thinklogical™
Extend • Distribute • Innovate

Velocitykvm

Multi-Mode Fiber Extension Systems

An overview of the Velocitykvm Dual-link and Single-link, Multi-Mode Fiber Extension Systems -4, 5, 8, 24, 28, 34, 35 & 38

thinklogical™
Milford, Connecticut, USA

thinklogical™
Extend • Distribute • Innovate

Copyright Notice

Copyright © 2011. All rights reserved. Printed in the U.S.A.

Thinklogical LLC™100 Washington Street
Milford, Connecticut 06460 U.S.A.
Telephone 1-203-647-8700

All trademarks and service marks are property of their respective owners.

Subject: Velocity Multi-Mode Fiber Extension System Product Overview
Revision: **B,** July 2011

Powered by
MRTS Technology

HOW TO CONTACT US:

Telephone

Telephone Product Support: Contact Product Support by telephone in Milford, CT at **1-203-647-8700**. The support lines are manned Monday through Friday, 8:30am to 5:00pm, Eastern Time Zone.

Telephone Sales: Contact our expert sales staff by telephone in Milford, CT at **1-203-647-8700** or, if in the continental US, you may use our **toll-free number 1-800-291-3211**. We are here Monday through Friday from 8:30am to 5:00pm, Eastern Time Zone. Ask for your representative's direct dial phone number when you call.

International Sales: Please contact our US sales staff in Milford, CT at **1-203-647-8700**. We are here Monday through Friday, 8:30am to 5:00pm, Eastern Time Zone (same as New York City). If leaving a voice message please let us know the best time to call back so we may reach you at your convenience.

Our switchboard attendant will direct your call during regular business hours. We have an automated attendant answering our main telephone switchboard after regular business hours and on holidays. You can leave a voice message for any individual at any time. Our sales representatives have direct numbers to speed up your next call to us.

Email

Thinklogical™ is staffed Monday through Friday from 8:30am to 5:00pm, Eastern Time Zone. We will do our best to respond to your email inquiries promptly. Please use the following email addresses for your various needs:

info@thinklogical.com – Information on Thinklogical™ and our products.

sales@thinklogical.com – Sales Department - orders, questions or issues.

support@thinklogical.com – Product support, technical issues or questions, product repairs and request for a **R**eturn **M**erchandise **A**uthorization (RMA) number.

Fax

Our company facsimile number is **1-203-783-9949**. Please indicate the nature of the fax on your cover sheet and provide return contact information.

PHONE: 1-800-291-3211
WEBSITE: www.thinklogical.com
EMAIL: support@thinklogical.com

Visit us online at www.thinklogical.com for more product information, current updates and the complete line of Thinklogical™ products.

The Logical Solution

Velocity KVM Extension Systems are designed for high performance visual applications that require video as well as peripheral support. The system allows users, via optical fiber, to station and operate a digital monitor(s) and peripherals from just a few meters away to up to 40 kilometers away from the controlling computer, securely and without loss of resolution.

Velocity KVM products are ideally suited for a wide range of applications in the broadcast and post-production field, as well as command and control centers, universities, large scale digital signage and other commercial KVM applications.

The Velocity KVM Multi-Mode Fiber Extender **standard model** from Thinklogical™ includes:

- *Multi-mode fiber for extension distances up to 350 meters*
- *Two DVI Displays*
- *Supports USB HID, USB 1.1 and (optional) USB 2.0 (up to 480 Mbps)*

System Features

Each Velocity KVM Multi-mode Fiber system includes the following features:

