

# FOX 3G HD-SDI Setup Guide

This guide provides instructions for an experienced installer to set up and operate Extron® FOX 3G HD-SDI Transceiver.

The transceiver can be configured via its rear panel Mode DIP switches to operate in one of three ways:

- Bidirectional transceiver
- Transmitter
- Receiver

See [Transceiver Configurations](#) on the rear of this guide if you need more information.

**IMPORTANT:**  
Refer to [www.extron.com](http://www.extron.com) for the complete user guide and installation instructions before connecting the product to the power source.

**NOTE:** In this guide, the term “transceiver” refers to any FOX 3G HD-SDI; the term “bidirectional transceiver” refers to a FOX 3G HD-SDI specifically configured as a bidirectional transceiver.

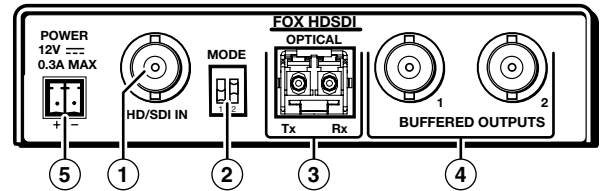
## Installation

### Step 1 — Mounting

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

### Step 2 — Connections and Initial Settings

- ① **HD-SDI Input connector** — If the FOX 3G HD-SDI is configured as either a bidirectional transceiver or as a transmitter, connect an HD-SDI, SDI, or 3G-SDI video input to this BNC connector.
- ② **Mode switches** — Set these DIP switches to the positions shown at right to select the transceiver configuration. See [Transceiver Configurations](#) on the rear of this guide for more information.
- ③ **Fiber optic connectors** —



MODE	SW1	SW2	Mode
	Down	Down	Bidirectional transceiver (default position)
	Down	Up	Transmitter with local monitor outputs
	Up	Down	Receiver with daisy chaining
	Up	Up	Spare (functions as receiver with daisy chaining)

**WARNING:** This unit outputs 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.

**NOTE:** Ensure that you use the proper fiber cable for your transceivers. Typically, singlemode fiber cable has a yellow jacket and multimode fiber cable has an orange or aqua jacket.

**Tx connector** — In any configuration, connect a fiber optic cable to the Optical Tx LC connector.

Connect the free end of this fiber optic cable to the Optical Rx connector on another FOX 3G HD-SDI transceiver that is configured as a bidirectional transceiver or as a receiver.

**Rx connector** — In either the bidirectional transceiver or receiver configuration, connect a fiber optic cable to the Optical Rx connector to receive the signal from the transmitting unit. Connect the free end as detailed below:

- In a 2-transceiver system, connect the free end of this cable to the Optical Tx connector on the transmitting unit, which is configured as a transmitter.
- In a daisy-chained system, connect the free end of this cable to the Optical Tx connector on the previous unit in the daisy chain (configured as either a bidirectional transceiver or a transmitter).

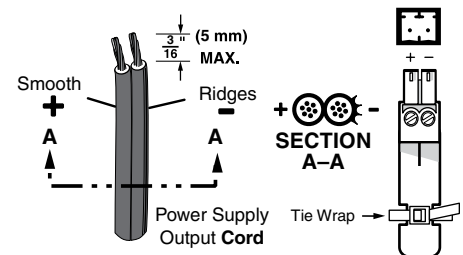
- ④ **Buffered Outputs connectors** — In any FOX 3G HD-SDI configuration, connect a digital display to these BNC connectors.

In the bidirectional transceiver configuration, connectors 1 and 2 both output the video that is sent from the other transceiver.

In the receiver configuration, only connector 2 outputs video and it is the video sent by the transmitting unit.

In the transmitter configuration, connectors 1 and 2 both output the video signal that is input on the HD/SDI Input connector, ①, on the same transceiver.

- ⑤ **Power connector** — Plug the included external 12 VDC power supply into this 2-pole captive screw connector as shown at right. Use the supplied tie-wrap to strap the power cord to the extended tail of the connector.



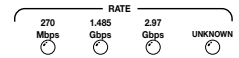
# FOX 3G HD-SDI Setup Guide (Continued)

## Operation

After the transmitting and receiving units and all of their connected devices are powered up, the system is fully operational. If any problems are encountered, ensure all traditional and fiber cables are routed and connected properly. If your problems persist, call the Extron S<sup>3</sup> Sales & Technical Support Hotline that is closest to you, at the number shown below.

