KLX-X SERIES

ADVANCED HDMI AND DISPLAYPORT KVM EXTENDERS VIA CATX AND FIBER

USER MANUAL

Designed and Manufactured in the USA

Smart-AVI

1-800-284-2131
www.smartavi.com

OVERVIEW

TECHNICAL SPECIFICATIONS

VIDEO	
Format	HDMI (X100, X1000, X2000), DisplayPort (X150, X1500, X2500)
Max Resolution	3840x2160 @ 30Hz
Input Cable Length	Up to 20 ft.
Output Cable Length	Up to 20 ft.
ETHERNET	
Format	RJ45 and/or SFP Fiber
Supported Cable Length	300ft/100meters via CATx or 10km via Fiber
USB	
Signal Type	(2) HID KM Ports, (2) USB 2.0 Ports
User Console Interface	(2) USB Type-A for keyboard and mouse connection only, (2) USB Type-A for USB 2.0 devices
AUDIO	
Input	Stereo 3.5mm Female
Output	Stereo 3.5mm Female
POWER	
Power Requirements	5V DC, 2A (minimum) power adapter with center-pin positive polarity
ENVIRONMENT	
Operating Temp	32° to 104° F (0° to 40° C)
Storage Temp	-4° to 140° F (-20° to 60° C)
Humidity	0-80% RH, non-condensing
MEASUREMENTS	
Dimensions (X100, X150, X1000, X1500)	5.2" W x 3.75" L x 1.5" H
Dimensions (X2000, X2500)	8.5" W x 4" L x 1.8" H
Weight (X100, X150, X1000, X1500)	8 oz
Weight (X2000, X2500)	1lb 10oz

WHAT'S IN THE BOX?

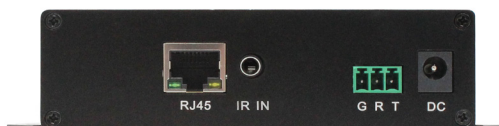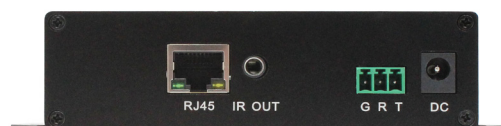| PART NO.	Q-TY	DESCRIPTION
KLX-X Transmitter	1	Advanced HDMI/DP KVM Transmitter via CATx/Fiber
KLX-X Receiver	1	Advanced HDMI/DP KVM Receiver via CATx/Fiber
PS5VDC2A	2	5V DC, 2A (minimum) power adapter with center-pin positive polarity
	1	User Manual

FRONT AND BACK

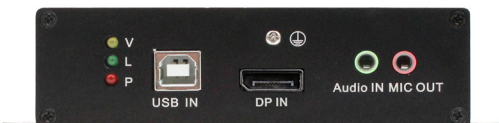**HDMI WITH CAT5**
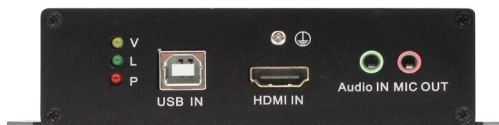
KLX-X100-TX Front

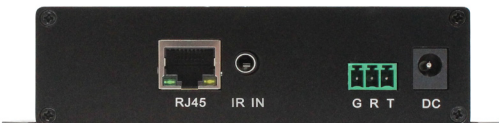KLX-X100-RX Front

KLX-X100-TX Back
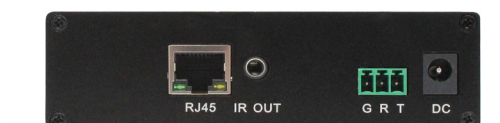
KLX-X100-RX Back

DISPLAYPORT WITH CAT5

KLX-X150-TX Front

KLX-X150-RX Front

KLX-X150-TX Back

KLX-X150-RX Back

HDMI WITH FIBER
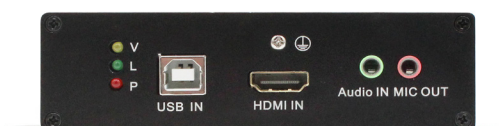
KLX-X1000-TX Front

KLX-X1000-RX Front

KLX-X1000-TX Back

KLX-X1000-RX Back

FRONT AND BACK (CONTINUED)