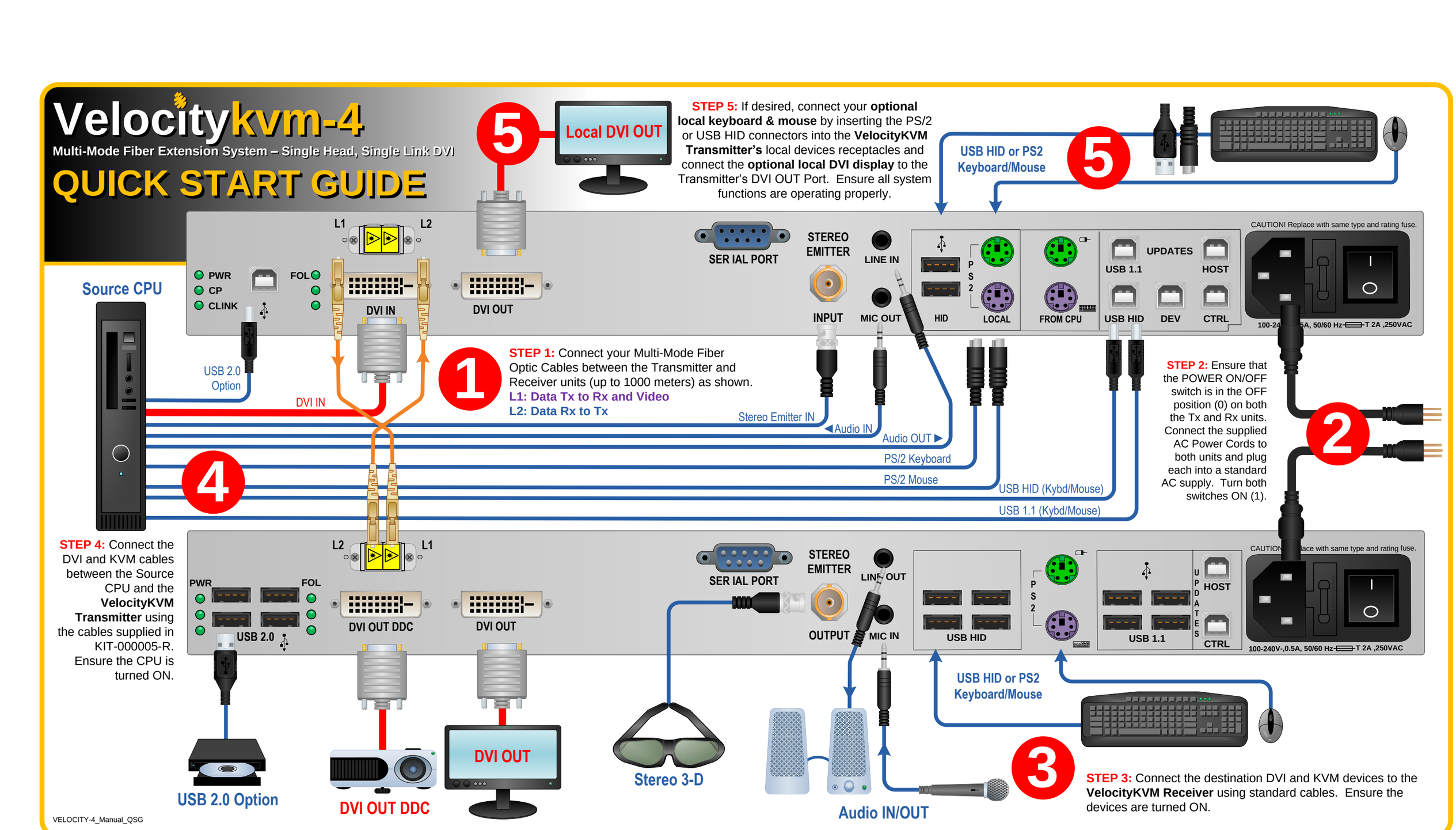
- Supports all single-link DVI video resolutions (Velocity KVM Extension. System-5 supports one single-link DVI or RGB and all single-link DVI resolutions).
- 6.25 Gbps signal transmission via fiber optic cable; No RF interference.
- Requires one, two, three, four or five fiber optic cables, depending on application.
- Flawless image quality with no frame dropping.
- Local KVM connections on transmitter.
- Additional video output(s) on the receiver.
- Extends KVM audio and serial signals up to 350 meters using standard multi-mode fiber; 1000 meters using eSX+ multi-mode fiber; 40 kilometers using single-mode fiber.
- USB HID compliant, 4-port hub.
- Full USB 1.1 compliant, 4-port hub.
- USB 2.0 compliant (high speed 480 Mbps, 4 port hub).
- Stereo Emitter BNC connections.
- DDC2B/EDID complaint.
- Fully compatible with all of Thinklogical's VX Router line of products.
- Full keyboard and mouse emulation through the transmitter.
- Full duplex stereo audio.
- Simple plug and play.

Velocitykvm-4

Multi-Mode Fiber Extension System – Single Head, Single Link DVI

QUICK START GUIDE

STEP 5: If desired, connect your **optional local keyboard & mouse** by inserting the PS/2 or USB HID connectors into the **VelocityKVM Transmitter's** local devices receptacles and connect the **optional local DVI display** to the Transmitter's DVI OUT Port. Ensure all system functions are operating properly.



VELOCITY-4_Manual_QSG

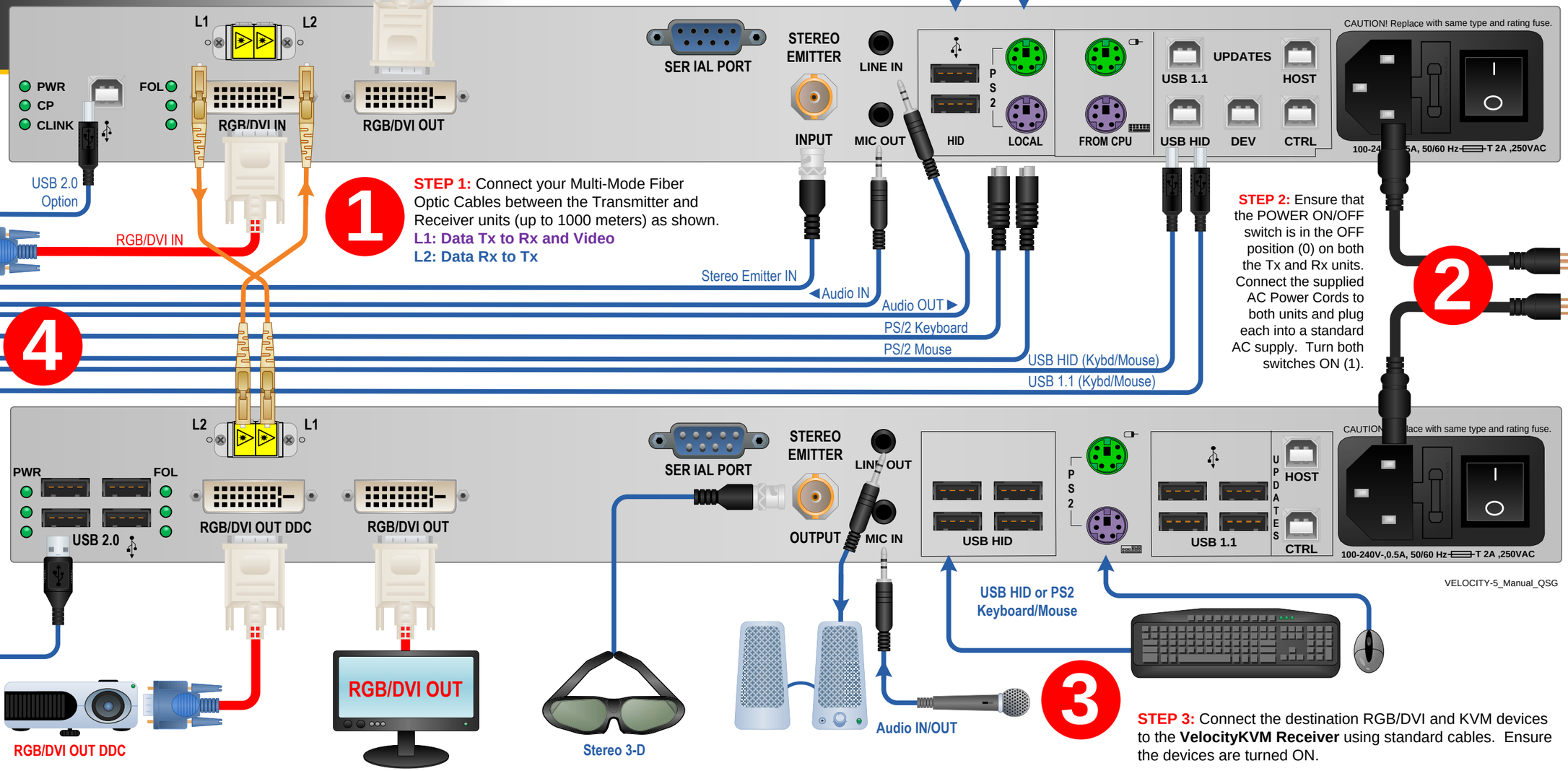
thinklogical™
Extend • Distribute • Innovate

