



**NETWORK
TECHNOLOGIES
INCORPORATED**

1275 Danner Dr Tel:330-562-7070
Aurora, OH 44202 Fax:330-562-1999
www.networktechinc.com

ST-2FODP14-LC9

DisplayPort 1.4 Extender over Duplex Single-mode Fiber

User Manual



Introduction

The XTENDEX® 8K DisplayPort 1.4 Extender via LC Fiber Optic Cable locates an Ultra-HD 8K 4320p 30Hz DisplayPort display away from a DP computer up to 3,937 feet (1,200 meters) via duplex LC single-mode fiber optic cable. Each extender consists of a transmitter that connects to a DisplayPort source, and a receiver that connects to a DisplayPort display.

- Signal transmission via two-strand single-mode 9-micron LC fiber optic cable.
- Supports Ultra-HD 8K resolutions to 7680x4320 @30Hz YUV 4:2:2, Ultra-HD 4Kx2K resolutions to 3840x2160 @60Hz YUV 4:4:4, and HDTV resolutions to 1080p @144Hz.
- DisplayPort features supported:
 - DisplayPort 1.4
 - Multi-Stream Transport (MST)
 - Up to 36-bit Deep Color
 - LPCM
 - YCbCr 4:4:4, YCbCr 4:2:2, and RGB
 - HDR
 - Bandwidth up to 23.76Gbps
- HDCP compliant
- EDID pass-through for the support of any DisplayPort display device.
- Cables can be installed in conduit prior to extender installation.
- Supports Plug-n-Play specifications.
- Low RFI/EMI for sensitive applications.

Cables

- Use DP14-xx-MM to connect a DisplayPort source/display up to 15 feet from the transmitter/receiver.
 - Two 3-ft DisplayPort 1.4 cables (DP14-3-MM) included.
 - ST-2FODP14-LC9 only supports 8K@30Hz (4:2:2, 8-bit) and 4K@120Hz (4:2:2, 8-bit) resolutions (23.76Gbps) when used with NTI's DP14-xx-MM cables. All other DP 1.4 cables will support resolutions to 3840x2160@60Hz (4:4:4, 8-bit).
- Use DP8K-FO-xxM-MMLC to connect a DisplayPort source/display up to 100 meters from the transmitter/receiver(not included).
 - Maximum resolution supported with ST-2FODP14-LC9 is 3840x2160@60Hz.
- Use USB3C-DP4K-xx-MM to connect a computer, tablet, or smartphone with USB Type C connector up to 10 feet from the transmitter (not included).
- Use DP-VGA-xx-MM to connect a VGA display up to 15 feet from the receiver (not included).
 - Supports resolutions to 1920x1200@60Hz.
- Use a duplex LC single-mode 9/125-micron fiber optic cable to extend the receiver from the transmitter up to 3,637 feet (1,200 meters) (not included).

Material Supplied with this kit:

ST-2FODP14-LC9 Local and Remote Unit
2- DP14-3-MM 3FT DisplayPort Male-to-Male cable
2- In:100 to 240V, 50/60Hz ; Out: DC 5V, 3A
2- Multi-country line cord

Note: DP14-x-MM cables are available from NTI in 3, 6, 10 and 15 foot lengths.

Features and Functions

Local Unit

1. LED Light (LINK LED)

Fiber link indicator. LED is solid BLUE when Source unit is linked to a Receiver.

2. Fiber Link Port

Duplex LC optical transceiver port. Extension link to Duplex LC fiberoptic cable.

3. LED Light (Power LED)

5V Power indicator. LED is solid BLUE when DC is supplied to the Transmitter.

4. Power Jack

5VDC 3A Power supply connects here.

5. LED Light (Display/Monitor LED)

Display/Monitor connection indicator. LED is solid BLUE when display is connected to the Receiver.

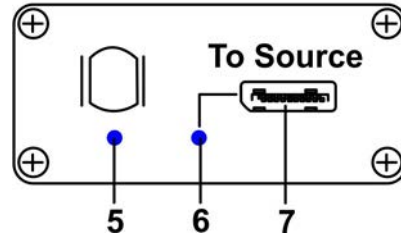
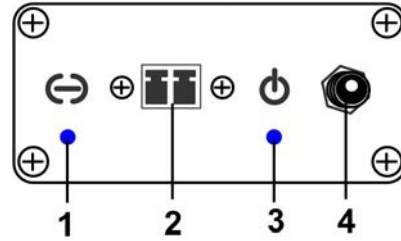
6. LED Light (Source LED)

DisplayPort source connection indicator. LED is solid BLUE when DisplayPort source is connected.

7. DP Source Port

DisplayPort cable connects between here and the host computer with DisplayPort output port.

ST-2FODP14-LC9 Transmitter (Local Unit)



Remote Unit

1. LED Light (LINK LED)

Fiber link indicator. LED is solid BLUE when Receiver unit is linked to a Transmitter.

2. Fiber Link Port

Duplex LC optical transceiver port. Extension link to Duplex LC fiberoptic cable.

3. LED Light (Power LED)

5V Power indicator. LED is solid BLUE when DC is supplied to the Receiver.

4. Power Jack

5VDC 3A Power supply connects here.

5. LED Light (Computer LED)

Computer connection indicator. LED is solid BLUE when computer(source) is connected to the Transmitter.

