



Copyright Notice

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Subject: VelocityKVM T-Series SDI Modules Product Manual
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PREFACE

Conventions Used in this Manual

As you use this manual you will notice certain conventions that bring your attention to important information. These are **Notes** and **Warnings**. Examples are shown below.



Note: Important Notes appear in blue text preceded by a yellow exclamation point symbol, like this.

A note is meant to call the reader's attention to **helpful information** at a point in the text that is relevant to the subject being discussed.



Warning! All Warnings appear in red text, followed by blue text, and preceded by a red stop sign, like this.

A warning is meant to call the reader's attention to **critical information** at a point in the text that is relevant to the subject being discussed.

BEFORE STARTING ANY PROCEDURE, IT IS RECOMMENDED THAT YOU READ THE INSTRUCTIONS THOROUGHLY!

Thinklogical's® VelocityKVM T-Series SDI Extender Modules

Extend SDI and RS-422 signals up to 40 Kilometers

T-Series SDI Modules provide industry leading performance and reliable media conversion for a wide variety of applications, making it an ideal solution for commercial A/V, broadcast and corporate studio applications:

- *Video production and editing*
- *Sports tele-production*
- *Field production*
- *Cross-town fiber links*
- *Cross-campus production*
- *Pre-fibered venues*
- *Courtesy feeds*

...and many more.



T-Series SDI Modules are an interface option designed for use in the **VelocityKVM T-4200 Modular Chassis** (sold separately). These modules enable users to transmit up to four SD/HD signals, or up to two 3G SDI signals, with or without embedded audio and data. And each module is SMPTE 424M, 292M, 259M, 372M and 425 level A and B compliant. Using multi-mode or single-mode fiber, T-Series SDI Modules allow users to locate an SDI monitor from just a few meters away to up to 40 kilometers (24 miles) away from the controlling computer, securely and without the loss of resolution. In addition, this fiber based transport system assures users that each signal is immune to video pathological signals over the entire length of the fiber interconnect, while supporting all pathological patterns at all rates.

SDI Module Features

The reliability of T-Series SDI Modules stem from the quality of its design and construction, featuring **advanced, integrated re-clocking circuitry** designed into the transmitter and receiver. In addition, equalized and re-driven **SDI loop-through is provided on the transmitter**. These key features provide assurance that the signal is equalized and re-clocked prior to fiber transmission, thus retaining all of the signal's initial parameters and allowing for pristine, re-clocked SDI outputs on the receiver.

Installation possibilities are expanded with built-in support for either multi-mode or single mode fiber, making this a convenient and cost effective solution to combat the restrictions inherent in the distribution of uncompressed broadcast-quality video signals over long distances. In addition, the standard SFP+ optics with LC connectors are hot swappable/pluggable. When using a return-channel fiber, an RS-422 connector provides a full duplex channel to send/receive data, making it ideal for remote camera operations (such as pan, tilt and zoom), and access to video and audio player/recorder control functions.



The VelocityKVM T-4200 Series SDI Transmitter Modules:

- Designed for use in the **Velocitykvm T-4200** Chassis
- Extends SDI signals over a single fiber. (Each fiber supports two SD/HD signals or one 3G signal for a total of four SD/HD signals or two 3G signals)
- SMPTE 424M, 292M, 259M, 372M, 425 level A and B compliant
- RS-422 port for device control, such as pan/tilt/zoom functions for remote camera operations
- Distribute uncompressed, broadcast-quality signals over single-mode fiber up to 40 km. (24 miles) and up to 1000 meters over multi-mode fiber
- Multi-standard operation from 270 mbit/s to 3 Gbit/s
- Auto detects the input video format and displays it on LEDs
- Single-mode or multi-mode fiber options extend signals up to:
 - 350 meters using multi-mode fiber type OM2
 - 750 meters using multi-mode fiber type OM3
 - 1000 meters using multi-mode fiber type OM4
 - 40 kilometers (24 miles) using single-mode fiber
- Supports 3G/HD/SDI inputs with embedded audio and ancillary data
- Signals are recovered and re-clocked on the receiver
- Equalized and re-clocked SDI loop-through on the transmitter
- Signal transmission via fiber optic cable; no RF interference
- SMPTE compliant cable equalization on inputs & cable drivers on outputs ensure signal integrity
- Supports pathological patterns at all rates
- Support for standard 2.97 (3G) , 1.485 (HD), 270 (SD), and fractional 1/1.001 rates
- Compatible with all Thinklogical **SDIXtreme 3G+** (stand alone) extenders, **VX** and **HDXRouters**