Velocitykvm-5

Multi-Mode Fiber Extension System – Single Head, Single Link RGB/DVI

QUICK START GUIDE

STEP 5: If desired, connect your **optional local keyboard & mouse** by inserting the PS/2 or USB HID connectors into the **VelocityKVM Transmitter's** local devices receptacles and connect the **optional local RGB/DVI display** to the Transmitter's RGB/DVI OUT Port. Ensure all system functions are operating properly.



STEP 1: Connect your Multi-Mode Fiber Optic Cables between the Transmitter and Receiver units (up to 1000 meters) as shown.
L1: Data Tx to Rx and Video
L2: Data Rx to Tx

STEP 2: Ensure that the POWER ON/OFF switch is in the OFF position (0) on both the Tx and Rx units. Connect the supplied AC Power Cords to both units and plug each into a standard AC supply. Turn both switches ON (1).

STEP 4: Connect the RGB/DVI and KVM cables between the Source CPU and the **VelocityKVM Transmitter** using the cables supplied in KIT-000005-R. Ensure the CPU is turned ON.

STEP 3: Connect the destination RGB/DVI and KVM devices to the **VelocityKVM Receiver** using standard cables. Ensure the devices are turned ON.

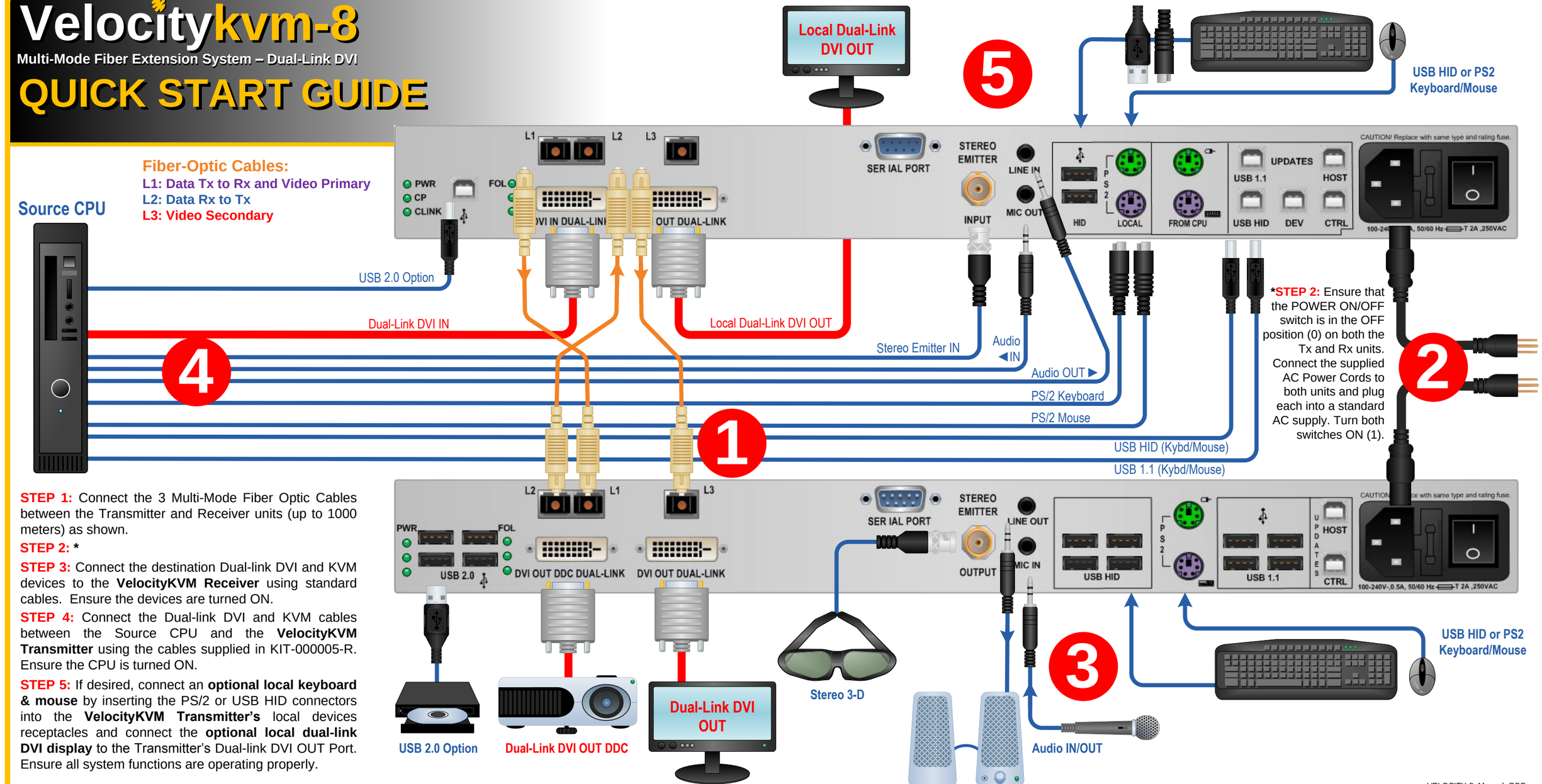
VELOCITY-5_Manual_QSG

thinklogical™
Extend • Distribute • Innovate

Velocitykvm-8

Multi-Mode Fiber Extension System – Dual-Link DVI

QUICK START GUIDE



STEP 1: Connect the 3 Multi-Mode Fiber Optic Cables between the Transmitter and Receiver units (up to 1000 meters) as shown.

