4K 10.2Gbps HDMI USB KVM Extender with Video Wall Support Over IP via Two LC Singlemode/Multimode Fiber Optic Cables

XTENDEX®

Extend an Ultra-HD 4Kx2K HDMI monitor, USB keyboard, USB mouse, RS232, and IR up to 9,842 feet (3,000 meters)

- Signal transmission via two-strand singlemode LC fiber optic cable.
  - Using singlemode 9-micron cable, extend to 9,842 feet (3,000 meters).
  - Using multimode 50-micron cable, extend to 1,804 feet (550 meters).
- Supports Ultra-HD 4Kx2K resolutions to 3840x2160 (30Hz), 2K resolution 2048x1080, HDTV resolutions to 1080p, and up to 1920x1200 (WUXGA).
- HDMI features supported:
  - HDMI 1.4
  - x.v.Color, sYCC601 color, Adobe RGB Color and Adobe YCC601 color
  - Dolby TrueHD, LPCM 7.1, DTS-HD Master Audio, Dolby Digital, and DTS
  - Bandwidth up to 340 MHz (10.2 Gbps)
  - Lip Sync
- HDCP 1.4 compliant.
- Transparent USB ports for self-powered and/or bus-powered USB peripheral devices (security cameras, printers, scanners, touch screen monitors, game controllers, flash drives, keyboards, mice, etc.).
  - Two USB 2.0 and two USB 1.1 connectors.
  - Keyboard and mouse are hot-pluggable.
- Supports video wall installations from 1x2 to 8x16 screens.
  - Displays can be rotated 180 and 270°.
- Plug-and-Play installation allows receivers to find the transmitter automatically on the same network. (Network configuration may be required for managed SFP switch.)
- Support for Point-to-Many or Many-to-Many connections requires a managed Gigabit SFP switch with IGMP support and Jumbo frame support.
  - Manage transmitter/receiver connections and video wall configuration with web interface or network switch that supports VLAN.
    - Each VLAN group acts as a separate HDMI Over IP Channel on the network.
- When using multiple remote units, there are two USB control modes - Exclusive Mode and Sharing Mode.
  - USB Exclusive Mode: Only one remote unit can have USB control over the source computer at any time.
  - USB Sharing Mode: Multiple remote units share the control of the source computer.
    - Up to 5 USB devices will be recognized by the computer.
- Full Infrared Remote (IR) control of HDMI source from remote HDTV using existing source remote control.
- Supports full-duplex RS232 up to 115200 baud.
- Customizable EDID table on local unit.
- Supports the DDC2B protocol.
- Easily expandable – add receivers as you add control stations.
- Integrated mounting brackets for easy surface/wall mounting.

XTENDEX® ST-IPFOUSB4K-LCVW (Local & Remote Units)

DIGITAL SIGNAGE

- **Supports Point-to-Point, Point-to-Many, and Many-to-Many connections.**
- **4 USB connectors for keyboard, mouse, flashdrive, HDD, or touchscreen display.**
- **Supports video wall installations from 1x2 to 4x4 screens**

The XTENDEX® 4K 10.2Gbps HDMI USB KVM Extender via Fiber provides remote KVM (USB keyboard, USB mouse and 4Kx2K 30Hz UHD HDMI monitor) access to a USB computer up to 9,842 feet (3,000 meters) away via a duplex LC singlemode fiber optic cable and 1,804 feet (550 meters) using duplex LC multimode fiber optic cable.

Each KVM extender consists of a local unit that connects to a computer and also supplies video to a local monitor, and a remote unit that connects to an HDMI monitor, 3.5mm stereo audio speakers and microphone, RS232, and up to four USB devices (keyboard, mouse, flash drive, HDD, or touchscreen display). The local and remote units can be connected together for a Point-to-Point connection via fiber cable, or a Point-to-Many or Many-to-Many connection via a managed Gigabit SFP switch.

Extend an Ultra-HD 4Kx2K HDMI monitor, USB keyboard, USB mouse, RS232, and IR up to 9,842 feet (3,000 meters)

Specifications

Local Unit
- Compatible with a USB computer (PC, SUN and MAC) with Ultra-HD HDMI output.
- Multiplatform support: Windows 2000/XP/Vista/7/8/10, Windows Server 2000/2003/2008/2012, Solaris, Linux, FreeBSD, and MAC OS 9/10.
- One female HDMI connector for source.
- One female HDMI connector for display.
- One female USB Type B connector.
- Two female 3.5mm stereo jacks for audio out and mic in.
  - Speaker only works when in a point-to-point connection.
- One female 3.5mm port for IR emitter (sold separately).
- Screw terminal for RS232.
- One duplex female LC fiber optic port for sending video/audio, USB, IR, and RS232 signals.