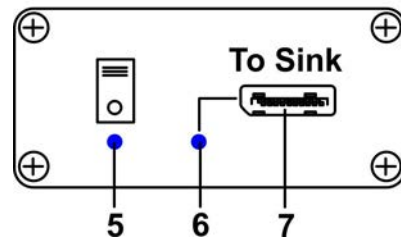
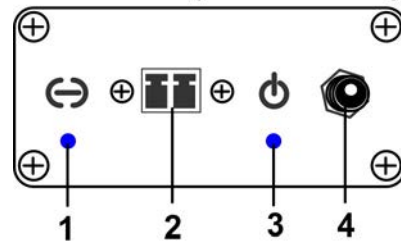
6. LED Light (Sink LED)

DisplayPort sink connection indicator. LED is solid BLUE when DisplayPort monitor (sink) is connected.

7. DP Sink Port

DisplayPort cable connects between this port and the monitor with DisplayPort input port.

ST-2FODP14-LC9 Receiver (Remote Unit)



Installation

This extender system is composed of two individual units, the Transmitter and the Receiver, interconnected by duplex single-mode fiber optic cable. Single-mode fiber optic Duplex cabling with LC connectors is required for extension up to 1.2km.

Note: The maximum possible extension distance depends on your host-side DisplayPort output.

Step 1. Connecting the Transmitter (Local Unit) to the Receiver (Remote Unit)

Connect the Transmitter and the Receiver unit using a duplex LC single-mode fiber optic cable.

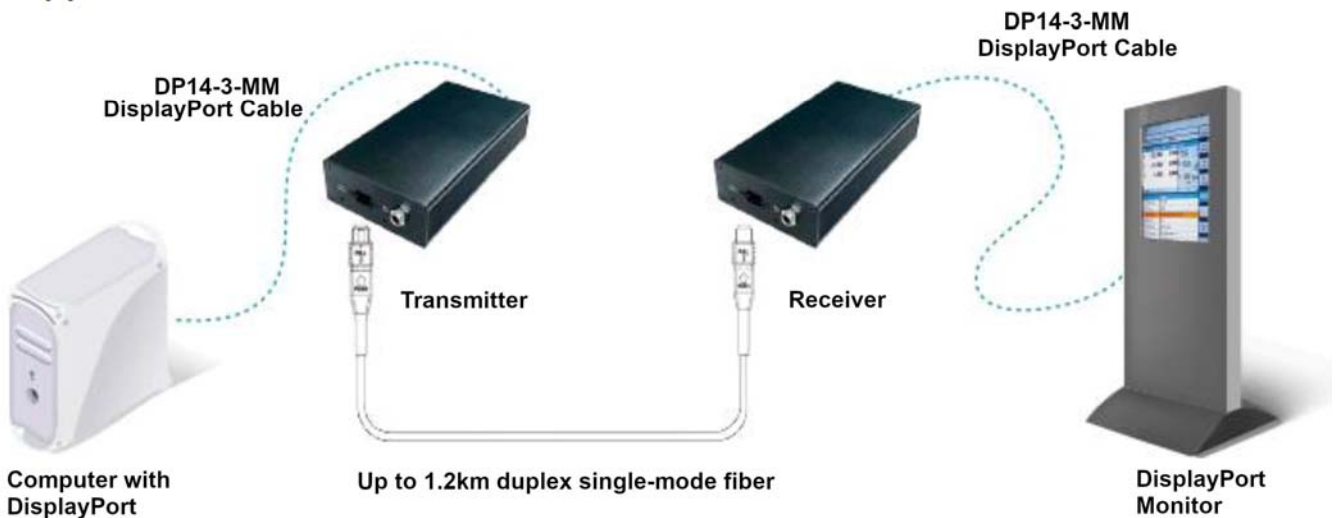
Step 2. Installing the Receiver

1. Connect the supplied DP14-3-MM DisplayPort cable between the Receiver and your DisplayPort monitor input.
2. Connect the supplied power adapter to the Receiver.

Step 3. Installing the Transmitter

1. Place the Transmitter near the computer.
2. Connect another supplied DP14-3-MM DisplayPort cable between your host computer and the Transmitter.
3. Connect the supplied power adapter to the Transmitter.

Application:



Specifications

Extension Range (Point-to-point)	Up to 1.2km over Duplex Single-mode Fiber
Maximum Resolution	7680*4320@30Hz (YCbCr 4:2:2)
EDID	Pass through
DPCP	Supported
HDR	Supported
DP Compliance	DP 1.4
HDCP	Compliant
Operating Temperature	32 to 122°F (0° to 50°C)
Storage Temperature	-4 to 158°F (-20° to 70°C)
Humidity	20-80% Operating, 10-90% Storage Relative Humidity Non-Condensing
Power (Local and Remote)	<ul style="list-style-type: none"> o Input: 100 to 240 VAC at 50 or 60Hz via AC adapter. o Output: 5VDC, 3A
Dimensions (Local and Remote) WxDxH	2.95x5.63x1.15 in. (75x143x29 mm).
Approvals	CE, FCC, RoHS

	Transmitter (Local Unit)	Receiver(Remote Unit)
Video Connector	DisplayPort Female	DisplayPort Female
Fiber Connector	Duplex LC x1	Duplex LC x1
Max. data rate	23.76Gbps	23.76Gbps
Power Consumption	5V/620mA	5V/600mA
Net Weight	266g	263g