DISPLAYPORT WITH FIBER

KLX-X1500-TX Front

KLX-X1500-RX Front
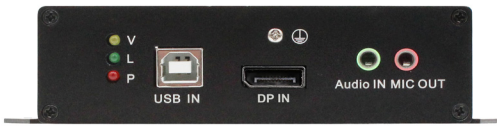
KLX-X1500-TX Back

KLX-X1500-RX Back

HDMI WITH CAT5 & FIBER

KLX-X2000-TX Front

KLX-X2000-RX Front

KLX-X2000-TX Back

KLX-X2000-RX Back

DISPLAYPORT WITH CAT5 & FIBER

KLX-X2500-TX Front

KLX-X2500-RX Front

KLX-X2500-TX Back

KLX-X2500-RX Back

INTRODUCTION

Unleash the potential of the KLX-X series —where reliability meets affordability. Perfect for small offices, home workstations, retail displays, or conference rooms, this point-to-point model offers versatile connectivity at an entry-level cost without compromising on quality. Seamlessly extend your connections up to 100 meters over CATx and up to 10 km over Fiber, ensuring UHD video streaming with minimal latency. Available in either HDMI or DP configuration options, the KLX-X series is your compact solution for affordable, reliable, and high-performance connectivity.
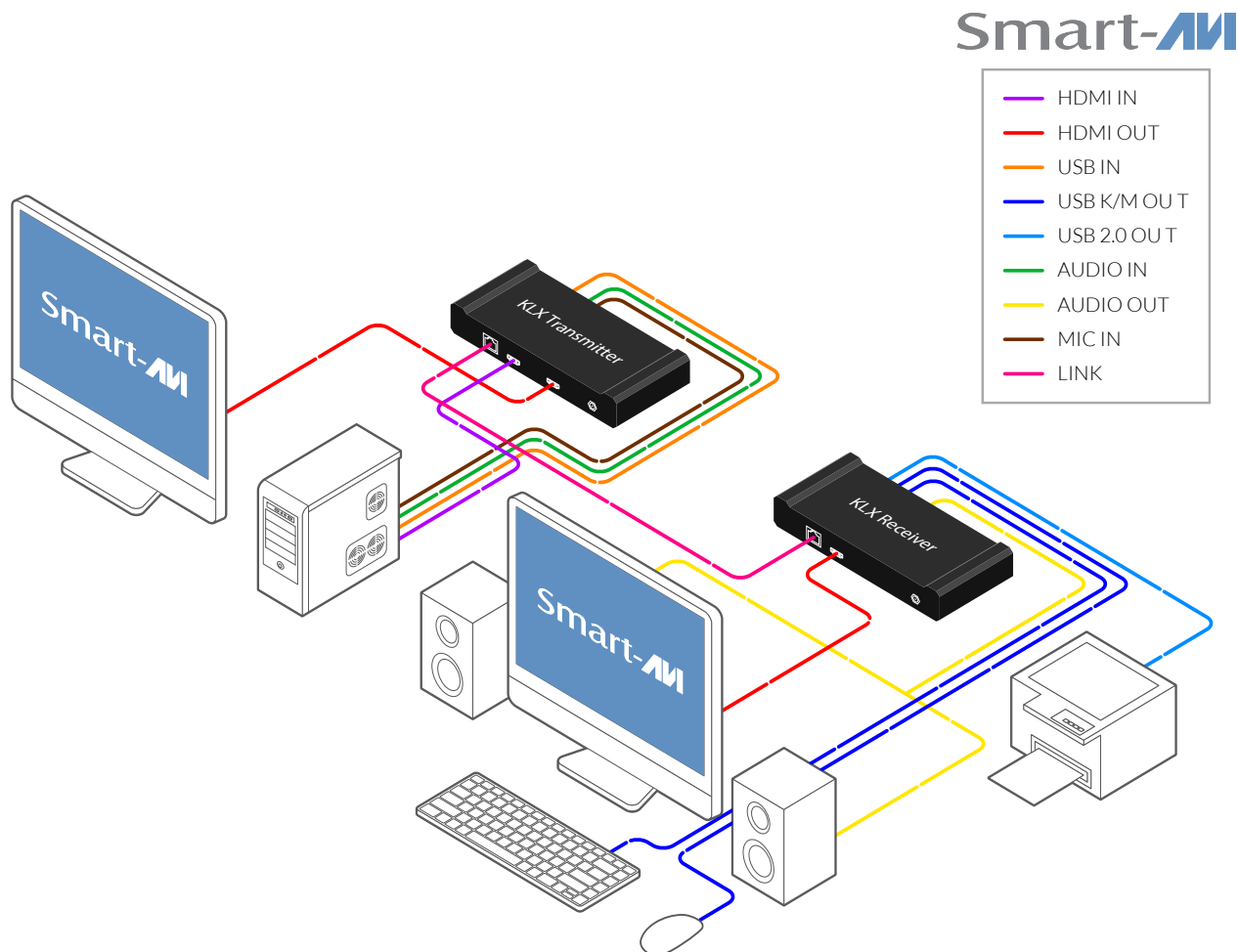
FEATURES