Remote Unit
- One female HDMI connector.
- Four transparent female USB Type A connectors.
  - Two USB 2.0 and two USB 1.1
  - Use for connecting self-powered and/or bus-powered USB peripheral devices (security cameras, printers, scanners, touch screen monitors, game controllers, flash drives, keyboards, mice, etc.).
- Two female 3.5mm stereo jacks for audio out and mic in.
  - Microphone only works when in a point-to-point connection.
- One female 3.5mm port for IR receiver (sold separately).
- Screw terminal for RS232.
- One duplex female LC fiber optic port for sending video/audio, USB, IR, and RS232 signals.
- Supported video resolutions:
  - Ultra-HD 4Kx2K resolutions (3840x2160 @ 30Hz)
  - 2K Cinema (2048x1080 @ 60Hz)
  - HDTV resolutions to 1080p
  - Up to 1920x1200 (WUXGA)
- Supports embedded digital audio through HDMI compatible TVs or audio receivers.

RS232
- Supports TXD and RXD.
- Baud rate: 9600/14400/19200/38400/57600/115200.

Power
- Local and remote unit:
  - Input: 100 to 240 VAC at 50 or 60 Hz via AC adapter (included).
  - Output: 12 VDC, 2A

Dimensions
- WxDxH (in): 6.1x4.33x1.18 (155x110x30 mm).

Environmental
- Operating temperature: 32 to 122°F (0 to 50°C).
- Storage temperature: -4 to 185°F (-20 to 85°C).
- Operating/storage relative humidity: 0 to 80% non-condensing RH.

Regulatory Approvals
- RoHS
- TAA compliant

Warranty
- Two years

Max Distance
- Using singlemode 9-micron cable, extend to 9,842 feet (3,000 meters).
- Using multimode 50-micron cable, extend to 1,804 feet (550 meters).

Cables
- Cables included with local unit:
  - One 6.56 ft (2 m) male to male HDMI cable.
  - One 6 ft (1.8 m) male USB Type A to male USB Type B cable.
  - One 5 ft (1.5 m) male to male 3.5mm stereo audio cable.
  - One 4 ft (1.2 m) 3-pin screw terminal to female DB9 RS232 cable.
- Cables included with remote unit:
  - One 4 ft (1.2 m) 3-pin screw terminal to male DB9 RS232 cable.
- Use a duplex singlemode LC 9-micron fiber optic cable to extend the receiver from the transmitter up to 9,842 feet (3,000 meters).
- Use a FIBER-D-LCLC-50-xxM duplex multimode LC 50-micron fiber optic cable to extend the receiver from the transmitter up to 1,804 feet (550 meters).
- IR emitter and receiver sold separately.

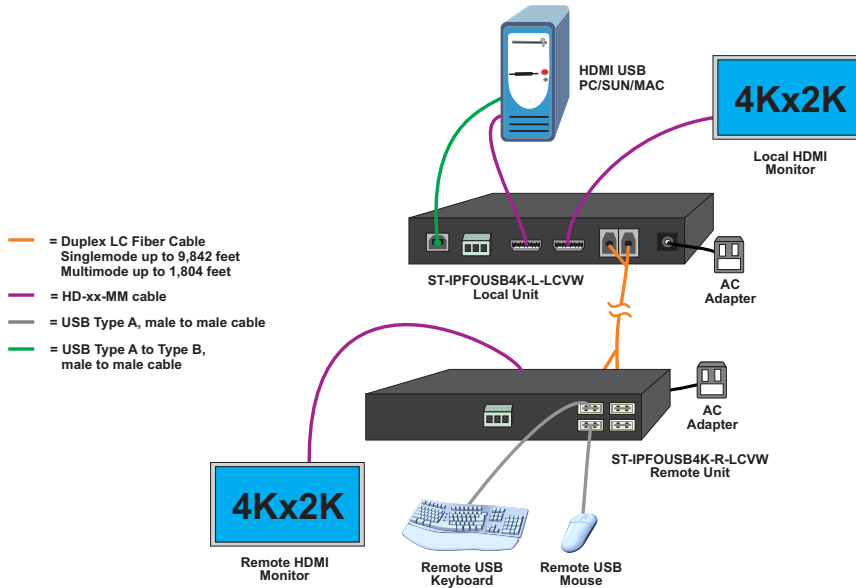**NTI** ® **NETWORK TECHNOLOGIES INCORPORATED**

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Extend an Ultra-HD 4Kx2K HDMI monitor, USB keyboard, USB mouse, RS232, and IR up to 9,842 feet (3,000 meters)

Configuration and Cable Illustrations

Point-to-Point Connection

HDMI USB
PC/SUN/MAC

4Kx2K
Local HDMI
Monitor

— = Duplex LC Fiber Cable
Singlemode up to 9,842 feet
Multimode up to 1,804 feet
— = HD-xx-MM cable
— = USB Type A, male to male cable
— = USB Type A to Type B,
male to male cable

ST-IPFOUSB4K-L-LCVW
Local Unit

AC
Adapter

ST-IPFOUSB4K-R-LCVW
Remote Unit

AC
Adapter

4Kx2K
Remote HDMI
Monitor

Remote USB
Keyboard

Remote USB
Mouse

Point-to-Many Connections

HDMI USB
PC/SUN/MAC

4Kx2K
Local HDMI
Monitor

— = Duplex LC Fiber Cable
Singlemode up to 9,842 feet
Multimode up to 1,804 feet
— = HD-xx-MM cable
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male to male cable

