

SDX-Ultra

HDBaseT 4K Video and USB 2.0 KVM Extender



Extend 4K ultra-HD video, USB 2.0, RS-232, stereo audio, and fully emulated USB keyboard-mouse signals up to 330 feet (100m) over a single CAT5/5e/6 cable.

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SMART AUDIO VIDEO INNOVATION

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WHAT'S IN THE BOX?		
PART NO.	QTY	DESCRIPTION
SDX-ULT-TX	1	SDX-Ultra 4K Extender with USB 2.0 Transmitter Unit
SDX-ULT-RX	1	SDX-Ultra 4K Extender with USB 2.0 Receiver Unit
PS5VDC4A	2	Power Supply 5VDC 4AMP
	1	Quick Start Guide

INTRODUCTION

- The SDX-Ultra is a 4K ultra-HD video, USB 2.0, stereo audio, RS-232, and keyboard-mouse signal extender enhanced with the HDBaseT technology, sending signals up to 330 feet (100m) away using CAT5/5e/6 cables.
- The SDX-Ultra is the first extender on the market to feature 4K, USB, and full KVM extension on one cohesive system. Its DVI and HDMI-adaptable 4K (3840x2160 @ 30Hz) video output is optimized for HD monitors.
- The SDX-Ultra extends keyboard-mouse signals for remote workflow management and offers uninterrupted emulation from the user's transmitter unit. This uninterrupted emulation prevents accidental disconnection or deactivation issues during mission critical operation.
- The SDX-Ultra's unparalleled KVM emulation makes it the perfect solution for server extension in applications ranging from data processing to interactive conferencing.

FEATURES

- Supports HDMI-based 2K@60Hz/4K@30Hz resolutions (HDBaseT2.0 technology) over CAT5/5e/6
- Extend 1080p HD video up to 330ft (100m) from its source with DVI-D
- Extend 2K/4K ultra-HD video up to 240ft (80m) from its source with DVI-to-HDMI adaptor
HDCP & EDID bypass
- Supports optional EDID emulation
- USB 2.0 device signals over CAT5/5e/6
- USB keyboard-mouse emulation
- Stereo audio over CAT5/5e/6
- Full RS-232 control up to (115,200 bps through connector)

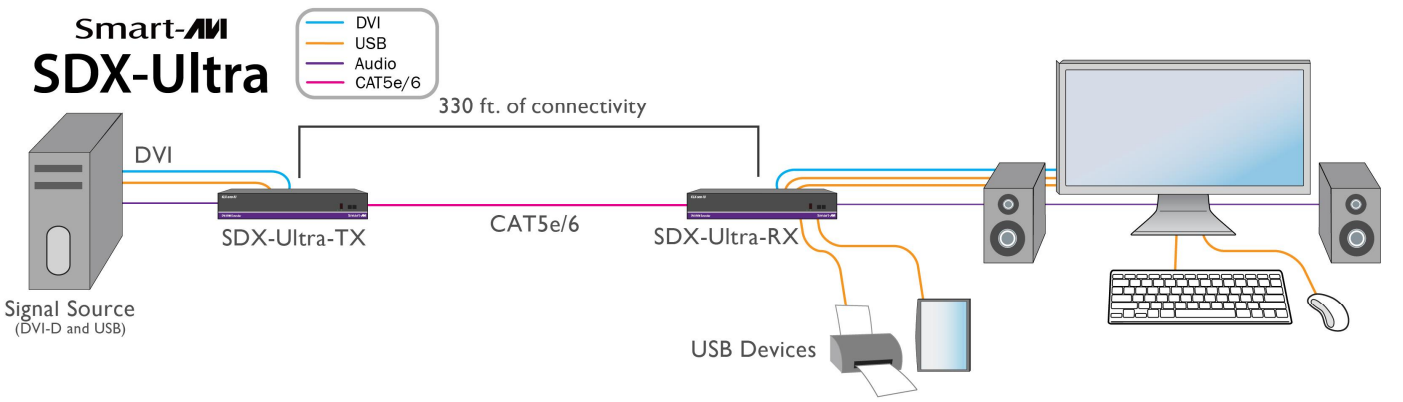
HARDWARE INSTALLATION

1. Disconnect power from all devices involved with the installation.
2. Connect the display, keyboard, mouse, audio, USB devices and RS-232 device to the ports identified for each item on the SDX-Ultra Receiver Unit.
3. Connect the Computer's Display output, USB port and RS-232 port to the ports identified for each item on the SDX-Ultra Transmitter Unit.
4. Connect the SDX-Ultra Transmitter Unit to the SDX-Ultra Receiver Unit with an Ethernet CAT5/5e/6 cable.
5. Power on the devices connected to the SDX-Ultra Receiver Unit.
6. Connect the power supplies provided to the SDX-Ultra Transmitter and Receiver and connect them both to power.
7. Power on the Computer.

If needed you can force the SDX-Ultra to re-learn the Monitors EDID settings with the following hot-key combination.

Press the Ctrl key twice, press the e key, press the Enter key.

This will cause the USB light on the front of the SDX-Ultra Transmitter Unit to blink rapidly for 1 second indicating the EDID settings have been re-learned.



SDX-Ultra (TX) Front



SDX-Ultra (RX) Front



SDX-Ultra (TX) Back



SDX-Ultra (RX) Back

TECHNICAL SPECIFICATIONS

VIDEO

Format	DVI-D (HDMI-ready with adaptor)
HDTV Resolutions	480p, 720p, 1080i, 1080p/60Hz, 4K/30Hz
Video Bandwidth	Single-link 340MHz (10.2 Gbps)
Input Interface (TX)	(1) DVI-D 29-pin
Output Interface (RX)	(1) DVI-D 29-pin
Max Output Distance	1080p@60 100m (330ft) [CAT5/5e/6] 4K2K (4:2:0 8bit) 80m (264ft) [CAT5/5e/6]
Equalization	Auto
Input TMDS Signal	1.2 Volts [peak-to-peak]
Input DDC Signal	5 Volts [peak-to-peak, TTL]
Video Bandwidth	Single-link 340MHz (10.2 Gbps)

AUDIO

Format	Stereo
Input Interface	3.5 mm Jack Socket (Female)
Output Interface	3.5 mm Jack Socket (Female)

USB

Format	USB 2.0
Keyboard-Mouse	1.1 with full emulation

RS-232

Format	Full duplex TXD,RXD signal
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SYSTEM

Interface	RJ45
Cable Requirements	CAT5/5e/6
Maximum Length	330 ft. (100m)

OTHER

Approvals	UL, CE, ROHS Compliant
Power	100-240VAC/5VDC4A @ 20W
Operating Temperature	32 - 131°F (0-55°C)
Storage Temperature	-4 - 185°F (-20 - 85°C)
Humidity	Up to 95%
Dimensions	7.875" W x 1.25" H x 4" D each
Weight	.45 lbs. each

LIMITED WARRANTY STATEMENT

A. Extent of limited warranty

Smart-AVI Technologies, Inc. warrants to the end-user customers that the Smart-AVI 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.

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

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

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

Smart-AVI limited warranty is valid in any country where the covered product is distributed by Smart-AVI.

B. Limitations of warranty

To the extent allowed by local law, neither Smart-AVI nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the Smart-AVI 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 extent allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event will Smart-AVI 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.

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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 Technologies, Inc.



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