



NTI® NETWORK
TECHNOLOGIES
INCORPORATED

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XTENDEX® Series

ST-FOUSBVARS-LC12V

VGA USB KVM Extender via One LC Singlemode/Multimode Fiber Optic Cable

Installation Manual



ST-FOUSBVARS-LC12V
Local and Remote Unit (Rear View)

TRADEMARK

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CHANGES

The material in this guide is for information only and is subject to change without notice. Network Technologies Inc reserves the right to make changes in the product design without reservation and without notification to its users.

INTRODUCTION

The XTENDEX® VGA USB KVM Extender via Fiber Optic Cable provides remote KVM (USB keyboard, USB mouse and VGA monitors) access to a USB computer up to 12.4 miles (20 kilometers) away from a computer using a single LC single-mode fiber optic cable and 1,968 feet (600 meters) using multimode fiber optic cable. Each extender consists of a transmitter that connects to a computer and also supplies video to a local monitor, and a receiver that connects to two VGA monitors, USB keyboard, USB mouse, 3.5mm stereo audio speakers and microphone, and RS232.

Features:

- Signal transmission via single-strand LC fiber optic cable – no RF interference.
 - Using single-mode 9-micron cable, extend to 12.4 miles (20 kilometers).
 - Using multimode 50-micron or 62.5-micron cable, extend to 1,968 feet (600 meters).
- Supports one local and two remote VGA monitors.
- Supports computer resolutions to 1920x1080.
- Two USB ports for keyboard and mouse
 - Keyboard and mouse are hot-pluggable.
- Supports stereo audio speakers and microphone.
- Plug and play functionality – no software needed.
- Supports full-duplex RS232 up to 57600 baud.
- Built-in default EDID table.
- Supports the DDC2B protocol.
- Cables can be installed in conduit prior to extender installation.
- Integrated mounting brackets for easy surface/wall mounting.

MATERIALS

Materials supplied with this kit:

- NTI XTENDEX Local and Remote Unit
- 2- 110-240VAC, 50 or 60Hz-12VDC/1A AC Adapter
- URL Slip with path to this manual

Materials Not supplied but REQUIRED:

VEXT-xx-MM VGA Male-to-Male Cable without Ferrites to connect to a VGA source or display up to 25 feet.

VEXT-F-xx-MM VGA Male-to-Male Cable with Ferrites to connect to a VGA source or display.

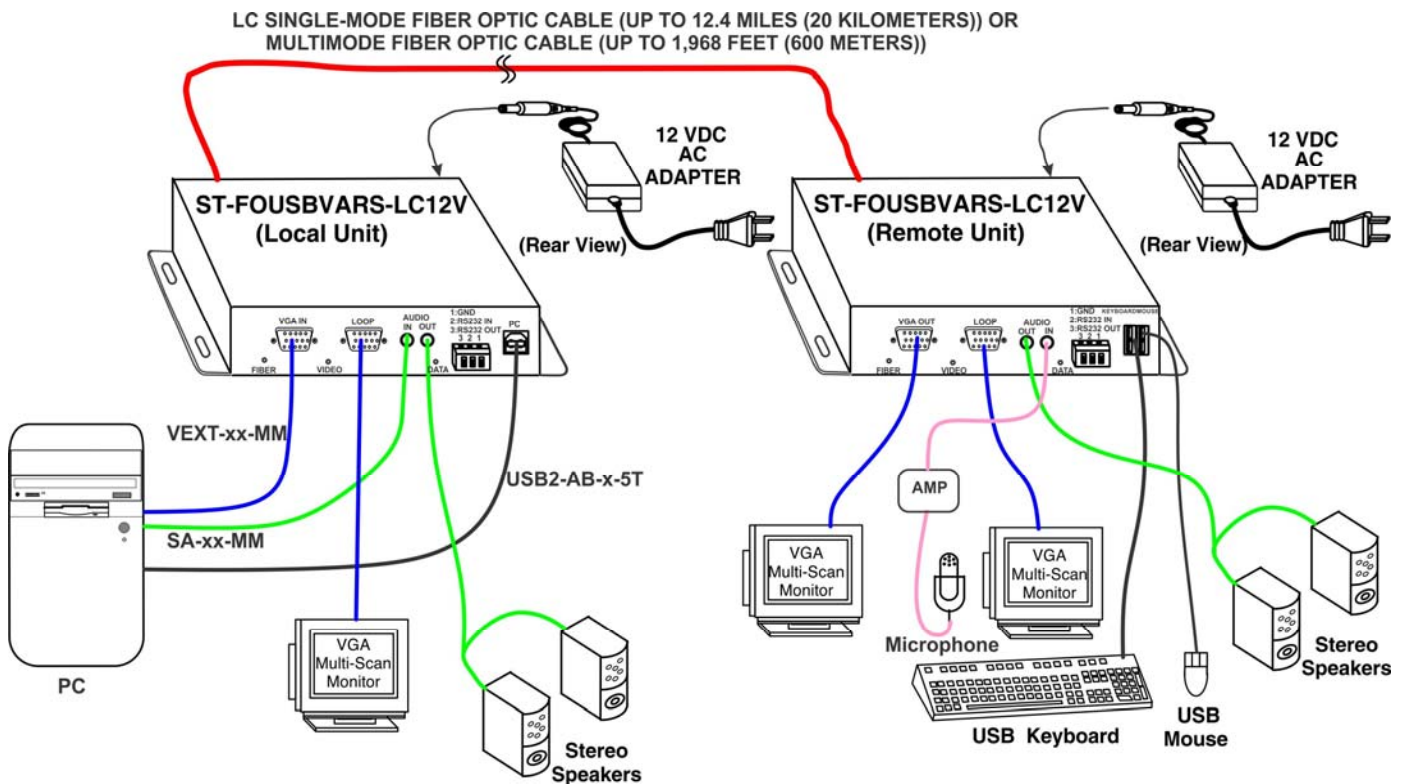
SA-xx-MM male to male 3.5mm stereo audio cables to connect self-powered speakers.