STEP 2: *

STEP 3: Connect the destination Dual-link DVI and KVM devices to the **VelocityKVM Receiver** using standard cables. Ensure the devices are turned ON.

STEP 4: Connect the Dual-link DVI and KVM cables between the Source CPU and the **VelocityKVM Transmitter** using the cables supplied in KIT-000005-R. Ensure the CPU is turned ON.

STEP 5: If desired, connect an **optional local keyboard & mouse** by inserting the PS/2 or USB HID connectors into the **VelocityKVM Transmitter's** local devices receptacles and connect the **optional local dual-link DVI display** to the Transmitter's Dual-link DVI OUT Port. Ensure all system functions are operating properly.

VELOCITY-8_Manual_QSG

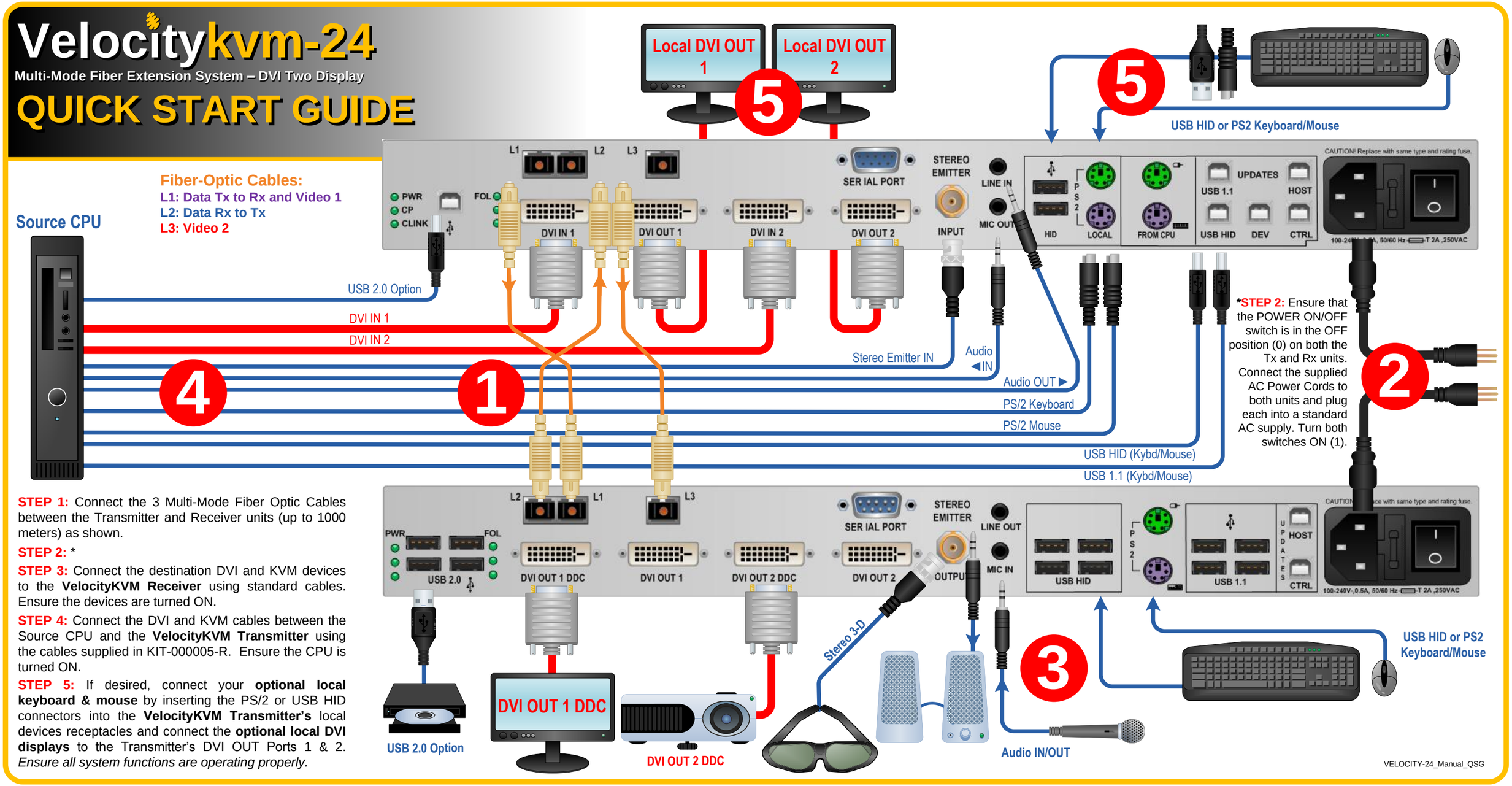
thinklogical™
Extend • Distribute • Innovate

Velocitykvm-24

Multi-Mode Fiber Extension System – DVI Two Display

QUICK START GUIDE

Fiber-Optic Cables:
L1: Data Tx to Rx and Video 1
L2: Data Rx to Tx
L3: Video 2



STEP 1: Connect the 3 Multi-Mode Fiber Optic Cables between the Transmitter and Receiver units (up to 1000 meters) as shown.

STEP 2: *

STEP 3: Connect the destination DVI and KVM devices to the **VelocityKVM Receiver** using standard cables. Ensure the devices are turned ON.

STEP 4: Connect the DVI and KVM cables between the Source CPU and the **VelocityKVM Transmitter** using the cables supplied in KIT-000005-R. Ensure the CPU is turned ON.

