# What's in the Box?

PART NO.	QTY	DESCRIPTION
HDXP-TX	1	HDX-Plus Transmitter
HDXP-RX	1	HDX-Plus Receiver
PS5VD2A-1	2	Power Supply
SM-EYE-3		Infrared Receiver
SM-LED-3		Infrared Emitter

# **Technical Specifications**

VIDEO			
Format	HDMI 1.3 and HDCP compliant		
HDTV Resolutions	480p, 720p, 1080i, 1080p/60Hz/48bit		
TV Resolution	480i		
Input Interface (TX)	HDMI Type A 19-pin Female TMDS		
Output Interface (RX)	HDMI Type A 19-pin Female TMDS		
Input Cable Length (TX)	Up to 40 ft.		
Output Cable Length (RX)	Up to 40 ft.		
AUDIO			
Format	Dolby TrueHD, DTS-HD MA		
Input Interface	HDMI (Integrated)		
Output Interface	HDMI (Integrated)		
IR			
Signal Type	38 KHz		
Interface	3.5 mm Jack Socket (Female)		
RS-232			
Baud Rate	Up to 19,200 bps		
Input Interface (TX)	DB-9 (Serial) Female		
Output Interface (RX)	DB-9 (Serial) Male		
SYSTEM			
Interface	RJ-45		
Cable Requirements	CAT5/5e/6		
Maximum Length	200 feet (60 meters)		
OTHER			
Power	External 100-240 VAC/5VDC2A @10W		
Dimensions	5″W x 1.125″H x 4.125″D		
Weight	0.6 lbs.		
Approvals	UL, CE, ROHS Compliant		
Operating Temp.	32-131°F (0-55 °C)		
Storage Temp.	-4-185 °F (-20-85 °C)		
Humidity	Up to 95%		

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# Installation Manual

HDX-Plus HDMI, IR and RS-232 Extender over two CAT5 UTP/STP Cables



Watch and Control HDTV 1080p video over 200ft (60m) from the source

Smart-**AVI** 

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www.smartavi.com

### **Introduction**

The HDX-Plus uses **two** CAT5 UTP/STP cables to extend HDMI signals such as HDTV output over 200ft (60m) from the source. It is capable of transmitting highresolution HD video up to 1080p. Controlling your video source is easy with the HDX-Plus's bi-directional IR and RS-232 extension. Whether it's for a home entertainment system or a commercial installation, the HDX-Plus delivers flexibility and control.

### **Features**

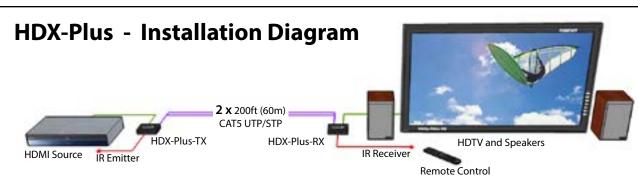
- Extends HDMI output over two CAT5/5e/6 UTP/STP cables
- Extends IR and RS-232 control signals for remote control
- Delivers uncompressed HD video up to 1080p@60Hz@48bits and 3D
- Data signals up to 3.4Gbps
- HDMI 1.3 and HDCP compliance
- IR and RS-232 communication are bi-directional
- Transmits high-quality Dolby TrueHD, DTS-HD MA audio signals
- Transmits 1080p resolution over 200 feet (60 meters) from the source

# **Applications**

- Home Theater
- Corporate or Educational Presentations
- Call Centers
- Industrial
- Information Terminals/Kiosks
- Airport Installations
- Educational Environments

### For Better Performance

Use 2 x CAT6/STP 23 AWG Cables.



## **Installation**

- 1. Power off the HDMI source, display and speakers.
- 2. Connect an HDMI cable from the HDMI source to the HDMI port on the HDX-Plus transmitter.
- 3. Connect an IR emitter/receiver (optional) to the IR ports on the HDX-Plus transmitter.
- 4. Connect an RS-232 compliant device (optional) to the RS-232 port on the HDX-Plus transmitter.
- 5. Connect the HDX-Plus transmitter to the HDX-Plus receiver using two CAT5 UTP/STP cables (up to 200ft/60m).
- 6. Connect an IR emitter/receiver (optional) to the IR ports on the HDX-Plus receiver.
- 7. Connect an RS-232 compliant device (optional) to the RS-232 port on the HDX-Plus receiver.
- 8. Connect an HDMI cable from the HDMI port on the HDX-Plus receiver to the HDMI Display.
- 9. Power on the HDX-Plus transmitter and receiver by plugging in their power adapters (5VDC2A).
- 10. Power on the HDMI source, displays and speakers.



HDX-Plus-TX-Rear



HDX-Plus-RX-Front



### HDX-Plus-RX-Rear

#### **RS-232 SPECIFICATIONS**

CONNECTOR	PIN	NAME	DESCRIPTION	
DB9 MALE - RECEIVE	2	RxD	Receive Data on DB9 Male	
0000	3	TxD	Transmit Data on DB9 Male	
6080	5	SGND	Ground	
DB9 FEMALE - TRANSMIT	2	TxD	Transmit Data on DB9 Female	
0000	3	RxD	Receive Data on DB9 Female	
<b>6000</b>	5	SGND	Ground	

#### CAT5/5e/6 CABLE SPECIFICATIONS

CONNECTOR		PAIR	PINS	
RJ-45 MALE	RJ-45 FEMALE	1	1&2	
<b>mmm</b>		2	3&6	
12345678	87654321	3	4 & 5	
		4	7 & 8	
CAPACITANCE	14 pf/ft (46.2 pf/m)			
CONDUCTOR GAUGE	24 AWG			
IMPEDANCE	60 +/- 15 ohms			