## Fiber Compatibility Indications

Use the proper fiber cable for your transceivers. Each transceiver indicates its fiber compatibility, singlemode or multimode, at power-up by blinking the four front panel Rate indicators, once for multimode or twice for singlemode.



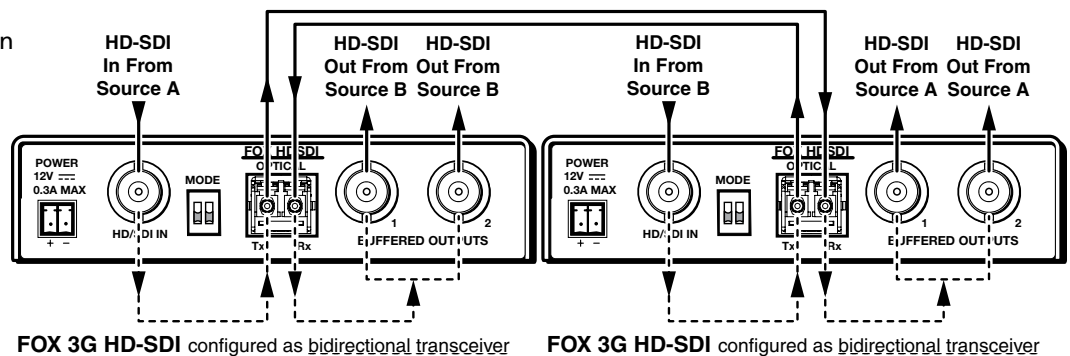
**NOTE:** All transceivers in the system *must* be the same model (either all singlemode or all multimode). Mixed transmission mode units *will not work together*.

## Transceiver Configurations

### Bidirectional Transceiver

A bidirectional transceiver inputs digital video on its SDI/HD-SDI Input BNC. The transceiver converts the video input to a proprietary signal and transmits it over a fiber link to another FOX 3G HD-SDI that is configured as either a bidirectional transceiver or as a receiver.

A bidirectional transceiver can also simultaneously receive a proprietary signal from another transceiver (in any configuration) on its Optical Rx port, convert the proprietary signal back to the original format digital video, and output the video on its own two Buffered Outputs BNC connectors.

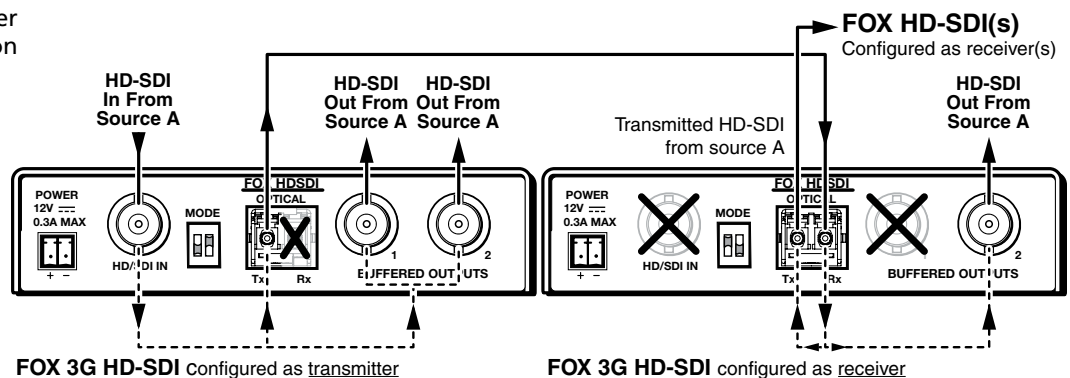


### Transmitter and Receiver

A unit configured as a transmitter inputs digital video on its HD/SDI Input BNC. The transmitter converts the video input to a proprietary signal and transmits the video over a fiber link to a FOX 3G HD-SDI that is configured as a receiver or as a bidirectional transceiver. The transmitter also simultaneously outputs the digital video on its two Buffered Outputs BNCs.

A unit configured as a receiver accepts a proprietary signal on its Rx fiber optic port. The receiver converts the proprietary signal back to original HD-SDI, SDI, or 3G-SDI video and outputs the video on only one of its own Buffered Output BNC connectors, Output 2.

The receiver converts the second digital video signal that it created from the optical input back into a proprietary signal and outputs it on the Optical Tx port over a fiber link to another FOX 3G HD-SDI that is configured as a receiver or as a bidirectional transceiver.



**NOTE:** Up to 10 receivers can be daisy-chained in this manner.

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