1. THE T-4200 SERIES EXTENDERS

The Logical Solution: Modular KVM Extension / DVI and SDI Support in One Unit

The VelocityKVM line of extenders continues to evolve and add value with exciting new capabilities. The **VelocityKVM T-4200 Series** is housed in a high reliability, rack-space-saving chassis that includes all of the same capabilities in a 1U device that used to require 2U. Featuring a dual interface and current sharing power supplies, each 1U chassis supports two separate interface modules, allowing users to combine module options within one chassis.

Available modules support a variety of video display options and **all modules support PS2, full duplex stereo audio, stereo emitter, serial (RS-232), USB 2.0** (up to 480 Mbps) **and/or USB 1.0 HID**.

Using multi-mode or single-mode fiber, the system allows users to securely locate a display device and peripherals up to 40 kilometers away from the controlling computer without loss of resolution.

*Powered by Thinklogical's cutting edge
MRTS Technology (Multi Rate Transmission System),
each module seamlessly transports every frame of a DVI, SDI or RGB
video stream with no compression or dropped frames.*

**Powered by
MRTS Technology**

In addition, all high speed peripherals function with no latency, making it ideally suited for a wide range of applications in the broadcast and post-production field, command and control centers, universities, air traffic control, energy production and exploration, and most other commercial KVM applications.

1.1 T-Series SDI and DVI Module Features

VelocityKVM T-4200 Modules include the following features:

- Two hot-swappable interface modules are supported (Features include):
 - one single-link DVI display
 - one single-link DVI or RGB display
 - one dual-link DVI display
 - two single-link DVI displays
 - four SD/HD/SDI signals
 - two 3G/SDI/dual-link signals
- A dry contact annunciator alarm provides a warning for power failure/over-temperature
- All models are available with standard LC type fiber connectors.
- All modules use single-mode or multi-mode fiber optics.
- Fully compatible with all of Thinklogical's **VXRouter** line of products.
- Simple plug and play
- DVI modules support PS2, full duplex stereo audio, 3D stereo emitter, serial (RS-232), USB 2.0 and USB 1.0 HID



1.2 Contents: SDI Extender Modules

When you receive your Thinklogical® VelocityKVM T-Series SDI Extender Modules, you should find the following items:

- VelocityKVM T-Series Extender Module(s): Transmitter/Receiver/Transceiver
- VelocityKVM T-4200 Extender SDI Modules Product Manual CD
- Product Quick Start Guide

2. CONNECTING THE T-4200 EXTENDER

All physical connections to the T-4200 Extender use industry-standard connectors. Non-supplied cables are commercially available. All connections are found on the rear panel of the unit.

2.1 Transmitter Modules

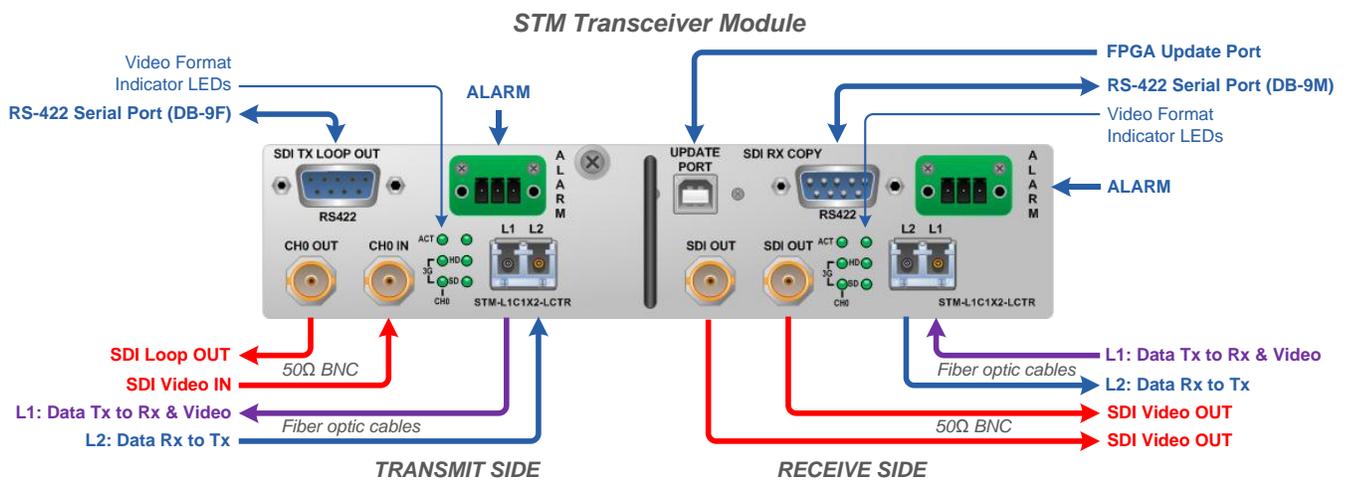
The **Transmitter Module** connects to the CPU (or other sources) using standard copper cables. The Transmitter then connects to a Receiver via multi-mode or single-mode fiber-optic cables.

