR Wiring

## FOX3 T 201 • Setup Guide (Continued)

- b. For remote control of a unit and loading firmware (LAN or USB only), connect a host device, such as a computer or control system, to one of the following ports (see the *FOX3 T 201 User Guide*, available at [www.extron.com](http://www.extron.com), for details):
- **Remote RS-232 port** — Connect to the 3-pole captive screw connector to this port (see [figure 1](#), **G** on page 1). The protocol for the Remote port is as follows:
    - 9600 baud
    - no parity
    - 8 data bits
    - 1 stop bit
    - no flow control
  - **LAN Ethernet port** — Connect an RJ-45 connector to this port (**H**).
  - **USB Configuration port** — Connect a USB mini-B connector to this port (see [figure 5](#), **B** on page 3).

### Step 4 – Throughput Connections

**NOTE:** See figure 4 for fiber cable connections. Connect the transmitter to a receiver in one of three ways:

- One way (transmitter to receiver) only, perform step 4a.
- Two way (transmitter to receiver and return), perform steps 4a and 4b.
- Output B is available to transmit 4K @ 60 Hz uncompressed signal when the FOX3 Uncompressed Video LinkLicense is purchased.

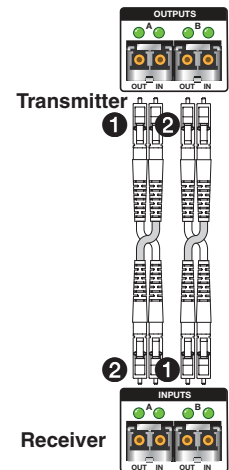
- a. Connect the fiber between the A Out port on the transmitter and the A In port on the receiver (**1**).

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

- b. To return serial data from the receiver (such as responses from a controlled device) or IR data to the transmitter, connect a cable between the A Out port on the receiver and A In port on the transmitter (**2**).
- c. To transmit an uncompressed 4K @ 60 Hz signal, using the Uncompressed Video LinkLicense, repeat step 4a on the SFP B port on the receiver

#### SFP Link LEDs —

- **Transmit Optical OUT LED** lights solid green when powered and lights off when there is no power on the endpoint.
- **Receive Optical IN LED** lights solid green when light is present and lights off when there is no power or light present.



**Figure 4.**  
**Fiber Cable Connection**

### Step 5 – Power Connection

Connect the provided external 12 V, 2.0 A power supply to the 2-pole captive screw connector for local power (see [figure 1](#), **A** on page 1). The power LED lights (**B**) when the unit is receiving power.

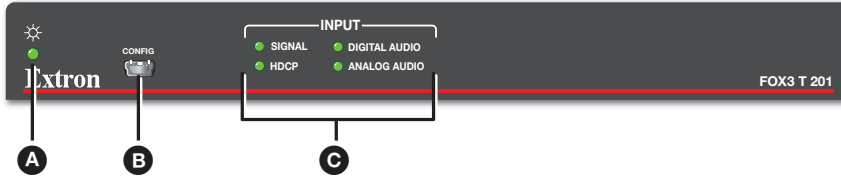
#### ATTENTION:

- See the attention notices in the Power Input section of the *FOX3 T 201 User Guide* for important information about using power supplies.
- Reportez-vous aux précautions d'emploi incluses dans la section sur l'entrée d'alimentation du *FOX3 T 201 User Guide* pour des informations essentielles sur l'utilisation des sources d'alimentation.

### Step 6 - Verify Operation

After the transmitter, receiver, 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 the display device has a compatible resolution and refresh rate. If problems persist, call the Extron S3 Sales & Technical Support Hotline (see the [contact number](#) on page 4).

## Operation



**Figure 5. FOX3 T 201 Front Panel**

- A Power LED** — Indicates power is applied to the unit.
- B USB Config port** — Connect a USB mini-B cable to a computer to configure the device and update the firmware via Product Configuration Software (PCS), Simple Instruction Set (SIS) commands, or internal web pages.
- C Input LEDs** —
  - **Signal** — Lights when the unit detects an input video signal.
  - **HDCP** — Lights when the input signal is HDCP encrypted.
  - **Digital Audio** — Lights when digital audio is selected.
  - **Analog Audio** — Lights when analog audio input is selected.

## Reset

Press the rear panel recessed reset button (see [figure 1, J](#) on page 1) if the FOX3 transmitter firmware is corrupted or the unit gets disconnected during the update process. The different resets allow the device to revert to the factory loaded firmware, reset IP settings, or reset configuration to default (see the Reset Modes table, for details on the reset modes).