USB2-AB-x-5T male USB Type A to male USB Type B cable to connect source.

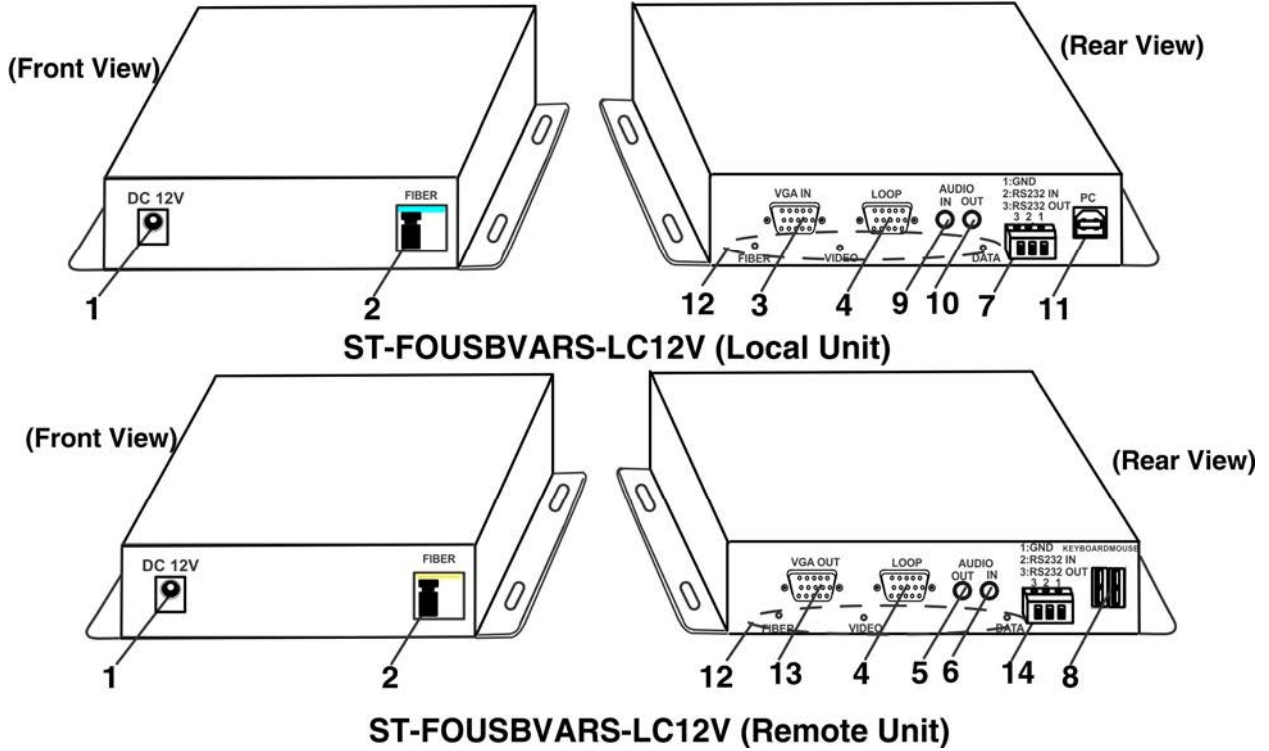
The above cables can be purchased from Network Technologies Inc by calling **(800) 742-8324 (800-RGB-TECH)** in the US and Canada or **(330) 562-7070 (worldwide)**.