2.2 Receiver Modules

The **Receiver Module** receives video and KVM data from a Transmitter via multi-mode or single-mode fiber-optic cables. The Receiver's output ports connect to the destination peripheral devices with their own standard copper cables.

2.3 Transceiver Modules

The **Transceiver Module** combines the functions and features of both a Transmitter and a Receiver in one unit. Each half of the Transceiver module receives the same standard source input, destination output and fiber-optic cables as half a dual Transmitter or Receiver module (below).

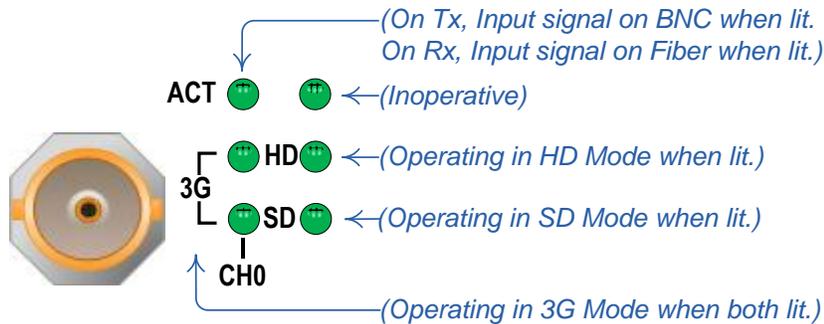


(See paragraph 2.8 **Technical Specifications**, on page 12, for details about specific optical distances using various fiber types.)

2.4 Module LEDs

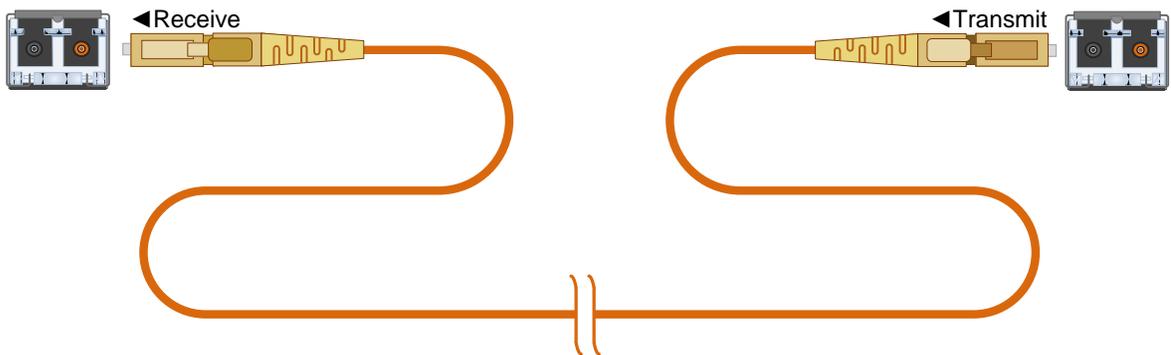
The Transmitter, Receiver and Transceiver Modules each feature two pairs of LEDs. Each pair of LEDs functions as follows:

SDI Module LEDs:



2.5 Fiber Optic Cable

Fiber optic cables connect the Transmitters to the Receivers. Standard multi-mode fiber optic cables must be 50 or 62.5 microns, terminated with LC type fiber optic connectors. **Be careful not to kink or pinch the fiber optic cable as it is being installed and keep all bend radii to no less than 3 inches (76.2mm).**



Standard multi-mode fiber optic cable (up to 1000 meters),
50 or 62.5 microns, terminated with LC-type connectors

2.5.1 Single Fiber Operation

The unit will operate with a single fiber from the TX to the RX. In this mode, the TX can transmit video and data to the RX, but the RX cannot send any information to the TX. (RS-422 data can be transmitted in the TX to RX direction only.)

