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# ST-FOUSB4K-LC DVI/HDMI USB KVM Extender Over Optical Fiber User's Guide

MAN276 REV 9/19/16

## Front/Rear Panel and Connectors

#### Transmitter



Keyboard/Mouse/Touch

### System Installation

- 1. Attach RX [DVI Out] to monitor by DVI-to-DVI or DVI-to-HDMI cable.
- 2. Attach keyboard/mouse/Touch screen to the RX USB-A for remote console.
- 3. Attach PC's USB to the RX's USB-B port if there is a local RX PC.
- 4. Attach TX's [DVI In] to PC DVI/HDMI by a DVI-to-DVI/HDMI cable.
- 5. Use a USB B-to-A cable to attach TX's USB-B to PC.
- 6. Attach keyboard/mouse to the TX's USB-A if you need TX local console.
- 7. Use a Dual Core LC connector SM Fiber cable to directly connect [SFP+] port of TX to RX.
- 8. Power ON TX and RX. The TX's PC DVI/HDMI will be displayed on the RX's monitor. The RX's monitor EDID will be available on the TX's PC.
- 9. The USB keyboard/mouse/Touch at the remote console should be able to control the TX's PC.

Note: This product can support HDMI source and monitor by using DVI-to-HDMI cable for HDMI resolution up to 3840 x 2160 @ 30Hz.

## ■ TX Hot-key Operation

- a. <Scroll Lock><Scroll Lock>L <Enter> ---> Lock/Unlock remote access (toggle)
- Scroll Lock><Scroll Lock>U <Enter> ---> enter Firmware Upgrade Mode

#### RX Hot-key Operation

- a. <Scroll Lock><Scroll Lock>R ---> switch to RX PC.
- b. <Scroll Lock><Scroll Lock>T ---> switch to TX PC.
- c. <Scroll Lock><Scroll Lock>U <Enter> ---> enter Firmware Upgrade Mode

### <Scroll Lock> LED

- Press <Scroll Lock><Scroll Lock> ---> <Scroll Lock> LED will blink (<Caps Lock> and <Num Lock> turn off) to indicate the Extender is in Hotkey Mode.
- b. The <Scroll Lock> LED will blink when TX pressed <Scroll Lock><Scroll Lock>Caps Lock> and <Num Lock> LED not changed).

#### Setup TX/RX RS-232 Baud rate

#### Method 1:

- 1. Connect PC COM port to TX.
- 2. Run TeraTerm on PC, set PC COM port baud rate to 115200 bps
- Power On TX, press <Ctrl-C> in 3 seconds until "#" prompted (in COMMAND mode)
- 4. # baud 9600 <Enter> ---> set baud rate 9600 bps

#### Method 2:

- 1. Connect PC COM port to TX.
- 2. Run TeraTerm on PC, set PC COM port baud rate to 115200 bps
- Attach a keyboard to TX's USB downstream, then enter: <Scroll><Scroll>C <Enter>
- 4. This will force TX in COMMAND mode, press <Enter> to get prompt #.
- 5. # baud 9600 <Enter> ---> set baud rate 9600 bps
- 6. # exit <Enter> ---> get back to DATA mode for TX/RX bi-direction communication
- **Note:** Baud rate setup is necessary only for TX, the RX baud rate will be set by TX after TX/RX inter-connected.

#### Firmware Upgrade

- 1. Use a USB B-to-A cable to attach the TX/RX USB-B port to PC.
- 2. Attach a USB keyboard to the TX/RX unit.
- 3. Press hotkey: <Scroll Lock><Scroll Lock> U <Enter>
- 4. The TX/RX unit will enter Firmware Upgrade mode.
- 5. Run the UPGRADE.exe program, then click "Connect" button.
- The program will display "Device connected" if the connection is succeeded.
- Click [...] button to navigate to the firmware file (.BIN) for upgrade:
- Press the "Upgrade" button to start firmware upgrade.

[]
Connect
Luc
Upgrade

## Specification

		TRANSMITTER	RECEIVER
DVI IN		1	N/A
DVI OUT		N/A	1
USB Upstream		1	1
USB Downstream		4	4
RS-232 Baud Rate Support		1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps	
Max RS-232 throughput		4KB/sec. delay 50 ms.	
Power		DC 12V 1A	
DVI Resolution		Up to 1920 x 1200 @ 60Hz	
HDMI Resolution		Up to 3840 x 2160 @ 30Hz	
Inter-Connect Cable		Duplex LC Single-Mode Fiber Cable (1.4 KM)	
SFP+ Transceiver		Multi Rate 4.9152Gbps to10.3125Gbps	
Environment	Operating Temp.	<b>0 to 70</b> °C	
	Storage Temp.	-40 to 100°C	
	Humidity	0 ~ 80% Non-condensing	
Physical Properties	Material	aluminum	
	Weight	407g	
	Dimension	150(W) x 110(L) x 28(H) mm	