

OCTAVA™

HD CAT Extender+Ethernet

HDCATS-100
Installation Guide

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Description

HDCATS-100 combines and extends 4 signal formats over 1 single CAT 6 cable up to 300ft:

- 1) 1080P HD digital video/audio
- 2) Bi-directional Infrared I.R. Extension
- 3) Serial Data
- 4) Ethernet

The **HDCATS-100** enables pre-existing CAT5e/6 cable infrastructure to transport **HD video / audio, IR, serial data, and Ethernet.**

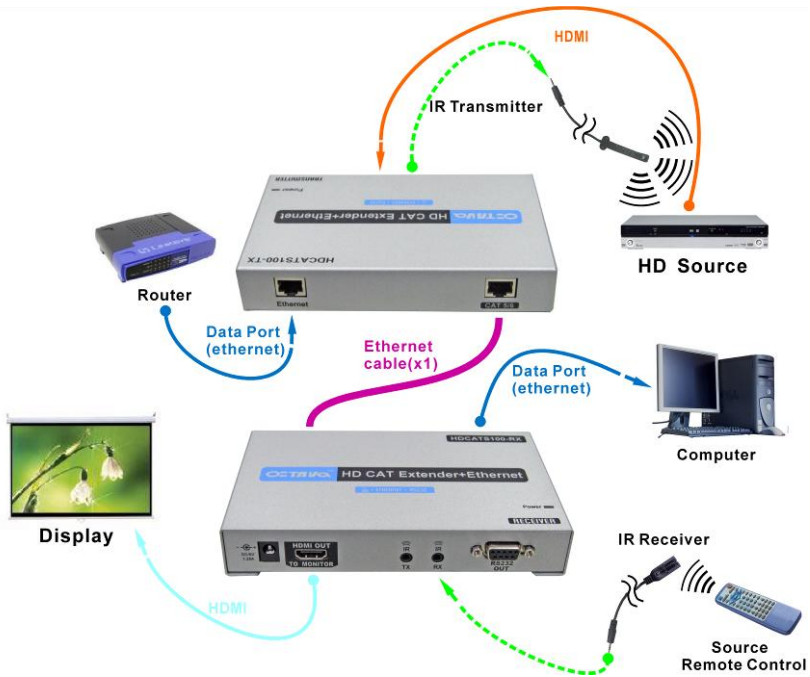
Ethernet cables and connectors are easily field terminated thus allowing installers to easily install the proper length cable needed for ultimate flexibility and eliminate logistics problems of having custom length cables.

CAT 6 cable is recommended for 1080P and best performance

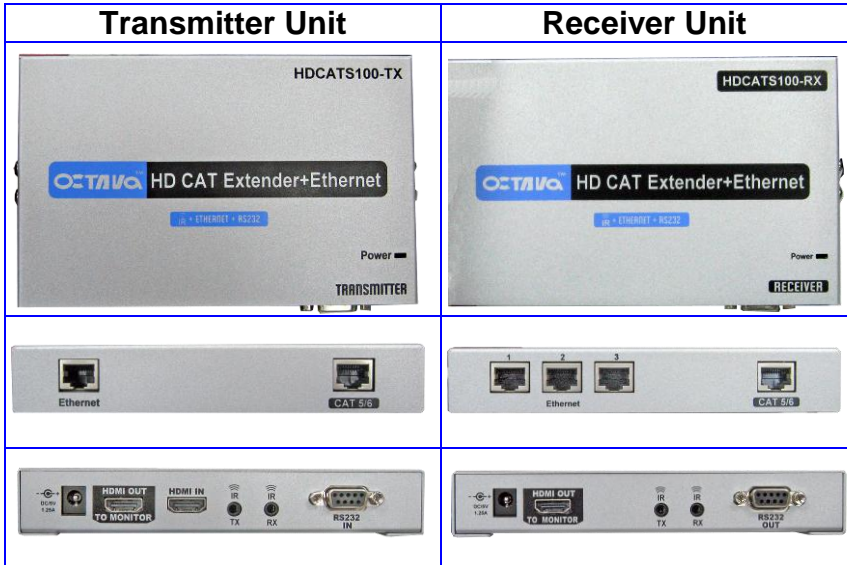
Active Drive and Compensation circuitry ensures error free video transmission for the ultimate HD experience .Typical connection lengths of 300ft (100m)

Features:

- **1080P HD** digital video/audio over single **CAT 5/6** cable
- Bi-directional **Infrared I.R.** Extension over single **CAT 5/6** cable
- **Serial Data** (RS-232) Extension over single **CAT 5/6** cable
- **Ethernet** data Extension single **CAT 5/6** cable
- **Local HD** port to switch between displays
- 3D support
- 300ft (1080p) over Ethernet CAT-6 cable