2.5.2 Dual Fiber Operation

In this mode video information is transmitted from the TX to the RX over fiber L1 (and L3 in models with two SFPs). Fiber L2 is used as a data return path from the RX to the TX, allowing full duplex, bi-directional RS-422 data transfer.

2.6 Installation

All physical connections to the product use industry-standard connectors. Non-supplied cables are commercially available. All connections are found on the rear of the unit.

2.6.1 Rear Panel Views

Transmitter/Transmitter: STM-L1L1X2-LCTX



Receiver/Receiver: STM-C1C1X2-LCRX



Transmitter/Receiver: STM-L1C1X2-LCTR



STM Modules in Transmitter, Receiver and Transceiver Configurations

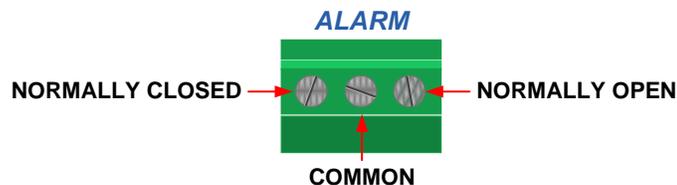
2.6.2 T-4200 Chassis SDI Module Options

- STM-L1L1X2-LCTX** T-4200 SDI **Dual Transmitter Module**: 2 Inputs (with 2 Loop Outs) & 2 SFPs
- STM-C1C1X2-LCRX** T-4200 SDI **Dual Receiver Module**: 2 SFPs & 2 Pairs of SDI Outputs
- STM-L1C1X2-LCTR** T-4200 SDI **Transceiver Module, TX**: 1 Input with Loop Out & 1 SFP
RX: 1 SFP & 2 SDI Outputs

2.7 Set-Up

2.7.1 Dry Contact Alarm

Dry contact alarms are located on the transmitter and receiver modules' rear panels. When there is an alarm condition, the relay is energized. An example of possible alarm causes might be over-temperature or a power supply issue.