STEP 5: If desired, connect your **optional local keyboard & mouse** by inserting the PS/2 or USB HID connectors into the **VelocityKVM Transmitter's** local devices receptacles and connect the **optional local DVI displays** to the Transmitter's DVI OUT Ports 1 & 2. *Ensure all system functions are operating properly.*

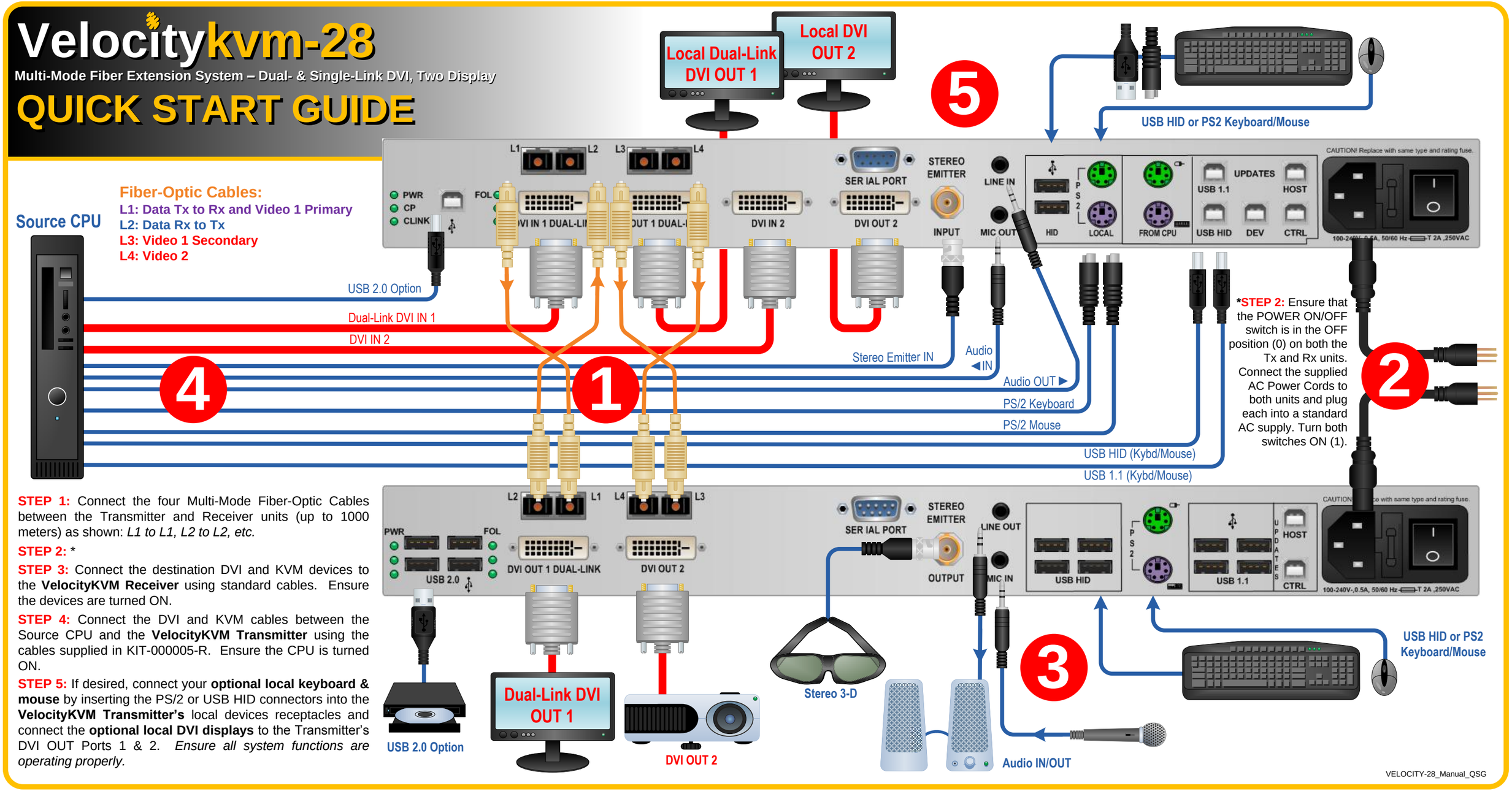
VELOCITY-24_Manual_QSG

thinklogical™
Extend • Distribute • Innovate

Velocitykvm-28

Multi-Mode Fiber Extension System – Dual- & Single-Link DVI, Two Display

QUICK START GUIDE



STEP 1: Connect the four Multi-Mode Fiber-Optic Cables between the Transmitter and Receiver units (up to 1000 meters) as shown: *L1 to L1, L2 to L2, etc.*

STEP 2: *

STEP 3: Connect the destination DVI and KVM devices to the **VelocityKVM Receiver** using standard cables. Ensure the devices are turned ON.

STEP 4: Connect the DVI and KVM cables between the Source CPU and the **VelocityKVM Transmitter** using the cables supplied in KIT-000005-R. Ensure the CPU is turned ON.

STEP 5: If desired, connect your **optional local keyboard & mouse** by inserting the PS/2 or USB HID connectors into the **VelocityKVM Transmitter's** local devices receptacles and connect the **optional local DVI displays** to the Transmitter's DVI OUT Ports 1 & 2. *Ensure all system functions are operating properly.*