ST-IPFOUSB4K-L-LCVW
Local Unit

AC
Adapter

Managed Gigabit SFP Switch

ST-IPFOUSB4K-R-LCVW
Remote Unit

ST-IPFOUSB4K-R-LCVW
Remote Unit

ST-IPFOUSB4K-R-LCVW
Remote Unit

AC
Adapter

AC
Adapter

AC
Adapter

4Kx2K
Remote HDMI
Monitor

Remote USB
Keyboard

Remote USB
Mouse

4Kx2K
Remote HDMI
Monitor

Remote USB
Keyboard

Remote USB
Mouse

4Kx2K
Remote HDMI
Monitor

Remote USB
Keyboard

Remote USB
Mouse

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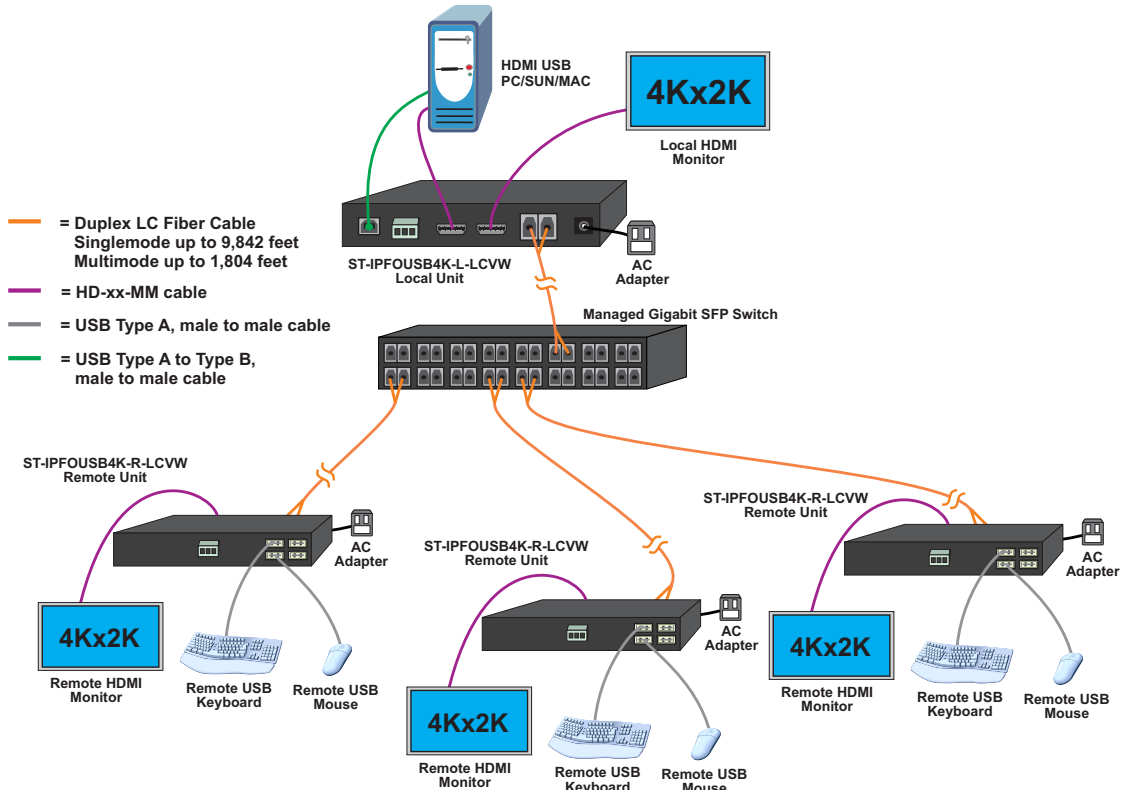sales@ntigo.com
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Extend an Ultra-HD 4Kx2K HDMI monitor, USB keyboard, USB mouse, RS232, and IR up to 9,842 feet (3,000 meters)

Configuration and Cable Illustrations

Many-to-Many Connection

HDMI USB PC/SUN/MAC
4Kx2K — Local HDMI Monitor
ST-IPFOUSB4K-L-LCVW Local Unit
AC Adapter

= Duplex LC Fiber Cable Singlemode up to 9,842 feet Multimode up to 1,804 feet
= HD-xx-MM cable
= USB Type A, male to male cable
= USB Type A to Type B, male to male cable

Managed Gigabit SFP Switch

ST-IPFOUSB4K-R-LCVW Remote Unit
AC Adapter
4Kx2K — Remote HDMI Monitor
Remote USB Keyboard
Remote USB Mouse

How to Configure a Video Wall

1 Receiver Per Screen

ST-IPFOUSB4K-R-LCVW (Remote Units)

Managed Gigabit SFP Switch

= Duplex LC Fiber Cable Singlemode up to 9,842 feet Multimode up to 1,804 feet
= HD-xx-MM cable

ST-IPFOUSB4K-L-LCVW (Local Units)

4K Satellite Set Top Box
4K HDMI Computer
4K Blu-Ray Player
4K Satellite Set Top Box

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