- **4K Video:** Supports 4K at 30Hz or FHD at 60Hz.
- **VLAN Management:** Integrate with managed network switches for dynamic, scalable, and cost-effective matrix switching.
- **High-Performance AV:** Exceptional video streaming with low latency.
- **Flexible Connectivity:** Extender connections up to 100 meters over Cat5 and up to 10 km over Fiber.
- **Visually Lossless Video:** HDMI or DisplayPort video with no perceptible loss.
- **Versatile Options:** HDMI & DP support for diverse video inputs.
- **Transparent USB 2.0:** Up to ~25 MBps transfer rate.
- **Compact Design:** Small footprint for any workspace.
- **Affordable Connectivity:** Entry-level cost without compromising quality.

APPLICATION

- Single device KVM Over IP Gateways
- Enterprise level multi-user matrix solutions.
- Remote gaming
- Working at home
- Managing a Kiosk
- Sharing resources in a business,
- HD audio-video broadcast
- Accessing data during a military operation
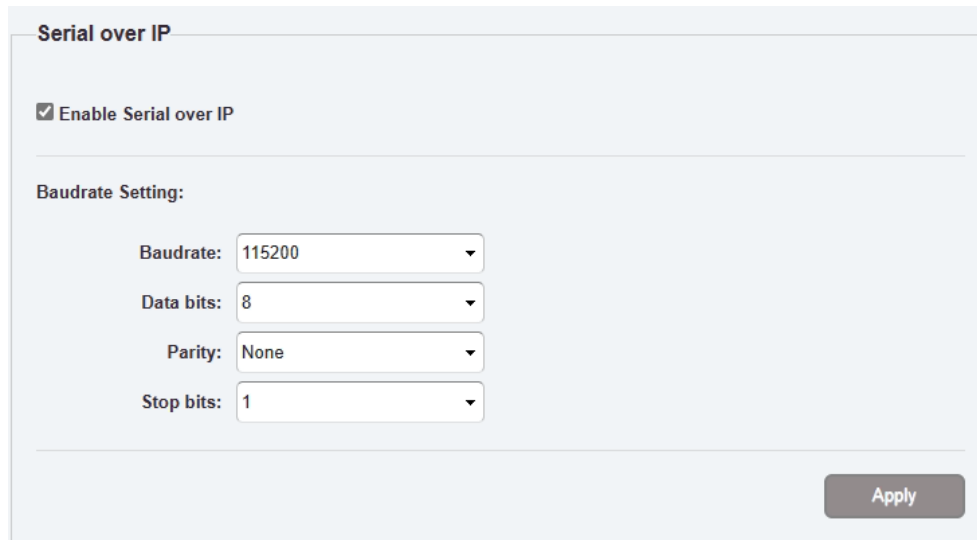- Managing network cable boxes remotely

INSTALLATION

1. Position your KLX-X transmitter conveniently near the computer you wish to use.
2. Connect the corresponding cables from the computer to the USB IN, AUDIO IN, MIC IN, and HDMI/DP IN found on the back of the KLX-X transmitter. If you want to connect a monitor to transmitter, connect a HDMI/DP cable from the monitor to the HDMI/DP OUT on the front of the transmitter.
3. Position your KLX-X receiver conveniently near where you would like to have your new setup.
4. Connect a CATx/Fiber cable the LINK on the front of the transmitter. Then connect the other end to the LINK on the front of the receiver.
5. Connect your keyboard and mouse to the USB K/M OUT ports found on the back of the receiver. Connect your audio output device, such as a set of speakers, to the 3.5mm jack labeled AUDIO OUT and connect your audio input device, such as a microphone, to the 3.5mm jack labeled MIC OUT.
6. Connect your monitor by connecting a HDMI/DP cable to the HDMI/DP port on the front of the receiver labeled HDMI/DP OUT. Then plug the other end of the cable into your monitor.
7. If you want to connect any extra USB devices, such as a printer, plug them into either of the two ports labeled USB 2.0 OUT.
8. You can now plug the power cords into both the transmitter and receiver, and after a few moments the units should boot. On the back of the units there are LEDs corresponding to link and power. If the link was established the link LED should be green.
9. Once the devices are finished booting up video should appear and you should be able to control the device with your K/M.