VELOCITY-28_Manual_QSG

thinklogical™
Extend • Distribute • Innovate

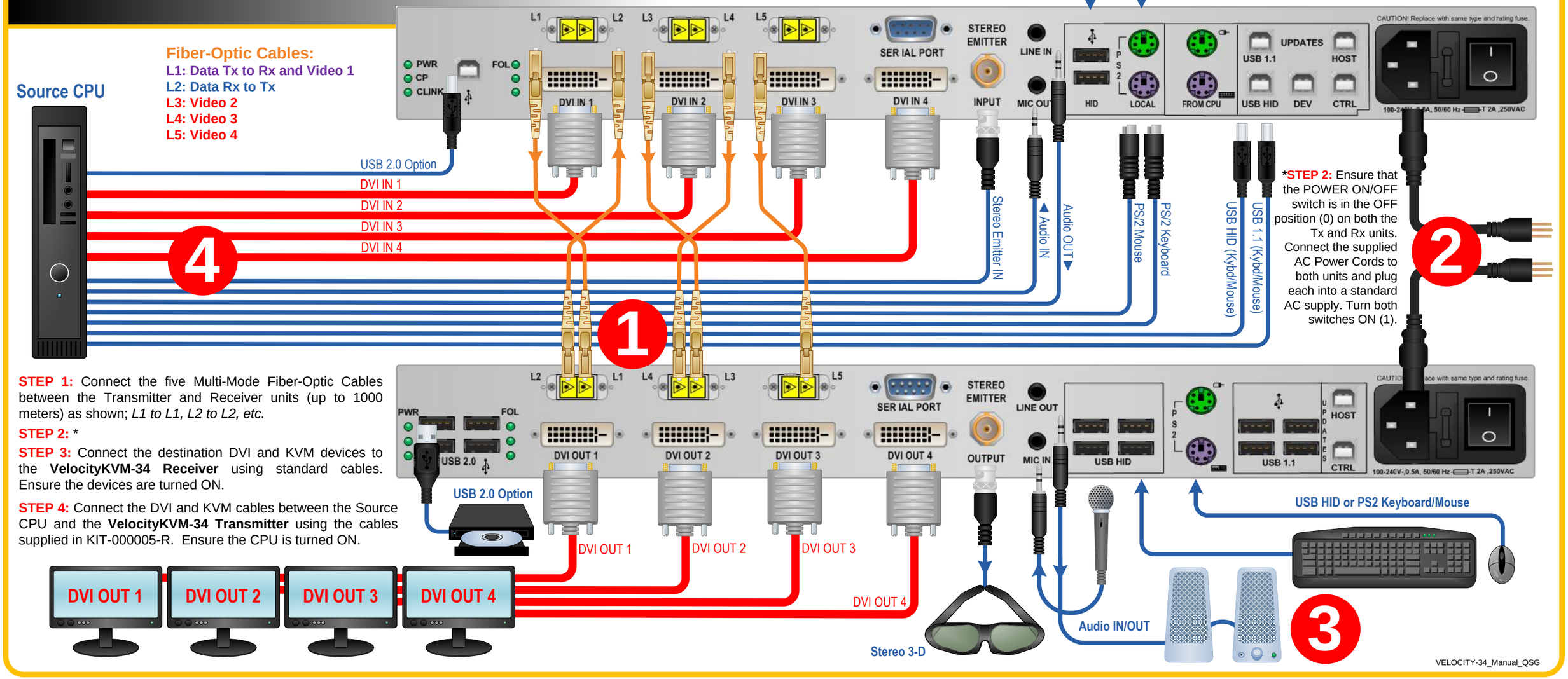
Velocitykvm-34

Multi-Mode Fiber Extension System – Four DVI Displays

QUICK START GUIDE

STEP 5: If desired, connect your **optional local keyboard & mouse** by inserting the PS/2 or USB HID connectors into the **VelocityKVM-34 Transmitter's** local devices receptacles. *Ensure all system functions are operating properly.*

Fiber-Optic Cables:
- **L1: Data Tx to Rx and Video 1**
- **L2: Data Rx to Tx**
- **L3: Video 2**
- **L4: Video 3**
- **L5: Video 4**



STEP 1: Connect the five Multi-Mode Fiber-Optic Cables between the Transmitter and Receiver units (up to 1000 meters) as shown; *L1 to L1, L2 to L2, etc.*

STEP 2: *

STEP 3: Connect the destination DVI and KVM devices to the **VelocityKVM-34 Receiver** using standard cables. Ensure the devices are turned ON.

STEP 4: Connect the DVI and KVM cables between the Source CPU and the **VelocityKVM-34 Transmitter** using the cables supplied in KIT-000005-R. Ensure the CPU is turned ON.