Use a simplex LC single-mode 9-micron fiber optic cable to extend the receiver from the transmitter up to 12.4 miles (20 km).

Use a simplex multimode LC 50-micron or 62.5-micron fiber optic cable to extend the receiver from the transmitter up to 1,968 feet (600 meters).



FEATURES AND FUNCTIONS



#	LABEL	CONNECTOR/LED	DESCRIPTION
1	DC12V	DC Power Jack	For connection of power supply
2	FIBER	Fiber Transceiver	For connection of fiber optic cable between Local and Remote unit
3	VGA IN	15HD Female	For connection of video source
4	LOOP	15HD Female	For connection of a local display device
5	OUT	3.5mm Jack	For connection of self-powered speakers
6	IN	3.5mm Jack	For connection of microphone
7	3/2/1	Terminal Block	For connection of RS232 cable from PC
8	USB	USB Type A Female	For connection of extended USB devices
9	IN	3.5mm Jack	For connection of audio cable from PC
10	OUT	3.5mm Jack	For connection of local self-powered speakers
11	PC	USB Type B Female	For connection of USB cable from PC
12	Fiber/Video/Data	Indicator LEDs	See chart on next page
13	VGA OUT	15HD Female	For connection of a local display device
14	3/2/1	Terminal Block	For connection of RS232 cable to extended device

Indicator Light	Status	Meaning
POWER	On	Power is ON
	Off	Power is OFF
VIDEO	On	Video signal is present
	Off	No video signal
DATA	On	Data signal (RS232) active
	Off	No Data (RS232) signal

TECHNICAL SPECIFICATIONS

Local Unit

- Supports a PC, SUN, or MAC with VGA video.
- Multiplatform support: Windows 7/8/10/11, Windows Server 2008/2012/2016/2019/2022, Solaris, Linux, FreeBSD, and MAC OS 10/11. Supports resolutions to 1920x1080.
- One female 15-pin HD connector for computer connection.
- One female 15-pin HD connector for local VGA monitor.
- One female USB Type B connector.
- Two 3.5 mm stereo audio jacks (audio in/out).
- 3-pin screw terminal for RS232.
- One simplex LC fiber optic port for sending/receiving video/audio, USB, and RS232 signals.

Remote Unit

- Two female 15-pin HD connectors for VGA displays.
- Two female USB Type A connectors for connecting USB keyboard and mouse.
 - No other types of USB devices are supported.
- Two 3.5 mm stereo audio jacks (audio in/out).
- 3-pin screw terminal for RS232.
 - Supports full-duplex RS232 up to 57600 baud.
- One simplex LC fiber optic port for sending/receiving video/audio, USB, and RS232 signals.
- Supports resolutions to 1920x1080.

Power

- Local and remote unit:
 - Input: 100 to 240 VAC at 50 or 60Hz via AC adapter.
 - Output: 12VDC, 1A
 - Power consumption: 9.12W max. total (3.6W Local and 5.52W Remote)

Environmental

- Operating temperature: -4 to 158°F (-20 to 70°C)
- Operating and storage relative humidity: 5 to 90% non-condensing RH.

Dimensions

- WxDxH (in): 6.59x5.02x1.12(167x128x28 mm)

Max Distance

- 12.4 miles (20 km) over 9µm single-mode LC fiber optic cable.
- 1,968 feet (600 meters) over 50µm or 62.5µm multimode LC fiber optic cable.

Resolutions supported:

- 1920x1080@60Hz
- 1680x1050@60Hz
- 1600x1200@60Hz
- 1600x900@60Hz
- 1366x768@60Hz
- 1360x768@60Hz
- 1280x1024@60/75Hz
- 1280x960@60/75Hz
- 1280x800@60Hz
- 1280x768@60Hz
- 1280x720@60Hz
- 1152x864@60/75Hz
- 1024x768@60/75Hz
- 800x600@60/75Hz

WARRANTY INFORMATION

The warranty period on this product (parts and labor) is two (2) years from the date of purchase. Please contact Network Technologies Inc at **(800) 742-8324** (800-RGB-TECH) or **(330) 562-7070** or visit our website at <http://www.networktechinc.com> for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.