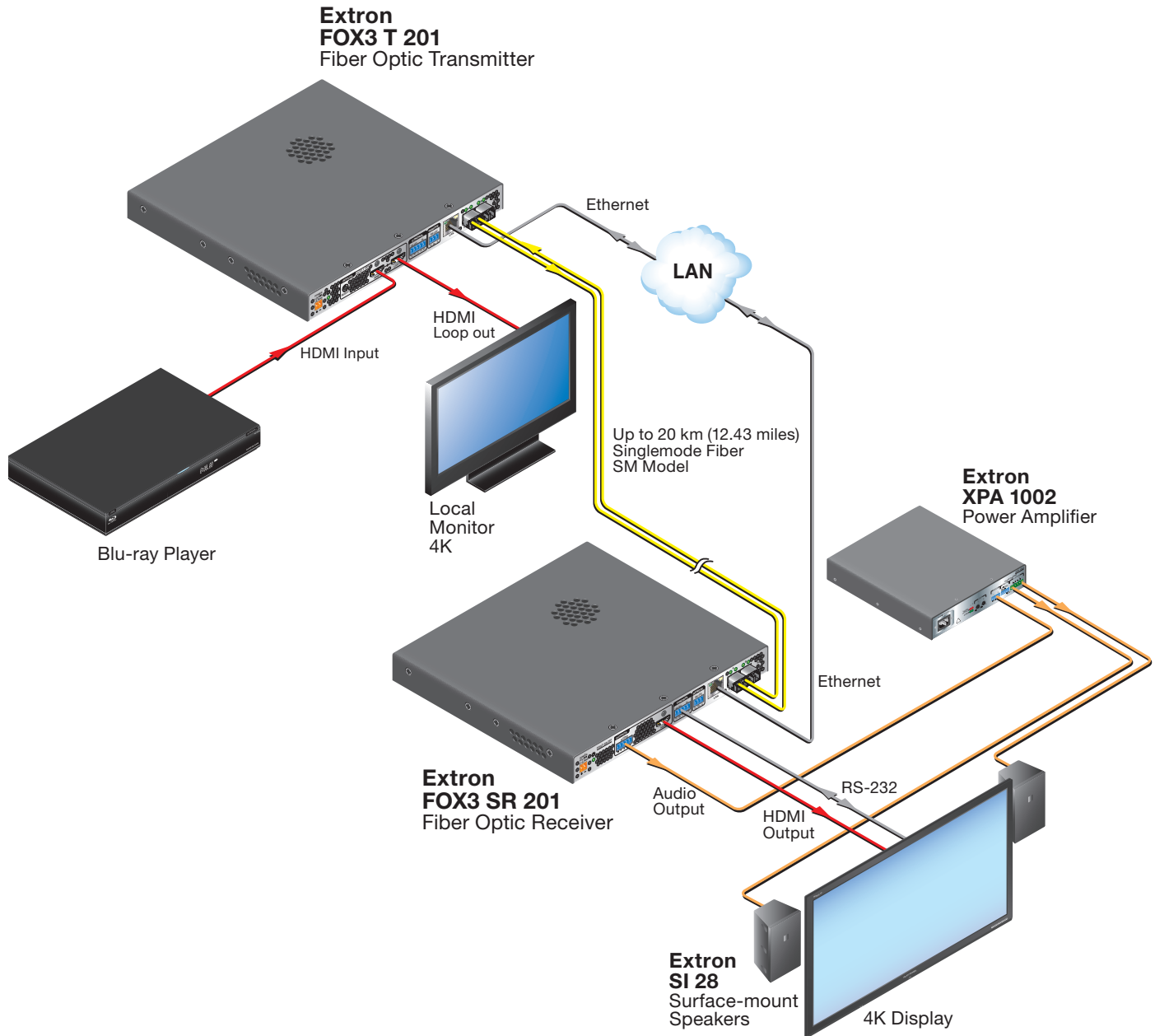
Reset Modes				
Mode	Activation	Result	Purpose and Notes	
Use Factory Firmware	1	Hold in the recessed rear panel <b>Reset</b> button while applying power to the unit.	The unit reverts to the factory default firmware for a single power cycle.	Use to revert to the factory default firmware for a single power cycle if incompatibility issues arise with user-loaded firmware. All user files and settings are maintained.
	<p><b>NOTE:</b> Do not operate with the default firmware loaded by a mode 1 reset. Use it only to load the most current firmware to the device.</p>			
Reset IP Setting	*4	Hold in the <b>Reset</b> button about 6 seconds until the Power LED blinks twice. Then, release and press the <b>Reset</b> button momentarily (<1 second) again within 1 second.	Sets the following back to factory default: <ul style="list-style-type: none"> <li>• Port mapping</li> <li>• IP address: 192.168.254.254</li> <li>• Subnet mask address: 255.255.255.0</li> <li>• Gateway address: 0.0.0.0</li> </ul> Turns DHCP off. Power LED blinks 4 times during reset.	Use to reset all IP settings back to the factory defaults. Equivalent to SIS command 1ZQQQ.
Reset to Factory Default	*5	Hold in the <b>Reset</b> button until the Power LED blinks three times (once at 3 seconds, again at 6 seconds, again at 9 seconds). Then, release and press the <b>Reset</b> button again within 1 second*.	A complete reset to factory defaults (except the firmware). <ul style="list-style-type: none"> <li>• Does everything mode 4 does.</li> <li>• Clears port configurations.</li> <li>• Resets all IP options.</li> <li>• Clears all user settings.</li> <li>• Clears all files from the unit.</li> <li>• Power LED blinks four times.</li> </ul>	Use to start over with default configuration and uploading, and also to replace events. Equivalent to SIS command ZQQQ.
<p><b>NOTES:</b></p> <ul style="list-style-type: none"> <li>• *For modes 4 and 5, nothing happens if the momentary press does not occur within 1 second.</li> <li>• The factory configured passwords for all accounts on this device have been set to the device serial number. In the event of a complete system reset, the passwords convert to the default, which is extron.</li> </ul>				

## Configuration and Control

See the *FOX3 T 201 User Guide* for details on operating and monitoring the transmitter using Extron SIS commands, Product Configuration Software, or the internal web pages.

**NOTE:** An Extron Insider account is required to download and use PCS. Contact an Extron support representative, to obtain an Insider Account.

## 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.