

# What's in the Box?

PART NO.	QTY	DESCRIPTION
HDX-Ultra-TX	1	HDX-Ultra Transmitter
HDX-Ultra-RX	1	HDX-Ultra Receiver
Power Supply	1	P55VDC2A
CCHDMM06	1	6ft HDMI Cable
User Manual	1	

## 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	330 feet (100 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-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

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## 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.

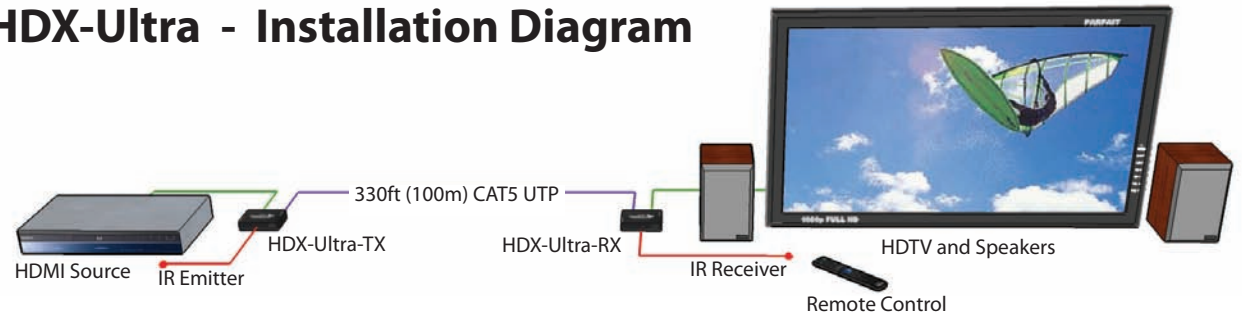
## Features

- 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

## HDX-Ultra - Installation Diagram



## 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.
3. Connect an IR emitter/receiver (optional) to the IR ports on the HDX-Ultra transmitter.
4. Connect an RS-232 compliant device (optional) to the RS-232 port on the HDX-Ultra transmitter.
5. 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.
9. 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-Front



HDX-Ultra-TX-Rear



HDX-Ultra-RX-Front



HDX-Ultra-RX-Rear

### RS-232 SPECIFICATIONS

CONNECTOR	PIN	NAME	DESCRIPTION
DB9 MALE - RECEIVE	2	RxD	Receive Data on DB9 Male
	3	TxD	Transmit Data on DB9 Male
	5	SGND	Ground
DB9 FEMALE - TRANSMIT	2	TxD	Transmit Data on DB9 Female
	3	RxD	Receive Data on DB9 Female
	5	SGND	Ground

### CAT5/5e/6 CABLE SPECIFICATIONS

CONNECTOR	PAIR	PINS
RJ-45 MALE	1	1 & 2
	2	3 & 6
	3	4 & 5
	4	7 & 8
CAPACITANCE		14 pF/ft (46.2 pF/m)
CONDUCTOR GAUGE		24 AWG
IMPEDANCE		100 +/- 15 ohms