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——	HDMI IN
——	HDMI OUT
——	USB IN
——	USB K/M OU T
——	USB 2.0 OU T
——	AUDIO IN
——	AUDIO OUT
——	MIC IN
——	LINK

USING RS232 PASS-THROUGH

1. The KLX-X2000 and up support RS232 pass-through, allowing you to control RS232 devices connected to the transmitter unit from the receiver unit.
2. Connect the RS232 cable from the device you want to control by serial to the RS232 port on the transmitter unit.
3. Connect the RS232 cable from the PC you will use to send the serial commands to the RS232 port on the receiver unit.
4. Make sure the Baudrate settings are correct for the device you wish to control via serial before attempting to control the device.

AUDIO INPUT AND OUTPUT

1. If your computer has a mic-in jack and you want to be able to access this jack from the receiver unit you should connect the microphone to the MIC IN jack on the receiver unit.
2. Then in order to get the audio from the microphone into the computer, connect a 3.5mm-to-3.5mm stereo cable from MIC OUT jack on the transmitter unit to the Line in jack on the computer.

WARNING: DO NOT connect the cable from the Line out jack on the transmitter unit to the Mic In jack on the computer. Doing it will result in audio "clipping" and may cause damage to the sound card.

Note: HDMI audio will always be passed through to the HDMI OUT connector on the receiver unit. However, if a 3.5mm stereo cable is connected to the Line in jack on the transmitter unit, the embedded HDMI audio is switched off. This allows the audio signal from Line in jack (transmitter unit) to be received on the Line out jack (receiver unit).

TROUBLESHOOTING

No Power
- Make sure that the power adapter is securely connected to the power connector of the unit.
- Check the output voltage of the power supply and make sure that the voltage value is around 12VDC.
- Replace the power supply.

No Video
- Check if all the video cables are connected properly.
- Connect the computer directly to the monitor to verify that your monitor and computer are functioning properly.
- Restart the computers.

Keyboard is not working
- Check if the keyboard is properly connected to the unit.
- Check if the USB cables connecting the unit and the computers are properly connected.
- Try connecting the USB on the computer to a different port.
- Make sure that the keyboard works when directly connected to the computer.
- Replace the keyboard.

Mouse is not working
- Check if the mouse is properly connected to the unit.
- Try connecting the USB on the computer to a different port.
- Make sure that the mouse works when directly connected to the computer.
- Replace the mouse.

No Audio
- Check if all the audio cables are connected properly.
- Connect the speakers directly to the computer to verify that the speakers and the computer audio are functioning properly.
- Check the audio settings of the computer and verify that the audio output is through the speakers.

TECHNICAL SUPPORT

For product inquiries, warranty questions, or technical questions, please contact info@smartavi.com.

LIMITED WARRANTY STATEMENT

A. Extent of limited warranty
SmartAVI, Inc. warrants to the end-user customers that the SmartAVI product specified above will be free from defects in materials and workmanship for the duration of 1 year, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.

SmartAVI limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:
> a. Improper or inadequate maintenance or modifications
> b. Operations outside product specifications
> c. Mechanical abuse and exposure to severe conditions

If SmartAVI receives, during applicable warranty period, a notice of defect, SmartAVI will at its discretion replace or repair defective product. If SmartAVI is unable to replace or repair defective product covered by the SmartAVI warranty within reasonable period of time, SmartAVI shall refund the cost of the product.

SmartAVI shall have no obligation to repair, replace or refund unit until customer returns defective product to SmartAVI.

Any replacement product could be new or like new, provided that it has functionality at least equal to that of the product being replaced.

SmartAVI limited warranty is valid in any country where the covered product is distributed by SmartAVI.

B. Limitations of warranty
To the extant allowed by local law, neither SmartAVI nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the SmartAVI product, and specifically disclaim implied warranties or conditions of merchantability, satisfactory quality, and fitness for a particular purpose.

C. Limitations of liability
To the extent allowed by local law the remedies provided in this warranty statement are the customers sole and exclusive remedies.

To the extant allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event will SmartAVI or its third party suppliers be liable for direct, indirect, special, incidental, or consequential damages whether based on contract, tort or any other legal theory and whether advised of the possibility of such damages.

D. Local law
To the extent that this warranty statement is inconsistent with local law, this warranty statement shall be considered modified to be consistent with such law.

NOTICE

The information contained in this document is subject to change without notice. SmartAVI makes no warranty of any kind with regard to this material, including but not limited to, implied warranties of merchantability and fitness for particular purpose. SmartAVI will not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material. No part of this document may be photocopied, reproduced, or translated into another language without prior written consent from SmartAVI, Inc.

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