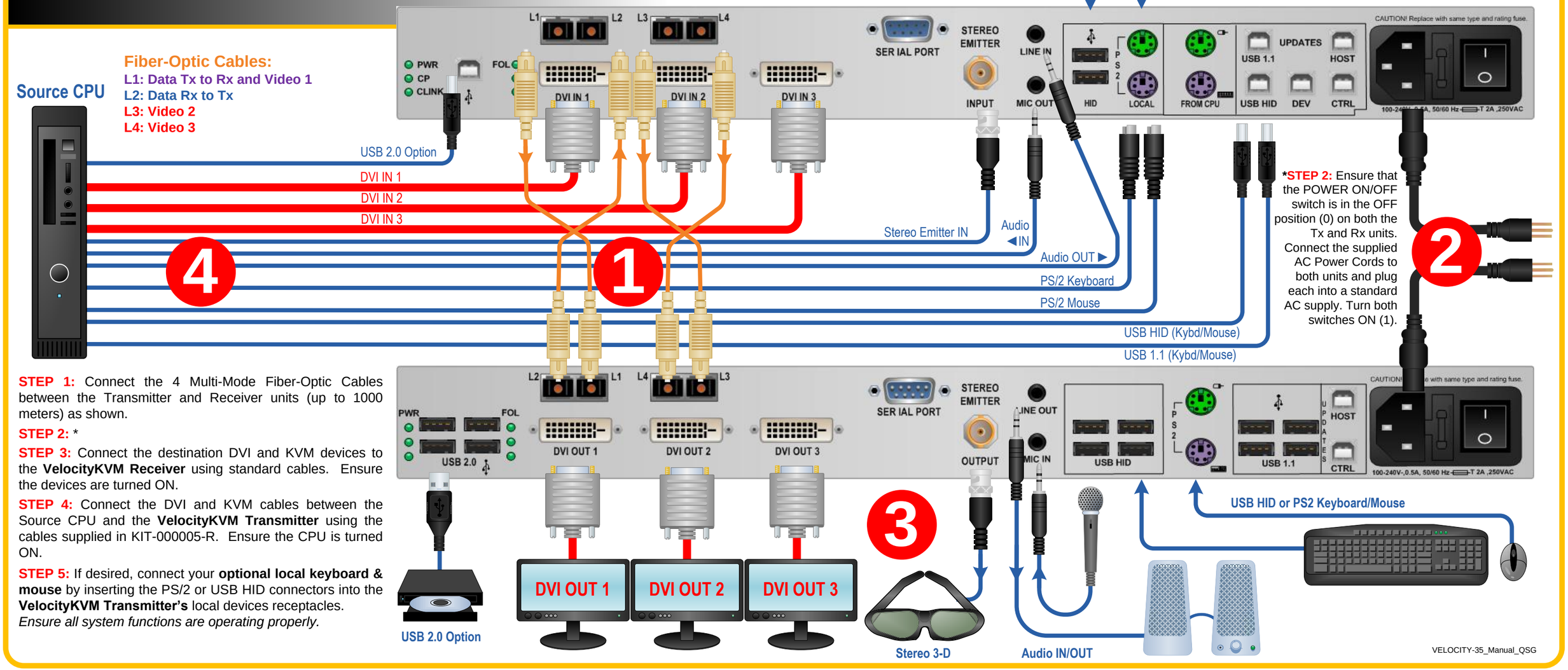
VELOCITY-34_Manual_QSG

thinklogical™
Extend • Distribute • Innovate

Velocitykvm-35

Multi-Mode Fiber Extension System – Three DVI Displays

QUICK START GUIDE



STEP 1: Connect the 4 Multi-Mode Fiber-Optic Cables between the Transmitter and Receiver units (up to 1000 meters) as shown.

STEP 2: *

STEP 3: Connect the destination DVI and KVM devices to the **VelocityKVM Receiver** using standard cables. Ensure the devices are turned ON.

STEP 4: Connect the DVI and KVM cables between the Source CPU and the **VelocityKVM Transmitter** using the cables supplied in KIT-000005-R. Ensure the CPU is turned ON.

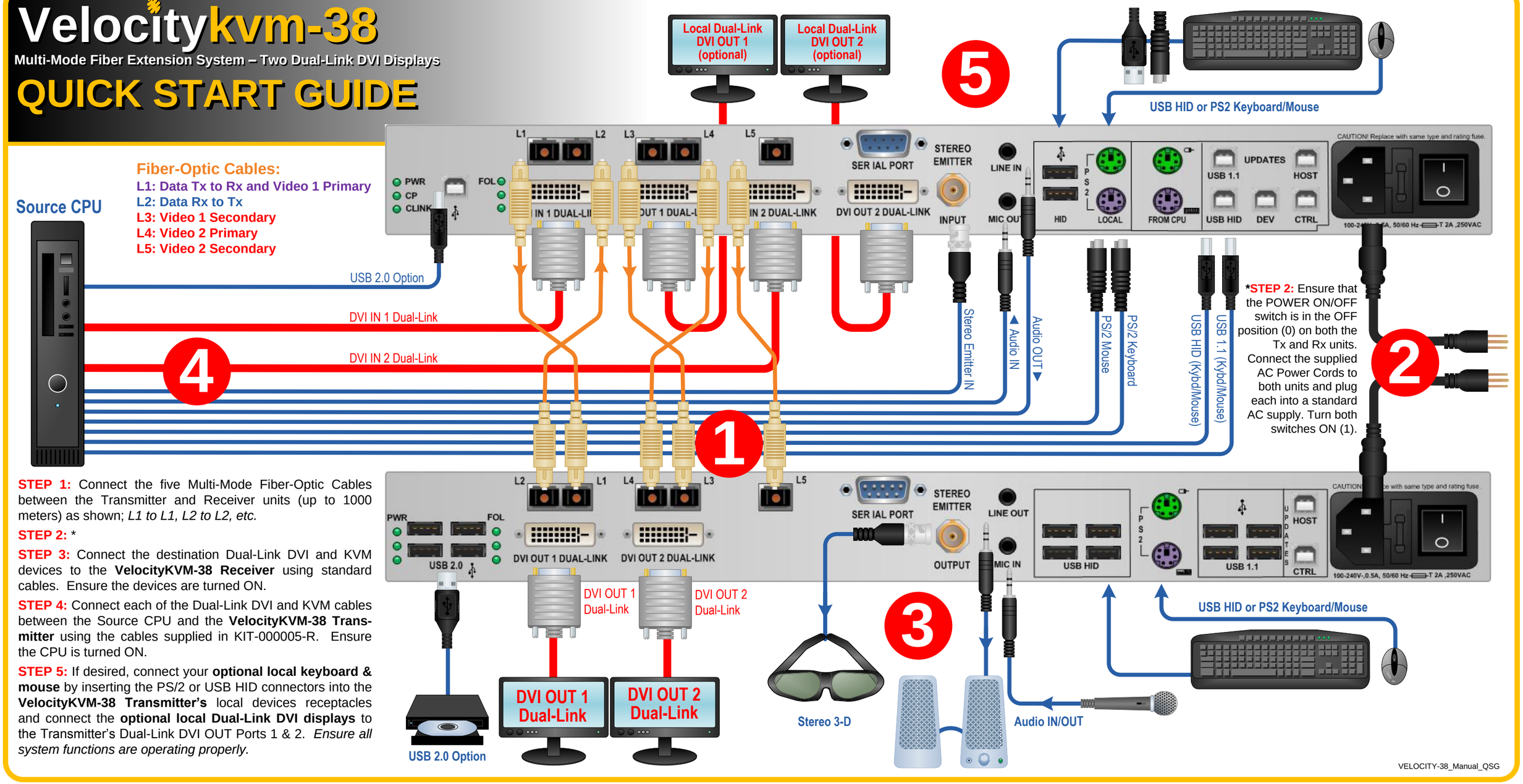
STEP 5: If desired, connect your **optional local keyboard & mouse** by inserting the PS/2 or USB HID connectors into the **VelocityKVM Transmitter's** local devices receptacles.
Ensure all system functions are operating properly.

thinklogical™
Extend • Distribute • Innovate

Velocitykvm-38

Multi-Mode Fiber Extension System – Two Dual-Link DVI Displays

QUICK START GUIDE



STEP 1: Connect the five Multi-Mode Fiber-Optic Cables between the Transmitter and Receiver units (up to 1000 meters) as shown; *L1 to L1, L2 to L2, etc.*

STEP 2: *

STEP 3: Connect the destination Dual-Link DVI and KVM devices to the **VelocityKVM-38 Receiver** using standard cables. Ensure the devices are turned ON.