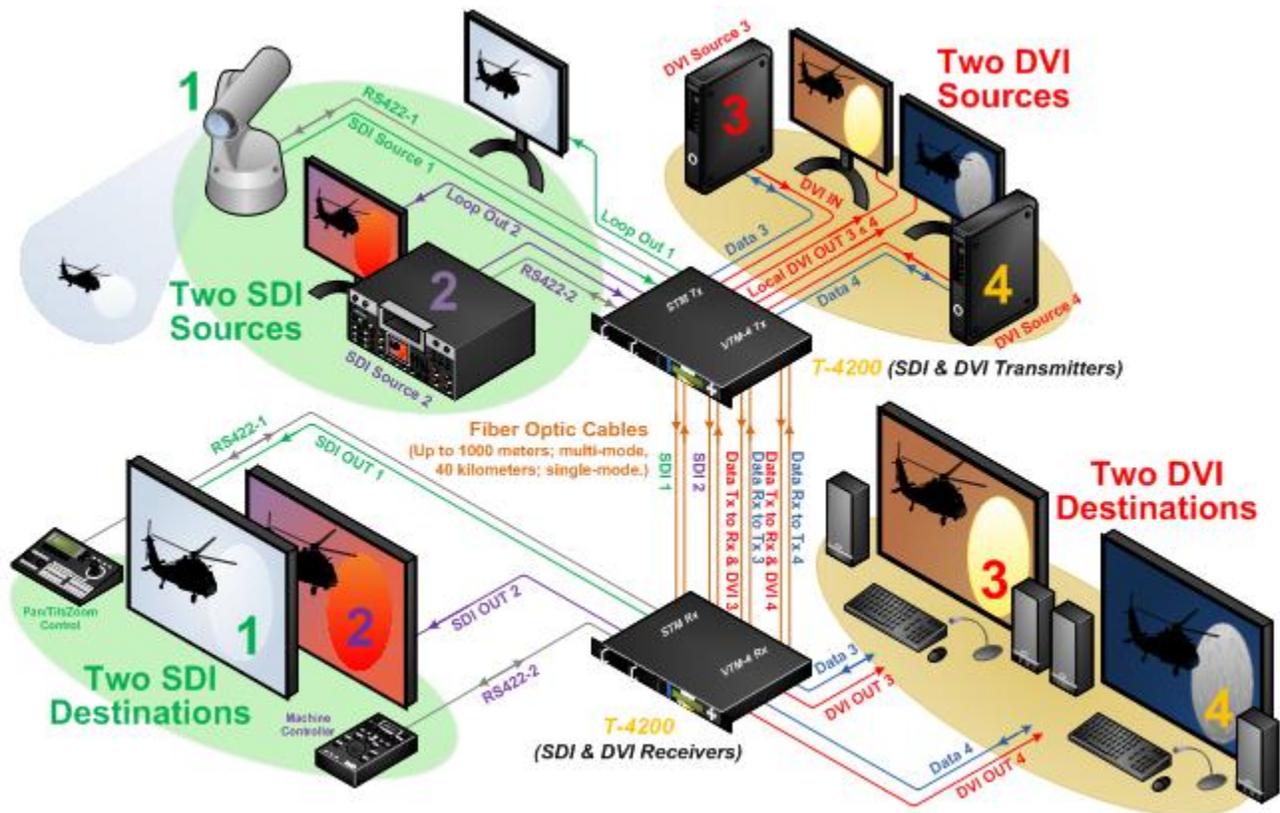


The dry contact alarm is a **Form C** contact with the following ratings:
Nominal Switching Capacity: 1 A 30 VDC, 0.3 A 125 VAX (resistive load)
Max. Switching Power: 30 W (DC), 37.5 VA (AC) (resistive load)

2.7.2 Firmware Upgrades

Firmware upgrades are available through Thinklogical. Please call for technical assistance at:
1-203-647-8700.

2.8 T-4200 Application Diagrams



2.8.1 Two SDI Video Sources and Two DVI Video Source Computers, located at separate workstations, connected to one **VelocityKVM T-4200 Chassis** equipped with one **STM** and one **VTM-4 Transmitter Module**, extending both SDI and DVI video signals, along with peripheral signals, up to 40 km. A **VelocityKVM T-4200 Chassis**, equipped with one **STM** and one **VTM-4 Receiver Modules**, is located at the destination, extending two SDI and two DVI displays/peripherals to four workstations.

2.9 Technical Specifications

Each Thinklogical VelocityKVM T-Series Module is designed to the following specifications:

<p>Copper Connectors</p>	<p>Transmitter: Video BNC (2) Serial Port DB9 Female Fiber Connectors LC Alarm Form C (3 contact)</p> <p>Receiver: Video BNC (2) Serial Port DB9 Male Fiber Connectors LC Alarm Form C (3 contact)</p>
<p>Optical Cable</p>	<p>Fiber Type: 50 or 62.5 micron, Multi-mode Required (per module): 2 (Not supplied)</p>
<p>Optical Distance</p>	<p>Up to 65 meters with Type OM1 Up to 350 meters with Type OM2 Up to 750 meters with Type OM3 Up to 1000 meters with Type OM4 Up to 40 kilometers with Single-Mode</p>
<p>Operating Temp and Humidity</p>	<p>0° to 50°C (32° to 122 °F), 5% to 95% RH, non-condensing</p>
<p>Dimensions</p>	<p>Height: 1.65" (41.91 mm) ± .039"; .1 mm Depth: 6.366" (161.70 mm)* ± .039"; .1 mm Width: 7.226" (183.54 mm) ± .039"; .1 mm</p>
<p>Weight</p>	<p>1 lb. (.454 kg)</p>
<p>Supply Voltage</p>	<p>100-240 VAC, 47-63 Hz, Universal AC power supply</p>
<p>Power Consumption</p>	<p>10 Watts per module</p>
<p>Compliance</p>	<p>Approvals for US, Canada, and European Union</p>
<p>Warranty</p>	<p>Twelve months from date of purchase. Extended warranties available.</p>

3. REGULATORY & SAFETY COMPLIANCE

3.1 Safety Requirements

3.1.1 Symbols found on the product

Markings and labels on the product follow industry-standard conventions. Regulatory markings found on the products comply with domestic and many international requirements.

