## What's in the Box?

| PART NO.  | QTY | DESCRIPTION           |  |
|-----------|-----|-----------------------|--|
| HDXU-TX   | 1   | HDX-Ultra Transmitter |  |
| HDXU-RX   | 1   | HDX-Ultra Receiver    |  |
| PS5VD2A-1 | 2   | Power Supply          |  |
| SM-EYE-3  | 1   | Infrared Receiver     |  |
| SM-LED-3  | 1   | 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 HDMI Type A 19-pin Female TMDS |  |  |  |
| Output Interface (RX)    |   |  |  |  |
| Input Cable Length (TX)  | Up to 40 ft.  |  |  |  |
| Output Cable Length (RX) | Up to 40 ft.  |  |  |  |
| AUDIO                    |   |  |  |  |
| Format                   | Dolby TrueHD, DTS-HD MA HDMI (Integrated)                     |  |  |  |
| Input Interface          |   |  |  |  |
| 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  DB-9 (Serial) Female  DB-9 (Serial) Male    |  |  |  |
| Input Interface (TX)     |   |  |  |  |
| Output Interface (RX)    |   |  |  |  |
| SYSTEM                   |   |  |  |  |
| Interface                | RJ-45   |  |  |  |
| Cable Requirements       | CAT5/5e/6   |  |  |  |
| Maximum Length           | 330 feet (100 meters)   |  |  |  |
| OTHER                    |   |  |  |  |
| Power                    | External 100-240 VAC/5VDC2A @10W                              |  |  |  |
| Dimensions               | 5"W x 1.125"H x 4.125"D<br>0.6 lbs.                           |  |  |  |
| Weight                   |   |  |  |  |
| 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-Ultra**

HDMI, IR and RS-232 Extender over a single CAT5 UTP Cable



Watch and Control HDTV 1080p video over 330ft (100m) from the source

www.smartavi.com

## Introduction

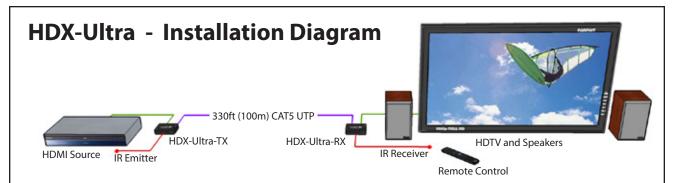
The HDX-Ultra uses only one CAT5 UTP cable to extend HDMI signals such as HDTV output over 330ft (100m) from the source. It is capable of transmitting high-resolution HD video up to 1080p. Controlling your video source is easy with the HDX-Ultra's bi-directional IR and RS-232 extension. Whether it's for a home entertainment system or a commercial installation, the HDX-Ultra delivers flexibility and control.

## **Features**

- Extends HDMI output over one CAT5/5e/6 UTP cable
- 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 330 feet (100 meters) from the source

## **Applications**

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



## **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-Ultra transmitter.
- Connect an IR emitter/receiver (optional) to the IR ports on the HDX-Ultra transmitter.
- Connect an RS-232 compliant device (optional) to the RS-232 port on the HDX-Ultra transmitter.
- Connect the HDX-Ultra transmitter to the HDX-Ultra receiver using a CAT5 UTP cable (up to 330ft/100m).
- 6. Connect an IR emitter/receiver (optional) to the IR ports on the HDX-Ultra receiver.
- 7. Connect an RS-232 compliant device (optional) to the RS-232 port on the HDX-Ultra receiver.
- 8. Connect an HDMI cable from the HDMI port on the HDX-Ultra receiver to the HDMI Display.
- Power on the HDX-Ultra transmitter and receiver by plugging in their power adapters (5VDC2A).
- 10. Power on the HDMI source, displays and speakers.





HDX-Ultra-TX-Rear



HDX-Ultra-RX-Front



HDX-Ultra-RX-Rear

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

| CONNECTOR             | PIN | NAME | DESCRIPTION                 |
|-----------------------|-----|------|-----------------------------|
| DB9 MALE - RECEIVE    |     | RxD  | Receive Data on DB9 Male    |
| 02845                 | 3   | TxD  | Transmit Data on DB9 Male   |
| <b>6089</b>           | 5   | SGND | Ground                      |
| DB9 FEMALE - TRANSMIT | 2   | TxD  | Transmit Data on DB9 Female |
| (00000)               | 3   | RxD  | Receive Data on DB9 Female  |
| <b>3039</b>           | 5   | SGND | Ground                      |

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

|                           | PAIR | PINS  |  |  |
|---------------------------|------|-------|--|--|
| RJ-45 FEMALE              | 1    | 1 & 2 |  |  |
|                           | 2    | 3 & 6 |  |  |
| 12345678                  | 3    | 4 & 5 |  |  |
|                           | 4    | 7 & 8 |  |  |
| 14 pf/ft (46.2 pf/m)      |      |       |  |  |
| 24 AWG<br>100 +/- 15 ohms |      |       |  |  |
|                           |      |       |  |  |