



HDMI-1-E

HDMI-1-R

#### **USER MANUAL**

HDMI CATx Extender / Receiver

## **Package Contents**

- 1 x HDMI-1-E or 1 x HDMI-1-R (Both of above when purchased in a set)
- User Manual (s)
- Power Supplies (5V 1A)
  (2 of above when purchased in a set)

#### Features

- Uses the latest HDBase-T technology
- Extends 1080p signals up to 330 feet (100 meters) With a single CATx cable
- Supports HDMI 1.4 with 3D function
- Supports HDMI 1.2 and 1.3a
- HDCP Compliant
- Supports 3D pass-through
- Supports CEC pass-through
- Supports RS-232 (Bi-directional transfer)
- Supports al frequency band IR control

#### Specifications

FEATURES/MODEL	HDBT-1-E	HDBT-1-R
HDMI In	1 x HDMI A-Type Female	None
HDMI Out		1 x HDMI A-Type Female
RJ-45	1	1
Max Resolution	1080p 60Hz	1080p 60Hz
Cable Distance	35m/115ft @ 1080p	35m/115ft @ 1080p
Power Adapter	5V 1A DC	5V 1A DC
Dimension (mm)	69 W x 39 x D 21 H	69 W x 39 x D 21 H

### HDMI-1-E FRONT VIEW



1. HDMI Input from the Source

## HDMI-1-E REAR VIEW



- 1. Link Activity Status (Green)
- 2. Local Power Status (Amber)
- 3. RJ45 for CATx Output to Receiver
- 4. 5V 1A Power

### HDMI-1-R FRONT VIEW



- 1. Cable Equalization Adjustment
- 2. HDMI Output to the Monitor



- 1. Link Activity Status (Green)
- 2. Local Power Status (Amber)
- 3. RJ45 for CATx Output to Receiver
- 4. 5V 1A Power

## Installation

- Turn off all devices
- Connect the HDMI cable between the source and the <HDMI IN> port of the HDMI-1-E
- Turn the EQ adjustment knob on the HDMI-1-R all the way counter clock wise. This will put the EQ in the "Auto Position"
- Connect the HDMI cable between the HDMI-1-R between the monitor and the <HDMI OUT> port of the HDMI-1-R
- Connect the CATx cable between the HDMI-1-E and HDMI-1-R's RJ45 ports
- Connect the Power

#### What do the LED Lights Mean?

#### HDMI-1-E

- The amber LED (Local Power Status) on the HDMI-1-E will come on, once the power is applied to the unit
- Both the green and amber LEDs will come on, when the power and the source are plugged in

#### HDMI-1-R

- When starting for the first time, make sure the EQ knob is turn all the way counter clock wise. This puts the unit to "AUTO" EQ
- The amber LED will be flashing once the power is applied to the unit
- Both the green and amber LEDs will be lit and steady, when the power, HDMI monitor cable and the CATx are plugged in

#### **EQ ADJUSTMENT**

- When the amber LED on the HDMI-1-R is lit and steady, this means the unit is in AUTO EQ mode.
   Once the amber LED is off, the unit is in manual EQ mode.
- Make sure you adjustment the EQ slowly, the adjustment are very sensitive

## **EDID Learning**

EDID mismatch is one of the most common problem in the display and extender industry. Learning the EDID on the HDMI-1-E can easily solve this issue

- 1. Turn on the display
- 2. Connect the HDMI-1-E to the display with a HDMI cable (do not connect the CATx cable)
- 3. Apply power to the HDMI-1-E
- 4. The green LED will lit for one second, then off, and the amber LED will remain flashing
- 5. This means the EDID from the display is now stored in the HDMI-1-E



Pin #	Signal	Pin #	Signal
1	TMDS Data 2+	11	TMDS Clock Shield
2	TMDS Data 2 Shield	12	TMDS Clock -
3	TMDS Data 2-	13	CEC
4	TMDS Data 1+	14	Reserved (N.C. on device)
5	TMDS Data 1 Shield	15	SCL
6	TMDS Data 1-	16	SDA
7	TMDS Data 0+	17	DDC/CEC Ground
8	TMDS Data 0 Shield	18	+5 Power
9	TMDS Data 0-	19	Hot Plug Detect
10	TMDS Clock+		

# **CATx Wiring**



Identification	Pin Assignment	Color Code	
Doir 1	5	White-Blue	
Pair 1	4	Blue	
Pair 2	1	White-Orange	
	2	Orange	
Pair 3	3	White-Green	
Pall 5	6	Green	
Pair 4	7	White-Brown	
	8	Brown	

## Trouble Shooting Q/A

- Q: There is no image on my Monitor
- A: This may be an EDID issue. Follow the EDID learning procedure described earlier
- Q: There is no image on my Monitor
- A: Check the following
  - Cable Length
  - The quality of the cable, low skew FTP cables performs better than regular network cables
  - Slowly adjust the EQ knob until the image appears
- Q: The output of display have noise or occasionally flashes
  - Check the cable distance
  - Check cable quality
  - Slowly adjust the EQ knob until the image appears. It is best to use a pattern generator instead of the source to perform this adjustment
  - Check for excessive RF interference in the room

If the flashing persists, you may want to consider using the Apantac HD Base T products (HDBT-SET-1) or the Apantac DVI over fiber products (DVI-xx-SC) to resolve this issue

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