Application Diagram

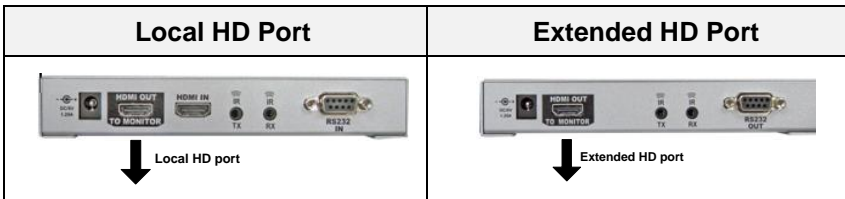


Installation	
1	Connect port labeled: “ CAT5/6 ” of the Transmitter and Receiver With CAT5e/6 cable.
2	Connect HD source to HDMI In of Transmitter unit
3	Connect HDTV to HDMI out of Receiver unit
5	IR connection(optional) -configure and connect as shown in section: “ IR Configuration ” (see page 7)
6	Ethernet connection(optional) -configure and connect as shown in section: “ Ethernet ” (see page 8)
7	Serial connection(optional) -configure and connect as shown in section: “ Serial Configuration ” (see page 8)
8	Connect power supply to the Transmitter and Receiver unit.

Local HD port:

A “switched” local HD port is provided for your convenience to connect to a local HD display



The Local HD port and Extended HD port can not be used simultaneously. Switching between the local and extended HD port is automatic. For example, if a HDTV connected to the local HD port is being viewed, then the extended HD port will automatically be disabled. When the display connected to the Extended HD port is turned ON, the local HD port is automatically turned off.





IR Configuration

The I.R. can be transported in 2 directions: 1) from Receiver to Transmitter or 2) from Transmitter to Receiver unit. Simply install the IR cables as shown below.

Configuration 1: Sending IR from Receiver to Transmitter Unit





Transmitter Unit	Receiver Unit
 <p>The diagram shows the front panel of the Transmitter Unit. From left to right, it features a DC 5V 1.5A power input, an HDMI OUT port labeled 'TO MONITOR', an HDMI IN port, two IR ports labeled TX and RX, and an RS232 IN port. A green dashed line indicates an IR Receiver cable being plugged into the TX port.</p>	 <p>The diagram shows the front panel of the Receiver Unit. From left to right, it features a DC 5V 1.5A power input, an HDMI OUT port labeled 'TO MONITOR', two IR ports labeled TX and RX, and an RS232 OUT port. A green dashed line indicates an IR Transmitter cable being plugged into the RX port.</p>
<p>Connect IR Transmitter cable to IR TX port</p>	<p>Connect IR Receiver cable to IR RX port</p>

Configuration 2: Sending IR from Transmitter to Receiver Unit

Transmitter Unit	Receiver Unit
 <p>The diagram shows the front panel of the Transmitter Unit. From left to right, it features a DC 5V 1.5A power input, an HDMI OUT port labeled 'TO MONITOR', an HDMI IN port, two IR ports labeled TX and RX, and an RS232 IN port. A green dashed line indicates an IR Receiver cable being plugged into the RX port.</p>	 <p>The diagram shows the front panel of the Receiver Unit. From left to right, it features a DC 5V 1.5A power input, an HDMI OUT port labeled 'TO MONITOR', two IR ports labeled TX and RX, and an RS232 OUT port. A green dashed line indicates an IR Transmitter cable being plugged into the TX port.</p>
<p>Connect IR Receiver cable to IR RX port</p>	<p>Connect IR Transmitter cable to IR TX port</p>

Serial Data (RS-232)

Serial control data can be sent using the RS-232 ports

Transmitter Unit	Receiver Unit
 <p style="text-align: center;">RS-232 </p>	 <p style="text-align: center;">RS-232 </p>
Connect SERIAL cable to RS 232 port	Connect SERIAL cable to RS 232 port



The Serial port connection of the Transmitter + Receiver is configured as a “cross over” connection.

The following table is a general guide on the serial cables you should use:

		You need:
Case 1	Connecting PC (DTE) to PC (DTE)	2 standard serial cable
Case 2	Connecting PC (DTE) to control device(DCE)	1 standard serial cable, 1 “cross-over” serial cable or “null modem”

Ethernet Data

The HDCATS-100 includes built in Ethernet switch. Simply connect Ethernet devices to ports labeled “Ethernet”

Transmitter Unit	Receiver Unit
 <p data-bbox="199 427 296 475">↑↓ Ethernet</p>	 <p data-bbox="669 427 767 475">↑↓ Ethernet</p>
Connect Ethernet device to Ethernet port	Connect Ethernet device(s) to Ethernet port

Description	Specifications
Model	HDCATS-100
HDMI In	1
HDMI Out	1(local), 1(extended)
Ethernet Data Port	3 (receiver unit), 1 (transmitter unit)
Infrared In/Out	1
Infrared Frequency	20 KHz-60 KHz
Serial Port (RS-232)	1
Ethernet cables required	1
Ethernet Cable	CAT-6 Recommended for 1080P and best performance
<ul style="list-style-type: none"> • EIA/TIA-568-B termination (T568B) recommended. • Punch-down connection block/panel will degrade performance and not recommended. • Use a single link of CAT-6 cable wherever possible. Using a Keystone connector will reduce link distance 	
Video Resolution	480 P, 720 i/P, 1080 i/P
Transmission Length	300ft @ 1080P using CAT-6
Dimension	6.52 x 4.10 x 1.06 inch (165.5 x 104.1 x 27.0 mm)
DC adapter (included)	5VDC, 2 adapter included

For Questions and support:

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