STEP 4: Connect each of the Dual-Link DVI and KVM cables between the Source CPU and the **VelocityKVM-38 Transmitter** using the cables supplied in KIT-000005-R. Ensure the CPU is turned ON.

STEP 5: If desired, connect your **optional local keyboard & mouse** by inserting the PS/2 or USB HID connectors into the **VelocityKVM-38 Transmitter's** local devices receptacles and connect the **optional local Dual-Link DVI displays** to the Transmitter's Dual-Link DVI OUT Ports 1 & 2. *Ensure all system functions are operating properly.*

VELOCITY-38_Manual_QSG

thinklogical™
Extend • Distribute • Innovate

thinklogical™
Extend • Distribute • Innovate

Velocitykvm Video & Data Connector and Labeling Guide

VelocityKVM-4: Single Head, Single Link DVI

VelocityKVM-5: Single Head, Single Link RGB/DVI

VelocityKVM-8: Dual Link DVI

VelocityKVM-24: DVI 2 Display

VelocityKVM-28: Dual Link, Single-link DVI, 2 Display

VelocityKVM-34: DVI, 4 Display

VelocityKVM-35: DVI, 3 Display

VelocityKVM-38: 2 Dual Link DVI Displays

Technical Specifications

Each Thinklogical™ Velocity KVM system is designed to the following specifications:

Copper Connectors

Transmitter

Video	System 4,5,8 DVI-D (2); System 24,34 DVI-D (4)
Audio MIC	3.5mm Jack
Audio LINE	3.5mm Jack
Serial Port	DB9 Female
USB 1.0 (HID)	USB B
USB 1.1	USB B
USB 2.0	USB B
USB Local Kybd.	USB A
USB Local Mouse	USB A
PS2 Keyboard	MiniDIN 6 Female
PS2 Mouse	MiniDIN 6 Female
PS2 Local Kybd.	MiniDIN 6 Female
PS2 Local Mouse	MiniDIN 6 Female
Stereo Emitter 3D	BNC Female
Software Updates	USB B (3)
Fiber Connectors	LC, SC or ST for Multi-mode

Receiver

Video	System 4, 5, 8 DVI-D (2); System 24,34 DVI-D (4)
Audio MIC	3.5mm Jack
Audio LINE	3.5mm Jack
Serial Port	DB9 Male
USB 1.0 (HID)	USB A (4)
USB 1.1	USB A (4)
USB 2.0	USB A (4)
PS2 Keyboard	MiniDIN 6 Female
PS2 Mouse	MiniDIN 6 Female
Stereo Emitter 3D	BNC Female
Software Updates	USB B
Fiber Connectors	LC, SC, or ST for Multi-mode

Electrical Cables (supplied with system)

CBL000009-002MR, DVI-D M to M: -4, -5, -24(2), -28, -34(4), -35 (3)
CBL000022-002MR, HD15 to DVI-D: -5
CBL000023-002MR, DVI-D Male to Male, Dual-Link: -8, -28, -38 (2)
KIT-000005-R, Audio Kit, 6FT: 1 each -4, -5, -8, -24, -28, -34, -35, -38
AC Power cords (model determined by destination)

KIT-000005-R Audio Kit contains the following:

CBL000006-006FR 6 pin MiniDIN Male to Male Cable, 6FT (2)
CBL000015-006FR USB A-B Cable, 6FT (2)
CBL000016-006FR 3.5mm Male to 3.5mm Male Plug, 6FT (2)
CBL000017-006FR DB9 Male to DB9 Female Cable, 6FT (1)
CBL000018-006FR BNC Male to BNC Male Cable, 50Ω, 6FT (1)

Video Resolution

DVI –D All Single-Link and Dual-Link Resolutions

Optical Cable

Fiber Type: 50 or 62.5 micron, Multi-mode
Required: 1, 2, 3, 4 or 5 depending upon application.
(Not supplied, but available through Thinklogical™)

Optical Distance

Up to 50 meters with Type OM1
Up to 350 meters with Type OM2
Up to 1000 meters with Type OM3

Operating Temperature and Humidity

0° to 50°C (32° to 122 °F), 5% to 95% RH, non-condensing

Dimensions

Height: 1.72” (4.4cm) ± .039”; .100cm
Depth: 18.02” (45.8cm)* ± .039”; .100cm
Width: 17.49” (44.5cm) ± .039”; .100cm

Weight

Weight: 11 lbs (4.99kg) each
Shipping Weight: 27 lbs (12.25 kg) Transmitter and Receiver

Supply Voltage

100-240 VAC, 47-63 Hz, Universal AC power supply
Power Consumption: 40 Watts per unit

Compliance: Approvals for US, Canada, and European Union
Warranty: 12 months from date of purchase. Extended warranties available.

PHONE: 1-800-291-3211
WEBSITE: www.thinklogical.com
EMAIL: support@thinklogical.com

Visit us online at www.thinklogical.com for more product information, current updates and the complete line of Thinklogical™ products.

thinklogical™
Extend • Distribute • Innovate

Copyright © 2011. All rights reserved. Printed in the U.S.A. All trademarks and service marks are the property of their respective owners.