

# CAT-5 EXTENDER

## HDMI over Signal CAT-5 with IR, RS-232, Keyboard and Mouse

### TRANSMITTER



Model: **CAT-HDX11T/A1**

### RECIEVER



Model: **CAT-HDX11R/A1**

Tx Specification:	
<b>Technical</b>	<b>CAT-HDX11T/A1</b>
<b>Input</b>	1 x HDMI (*19 pin female) 1 x Keyboard (*PS-2) 1 x Mouse (*PS-2)
<b>Output</b>	1 x RJ45 1 x IR
<b>Control port</b>	1 x RS-232 (*3 pin Terminal block)
<b>HDMI Compliance</b>	1080p 60Hz 1.3
<b>DVI Compliance</b>	DVI 1.1
<b>HDCP Compliance</b>	YES
<b>Video Bandwidth</b>	Single-link 225 MHz (6.75 Gbps)
<b>Video Support</b>	Up to WUXGA (1920x1200@60Hz) & 1080p@60Hz 36-bit color
<b>Audio Support</b>	Surround Sound (up to 7.1ch) or Stereo digital Audio
<b>Transmitter Range</b>	Full HD (1080p) up to 100m (330ft) **distance are measured base on ABtUS CAT-5e UTP cable
<b>Input TMD5 Signal</b>	1.3 Volts (peak to peak)
<b>Input DCC</b>	Signal 5 Volts (peak to peak, TTL)
<b>ESD Protection</b>	[1] Human body model ±15kV [air-gap discharge] & ±15kV [contact discharge] [2] Core chipset ±15kV
<b>PCB Stack-up</b>	6-layer board impedance Control- differential 100ohm: single 50ohm
<b>Power Supply</b>	12 V DC 1A
<b>Operation Temperature</b>	0~40°C [32~104°F]
<b>Storage Temperature</b>	-20~60°C [-4~140°F]
<b>Relative humidity</b>	20~90% RH [no condensation]
Mechanical	
<b>Housing</b>	<b>Metal enclosure</b>
	<b>Product</b> <span style="float: right;"><b>Package</b></span>
<b>Dimensions (L x W x H)</b>	190 x 103 x 30mm <span style="float: right;">265 x 180 x 80 mm</span>
<b>Weight</b>	445g (equipment only) <span style="float: right;">750g each</span>
<b>Package include</b>	1 x Power adaptor 1 x Switcher 1 x User Manual and Box
Rx Specification:	
<b>Technical</b>	<b>CAT-HDX11R/A1</b>
<b>Input</b>	1 x RJ45 1 x IR Receiver
<b>Output</b>	1 x Keyboard 1 x Mouse 1 x HDMI
<b>Control port</b>	1 x RS-232 (*3 pin Terminal block)
<b>HDMI Compliance</b>	1080p 60Hz 1.3
<b>DVI Compliance</b>	DVI 1.1
<b>HDCP Compliance</b>	YES
<b>Video Bandwidth</b>	Single-link 225 MHz (6.75 Gbps)
<b>Video Support</b>	Up to WUXGA (1920x1200@60Hz) & 1080p@60Hz 36-bit color
<b>Audio Support</b>	Surround Sound (up to 7.1ch) or Stereo digital Audio
<b>Transmitter Range</b>	Full HD (1080p) up to 100m (330ft) **distance are measured base on ABtUS CAT-5e UTP cable
<b>Input TMD5 Signal</b>	1.3 Volts (peak to peak)
<b>Input DCC Signal</b>	5 Volts (peak to peak, TTL)
<b>ESD Protection</b>	[1] Human body model ±15kV [air-gap discharge] & ±15kV [contact discharge] [2] Core chipset ±15kV
<b>PCB Stack-up</b>	6-layer board impedance Control-96 differential 100ohm: single 50ohm
<b>Power Supply</b>	12 V DC 1A
<b>Operation Temperature</b>	0~40°C [32~104°F]
<b>Storage Temperature</b>	-20~60°C [-4~140°F]
<b>Relative Humidity</b>	20~90% RH [no condensation]
Mechanical	
<b>Housing</b>	<b>Metal enclosure</b>
	<b>Product</b> <span style="float: right;"><b>Package</b></span>
<b>Dimensions (L x W x H)</b>	190 x 103 x 30mm <span style="float: right;">265 x 180 x 80 mm</span>
<b>Weight</b>	445g (equipment only) <span style="float: right;">750g each</span>
<b>Package include</b>	1 x Power adaptor 1 x Switcher 1 x User Manual and Box

### PRODUCT DESCRIPTION

**ABtUS CAT-HDX11T/A1**, a HDMI over Cat-5 Extender that sends lossless “Full HD 1080p” HDMI, RS-232 pass through, IR signals loop back, Keyboard/Mouse and even power over a single economical Cat-5e cables. Extending state-of-the-art Full HD digital video displays, computer monitors and touch screens has never been easier and cost effective.