3.1.2 Regulatory Compliance

Thinklogical VelocityKVM Extender products are designed and made in the U.S.A. VelocityKVM Extender products have been tested by a certified testing laboratory and found to be fully compliant with the following standards (both domestic USA and many international locations):

North America

Safety

ANSI/UL60950-1: 1st Edition (2003)

CAN/CSA C22.2 No. 60950-1-03

LASER Safety

CDRH 21CFR 1040.10

Class 1 LASER Product

Electromagnetic Interference

FCC CFR47, Part 15, Class A

Industry Canada ICES-003 Issue 2, Revision 1

Australia & New Zealand

This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

European Union

Declaration of Conformity

Manufacturer's Name & Address: **Thinklogical®**
100 Washington Street
Milford, Connecticut 06460 USA
Telephone 1-203-647-8700

These products comply with the requirements of the Low Voltage Directive 72/23/EEC and the EMC Directive 89/336/EEC.

3.1.3 Standards with Which Our Products Comply

Safety

GENELEC EN 60950-1, 1st Edition (2001)

LASER Safety

IEC60825:2001 Parts 1 and 2

Class 1 LASER Product

Electromagnetic Emissions

EN55022: 1994 (IEC/CSP1R22: 1993)

EN61000-3-2/A14: 2000

EN61000-3-3: 1994

Electromagnetic Immunity

EN55024: 1998 Information Technology Equipment-Immunity Characteristics

EN61000-4-2: 1995 Electro-Static Discharge Test

EN61000-4-3: 1996 Radiated Immunity Field Test

EN61000-4-4: 1995 Electrical Fast Transient Test

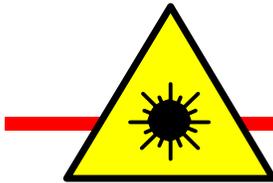
EN61000-4-5: 1995 Power Supply Surge Test

EN61000-4-6: 1996 Conducted Immunity Test

EN61000-4-8: 1993 Magnetic Field Test

EN61000-4-11: 1994 Voltage Dips & Interrupts Test

*All T-4200 modules are designed and identified as **Class 1 LASER** products.*



CLASS 1 LASERS do not require any special precautions under conditions of normal use.

3.2 Supplementary Information

The following statements may be appropriate for certain geographical regions and might not apply to your location.

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.



Warning! This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take corrective measures.



Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to

provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications in which case the user may be required to take adequate corrective measures at their own expense.



Note: This Class A digital apparatus complies with Canadian ICES-003 and has been verified as being compliant within the Class A limits of the FCC Radio Frequency Device Rules (FCC Title 47, Part 15, Subpart B CLASS A), measured to CISPR 22: 1993 limits and methods of measurement of Radio Disturbance Characteristics of Information Technology Equipment.



Note: The user may notice degraded audio performance in the presence of electromagnetic fields.



Note: If using a keyboard that is noise susceptible, a ferrite ring on the keyboard cable may be needed to comply with Immunity Requirements

3.2.1 Product Serial Number

The VelocityKVM products have a unique serial number, imprinted on an adhesive label that is fixed to the bottom of the chassis. The serial number includes a date-code. The format for the date-code is 2 digits for the month, 2 digits for the day and 2 digits for the year, plus two or three digits for a unique unit number. This serial number is also found on the original shipping carton.

3.2.2 Connection to the Product

Connections and installation hardware for our products use industry-standard devices and methods. All wiring connections to the customer equipment are designed to minimize proprietary or customized connectors and cabling. Power connections are made with regionally appropriate power cords and approved methods.

4. HOW TO CONTACT US

4.1 Customer Support

Thank you for choosing Thinklogical[®] products for your application.

We appreciate your business and are dedicated to helping you successfully use our products.

thinklogical[®] is always here to help you.

To contact us, please use the following telephone numbers and internet-based methods:

Thinklogical is an engineering company and you will receive the information you require directly from our most knowledgeable engineers. We believe that the first lines of support are the design engineers that developed each product. Therefore, your questions will be handled promptly by our in-house engineers who are most familiar with your products.

To contact Thinklogical, please use any of the following telephone or internet-based methods:

Website

Visit our website for specific product information, current updates and our complete line of products at www.thinklogical.com.

Our internet website offers product information on all current systems, including technical specification sheets and installation guides (for viewing online or for download), product diagrams showing physical connections and other helpful information.



Note: Most online documents are stored as Adobe Acrobat “PDF” files. If you do not have the Adobe Acrobat reader needed to view PDF files, visit www.adobe.com for a download.

Email

Thinklogical is staffed **Monday through Friday from 8:30am to 5:00pm**, Eastern Time Zone. We will make every effort to respond to your email inquiries promptly. Please use the following email addresses for any of your concerns:

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 Return Authorization.

Telephone

Telephone Sales: Contact our expert sales staff via 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.

Telephone Product Support: Contact Product Support via 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.

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 provide a “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 holidays. You can leave voice messages for individuals at any time. Our Sales Representatives have direct numbers to speed up your next call to us.

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.

4.2 Product Support

Thinklogical’s support personnel are available **Monday through Friday from 8:30am to 5:00pm**, Eastern Time Zone. If your application requires assistance at some time outside of our normal business hours, please contact us beforehand and we will do our best to make arrangements to help you with your Thinklogical products.

4.2.1 Warranty

Thinklogical® warrants this product against defects in materials and workmanship for a period of one year from the date of delivery. Thinklogical® and its suppliers disclaim any and all other warranties.



Note: Thinklogical Inc. products carry a one year warranty, with longer term available at time of purchase on most products. Please refer to your product invoice for your products Warranty Terms & Conditions.

Defect remedy shall be the repair or replacement of the product, provided that the defective product is returned to the authorized dealer within a year from the date of delivery.

If you wish to return your device, contact the Thinklogical authorized dealer where you purchased the device, or if you purchased directly, call Thinklogical at **1-800-291-3211** (USA).

4.2.2 Return Authorization

In the event you must return a product to Thinklogical directly:

Contact **Customer Support** at **1-800-291-3211** or **1-203-647-8700**.

Customer Support will ask you to describe the problem and will issue you a **Return Merchandise Authorization** number (RMA#). If possible, pack the device in its original box and return it with the RMA# printed clearly on the box.

Return address for products with a **Return Material Authorization**:

Thinklogical® LLC
Attn: RMA#
100 Washington Street
Milford, CT 06460 USA

Phone: 1-800-291-3211 (USA only)



Note: **DO NOT** return a product to Thinklogical without a **Return Material Authorization**.

Our Address

If you have any issue with a product, have product questions or need technical assistance with your Thinklogical system, please call us at **1-800-291-3211** (USA only) or **1-203-647-8700** and let us help. If you'd like to write us, our mailing address is:

Thinklogical® LLC
100 Washington Street
Milford, CT 06460 USA

Appendix A- Quick Start Guide: STM-24 Transmitters to STM-24 Receivers

thinklogical® T-4200 Chassis with SDI Transceiver Modules & DVI Tx/Rx Modules

QUICK START GUIDE

Chassis 1: SDI Transceiver Module
STM-L1C1X2-LCTR

Chassis 2: SDI Transceiver Module
STM-L1C1X2-LCTR

Chassis 1: DVI Transmitter Module
VTM-U00024-LCTX

Chassis 2: DVI Receiver Module
VTM-U00024-LCRX

STEP 1: Connect the STM-Transceiver & DVI Transmitter Modules in Chassis 1 to the STM-Transceiver and DVI Receiver Modules in Chassis 2 using multi-mode fiber-optic cables (up to 1000 meters). Connect L1 to L1, L2 to L2, and L3 to L3.

STEP 2: On the front of each T-4200 Chassis, ensure the ON/OFF switches are in the OFF position (see **A** below). Install the T-4200's Right Power Supply Module AC Power Cord (Left receptacle) and the Left Power Supply Module AC Power Cord (Right receptacle). Plug each Chassis AC Cord into a standard AC source. Turn ON the Right and Left Power Supply Modules.

STEP 3: Connect a monitor to each of the SDI OUT ports (Chassis 1 & 2) with a standard 50Ω BNC cable. Connect any RS-422 devices with standard serial cables. Turn all the devices ON.

STEP 4: Connect the SDI IN Cables from the SDI Sources to the CH0 IN ports of each SDI Transmitter (Chassis 1 & 2). Connect the RS-422 cables from the Sources to the Transmitters with standard serial cables. *Ensure each Source is turned ON.* Connect an optional local monitor to the CH0 OUT port on each SDI Transmitter.