Support distances up to 330 feet/100meter at a Full HD 1080p resolution are guaranteed to perform beautifully, giving you a reliable method of all-digital extension while streamlining your installation cabling needs. (\*\*Support cable length are tested base on ABtUS standard Cat-5e UTP Cable and it may differ due to the rating and/or the standard of the each cable used)

### PRODUCT HIGHLIGHTS

- Full HD Over single economical Cat-5e cables
- Support distances up to 330 feet / 100meter at a Full HD 1080p resolution
- With RS232 Full duplex, IR pass through and Keyboard / Mouse extension
- Power over LAN (\*Only One Power adaptor is required at either Tx or Rx)
- Integrated with Local Monitor output (\*\*Depending on model)

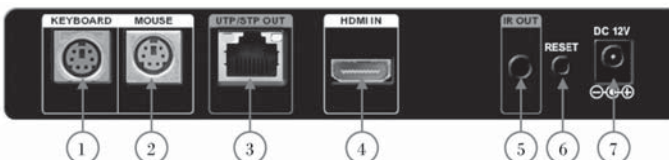
## FRONT PANEL VIEW

## CAT-HDX11T/A1



Item	Description
1.	Power Indicator (LED)
2.	Link Indicator (LED)
3.	RS-232 pass through Control port

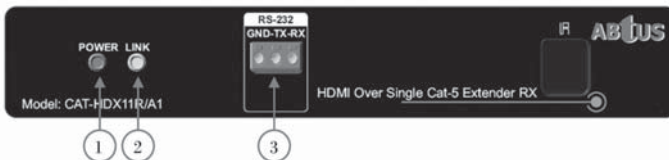
## BACK PANEL VIEW



Item	Description	Item	Description
1.	For Keyboard connection	5.	IR pass through from Rx for control source device
2.	For Mouse connection	6.	For system reset if transmission fault
3.	Cat-5 Output connected to Rx	7.	For supply of power to device
4.	HDMI Input for source connection		

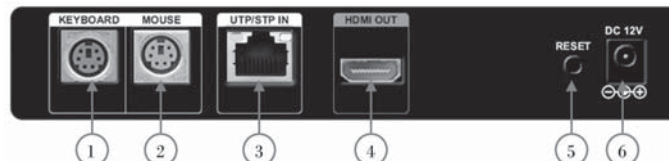
## FRONT PANEL VIEW

## CAT-HDX11R/A1



Item	Description
1.	Power Indicator (LED)
2.	Link Indicator (LED)
3.	RS-232 pass through Control port

## BACK PANEL VIEW



Item	Description	Item	Description
1.	Keyboard For Keyboard connection	4.	HDMI OUT HDMI Output to Monitor/TV connection
2.	Mouse For Mouse connection	5.	RESET For system reset if transmission fault
3.	UTP/STP IN Cat-5 Input connected from Tx	6.	DC 12 V For supply of power to device

## PERFORMANCE GUIDE FOR HDMI OVER CATEGORY CABLE TRANSMISSION

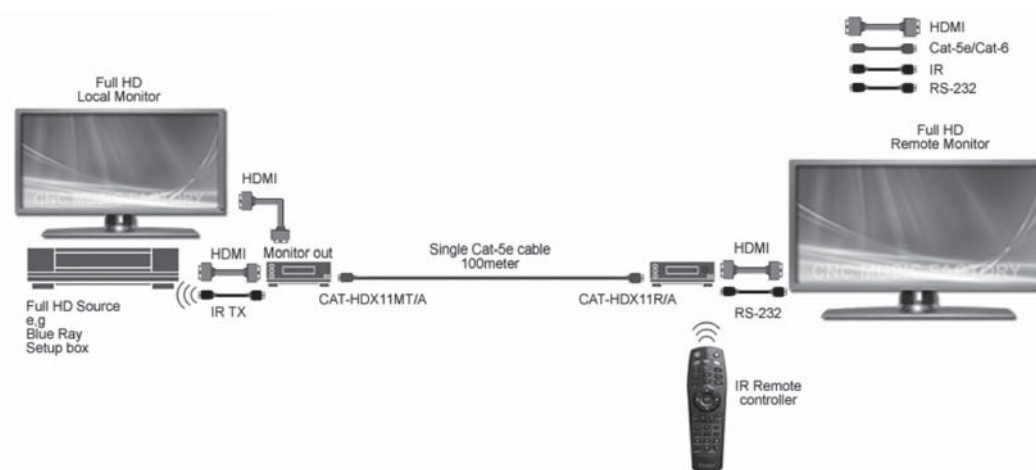
Cable Rating		Type of Category Cable		
Wiring	Shielding	CAT-5e	CAT-6	CAT-7
Solid	Unshielded (UTP)	☆☆☆	☆☆☆☆	☆☆☆☆☆
	Shielded (STP)	☆☆☆	☆☆☆	☆☆☆☆
Standard	Unshielded (UTP)	☆	☆☆	☆☆
	Shielded (STP)	☆	☆	☆☆
Termination		Please use EIA/TIA 568-B termination (T568B) at any time		

EIA/TIA 568B	
PIN No.	Wire Color
1	Orange/White
2	Orange
3	Green/White
4	Blue
5	Blue/white
6	Green
7	Brown/White
8	Brown

### \*\*Note:

Because the quality of the category cables has the major effect on how long the transmission limit can achieve and how good is the received picture quality, the actual transmission range is subject to one's choice of Cat-5e/6/7 cables.

### Configuration Diagram:



### Typical Application

Any integration that required simple and cost effective HDMI over long Cat-5 extender solution  
 • Schools (Lab, Hall ect.) • Churches • Corporate Applications (Function Room) • Rental • Home