STEP 5: Connect the DVI IN Cables from the DVI Sources to the DVI IN 1 & 2 ports of the DVI Transmitter (Chassis 1). Connect the peripheral device sources to the Transmitter with standard cables as shown.

STEP 6: Connect the peripheral devices to the DVI Receiver (Chassis 2) with standard cables and turn them all ON. *Ensure all system functions are operating properly.*

A NOTE: The DISPLAY Switch on the front of the chassis determines if Module 1 or Module 2 controls the LCD.

Appendix B- Thinklogical KVM Extenders

The Logical Solution

VelocityKVM Extension Systems are designed for high performance visual applications that require DVI, SDI or RGB video as well as peripheral support (VelocityKVM-5 supports DVI or RGB). 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. Each of the VelocityKVM Systems is designed to support PS2, full duplex stereo audio, serial (RS-232), USB 1.0 (HID) and USB 2.0 (up to 480 Mbps).

VelocityKVM 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.

Theory of Operation

MRTS Technology

6.25 Gbps. Allows for Full Frame Rate Transmission of Uncompressed DVI

Powered by Thinklogical's cutting edge **MRTS Technology (Multi Rate Transmission System)**, this KVM extension system transports every frame of a DVI video stream seamlessly, with no compression or dropped frames. In addition, all high speed peripherals function with no latency. Leveraging standard SFP+ transceivers, the system allows for the use of either multi-mode or single-mode fiber optic cable.

The System

The VelocityKVM Extension System has a simple transmitter/receiver design which allows for ease of installation and straight-forward deployment. Depending on the user's infrastructure, the transmitter and the receiver can be connected by a multi-mode or single-mode fiber optic cable. The transmitter unit connects to the CPU with the supplied peripheral cables. In addition, a local video, keyboard and mouse port is available on the transmitter. The receiver unit provides connections to the user interface devices.

Why Fiber?

The limit on how much bandwidth or data that can be carried across a copper line can become a bottleneck for enterprise access and ultimately, for revenue. This bottleneck often appears in heavy-volume, metropolitan area networks. Fiber Optic Cable alleviates this problem by offering substantially greater bandwidth.

The VelocityKVM Distance (up to 350m using 50/125µm fiber)

Multi-mode fiber is designed for transmission distances such as those found within a single building or facility and so is ideal for multi-channel television broadcast systems. Multi-mode fiber may be used to send video signals from room to room or floor to floor. The VelocityKVM allows for video and peripheral transmission distances up to 350 meters using 50/125µm fiber, making it an ideal solution for in-house applications.

Advanced Top Quality Video Transmission

Fiber Optic Cable has emerged as a logical solution for next-generation signal routing. The VelocityKVM product family harnesses this capability and ensures long distance, error-free transmission with no frame or bit dropping and complete immunity to interference. The end result is ***no degradation of the video or peripheral signals whatsoever.***

Appendix C- VelocityKVM T-Series Ordering Information

Part Numbers and Descriptions

VELOCITY T-4200 CHASSIS

VTS-004200 Velocity T-4200 CHASSIS

SDI MODULES

Velocity T-Series SDI Modules

STM-C1C1X2-LCRX SDIXtreme 3G+ T-4200 Dual Receiver Module with 2 SFPs and 2 Pairs of SDI Outputs, LC

STM-L1C1X2-LCTR SDIXtreme 3G+ T-4200 Transceiver Module: **TX:** 1 Input with Loop-out and 1 SFP, LC

RX: 2 SDI Outputs and 1 SFP, LC

STM-L1L1X2-LCTX SDIXtreme 3G+ T-4200 Dual Transmitter Module with 2 Inputs, 2 Loop Outs and 2 SFPs, LC

Single Mode Optics Option (SDI Modules)

VOP-S29 SDIXtreme 3G+ Optics Option for Transmitter or Receiver, Single Mode, 3 Fibers, 4KM, LC

VOP-S30 SDIXtreme 3G+ Optics Option for Transmitter or Receiver, Single Mode, 3 Fibers, 10KM, LC

VOP-S58 SDIXtreme 3G+ Optics Option for Transmitter or Receiver, Single-Mode, 3 Fibers, 30M, LC

Multi-Mode Optics Option (SDI Modules)

VOP-M21 SDIXtreme 3G+ Optics Option for Transmitter or Receiver, Multi-Mode, 3 Fibers, 1000M, LC

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