



# HDBitT HDMI EXTENDER MATRIX PSG3455

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#### Please read these instructions carefully before use and retain for future reference.

#### IMPORTANT SAFETY INFORMATION

When using electrical appliances basic safety precautions should always be followed.

- To prevent fire or shock hazard, do not expose this product to rain or moisture.
- Check that the power supply matches the mains voltage.
- Only use the power supply provided or one of identical specification.
- Ensure the IR remote extender cables are connected to the correct devices.
- Beware of static electricity which may damage the device. Use ESD precautions when installing.
- Do not plug or unplug cables while the devices are powered on.

#### WHAT'S INCLUDED

- 1 x HDMI Extender and 1 x Receiver
- 2 x Power Adapter 230VAC to 5VDC 2A
- Operation Manual
- IR remote extender
- IR remote receiver
- Remote control
- 4 x Mounting brackets and 8 x screws

### FEATURES

- Based on HDbitT technology for a more stable performance.
- Supports up to 1080p@60Hz Full HD.
- Supports 1 to 1 and 1 to many using off-the-shelf IGMP switch.
- Transmission up to 120 metres.
- HDMI 1.3 and HDCP 1.4 compliant.
- Supports IR pass back for control from receiver location.
- Simple plug and play installation.

### CAT CABLE REQUIREMENT

Follow the standard of IEEE-568B, It is recommended to select a high quality network cable with less loss and crosstalk.

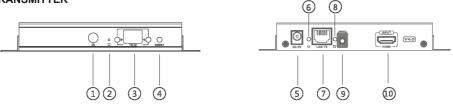
- 1 orange/white
- 2 orange
- 3 Green/white
- 4 Blue

5 Blue/white 6 Green 7 Brown/white 8 Brown

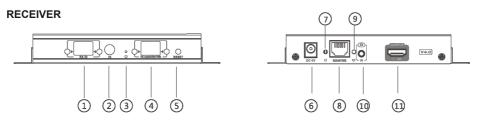


#### OVERVIEW

#### TRANSMITTER



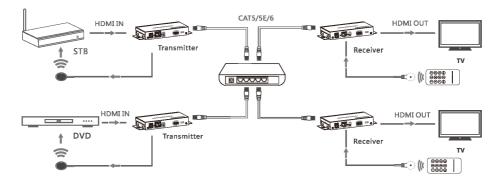
- 1. IR receiver window Receiver IR signal from remote control.
- 2. Power indicator LED for power on indication.
- 3. TX indicator Indicates current transmission channel ID.
- 4. Reset Button
- 5. Power input connect the PSU 5VDC connector.
- 6. Data transmission indicator.
- 7. RJ45 output connector.
- 8. Connection LED illuminates when transmitter/receiver are connected.
- 9. IR extender emitter connection to control the source device.
- 10. HDMI input connect to the source device HDMI output.



- 1. RX indicator Indicates current transmission channel ID.
- 2. IR receiver window Receiver IR signal from remote control.
- 3. Power indicator LED for power on indication.
- 4. TX connected Indicates current input channel ID when matched to TX ID transmission is enabled.
- 5. Reset button press to reset the unit.
- 6. Power input connect the PSU 5VDC connector.
- 7. Data transmission indicator flashes slowly when connecting then faster during data transmission.
- 8. RJ45 input connector.
- 9. Connection LED illuminates when transmitter/receiver are connected.
- 10. IR extender receiver connection to pick up signal from the remote control.
- 11. HDMI output connect to the destination display device HDMI input.

#### INSTALLATION

#### MATRIX CONFIGURATION



#### POINT TO POINT CONFIGURATION



#### **OPERATION**

#### **IR User Guide:**

- IR receiver extension cable should be connected to the IR IN port of the receiver.
- The IR emitter extension cable should be connected to the IR OUT port of the transmitter.
- The emitter of the IR extension cable should face as close as possible to the IR receiving window of the source device.
- Face the receiving head of the IR receiver extension cable toward the user for unobstructed line of sight to the remote control.
- The IR receiver detects the users remote control and transmits the signal down the network cable to the IR emitter which replicates the IR output to control the source device.

#### APP control user guide

- Android User: Download the App "Matrix Controller" with your mobile phone or tablet from the website: http://www.hdbitt.com/download-matrix/.
- IOS User: Download the APP "Matrix Controller " from the APP Store.
- Firstly, connect the video matrix controller to the IGMP switch.
- Then, wirelessly connect your mobile phone or tablet and the video matrix controller via hotspot "MATRIX" with each other (wifi password is 12345678).
- Open the downloaded APP which will display the interface and APP control commences.

# **Button Control:**

- There is a "TX ID" display on the transmitter, and there are both TX CONNECTED and RX ID displays on the receiver unit, each of which has a 2 digit display plus 2 adjacent buttons which adjust each digit.
- Values can be adjusted from 00 through to 99 by repeated button presses.
- Each receiver can be assigned an RX ID number and when the TX ID channel set on the transmitter matches the TX CONNECTED on the receiver the channel is connected.
- Short press: Press to set IGMP group and display the current set value. The unit switches automatically to the corresponding IGMP group 5 seconds after the press.
- Long press: Press and hold for 3 seconds to reset the unit.

### Computer software control:

- Connect a PC to the IGMP Ethernet switch using CAT network patch lead
- Download the application "HDbitT E-Matrix Control Centre" from http://www.hdbitt. com/download-matrix/
- Change the PC's IP address to 192.168.1.XXX (to match the IP address of the TX and RX units and run the program.

Device Scan Fage Fre edit mode Scan Setup Device Scan Time: 3	Seconds	Pre Edit Mode set a pre oper that you will u Device scan page: connected device of those devices	ration mode use frequen	tly Start Scan
Tx Device: 0	TX ID		Hane	TX Connected
TI_1	90	94	RI-TV41	60
TX_2	86	10	RI_TV32	90
TX_3	60	15	RI_TV37	77
ΤΧ_4	77	23	RI_TV60	60
TX/RX setting	's IP	Update Se	alect Mode: NEW_	Mode selection

Figure 1

# **IP** setting

• TX and RX units have their own default IP address, TX's IP is 192.168.1.238, and RX's IP is 192.168.1.239. Generally, it is not need to change the device IP address, as the system can work normally even though multiple TX units and multiple RX units connected into the system with their default IP address.

If IP setting is really needed, please follow up the operation as Figure 2 (example of
TX's IP setting shown, RX 's setting is the same as TX's )

Device Scan Time: 3 Set	tup Ip St ur	t Scan
	Device Selection	
Tx Device: 4	TX_PC42 •	
Sano	IP Setup	Connected
TX_1	IP: 192 . 168 . 1 . 238 32 90	1
TX_ 2. TX_ 3	Netmask: 255 . 255 . 255 . 0 Set IP , and sa byclicking but "Update"	ive tton
	Gateway: 192 . 168 . 1 . 254	
TX_ 4	50 77	
	etup", Update	
	Chose DHCP-	

Figure 2

# Device scanning and setting

• Device scanning and setting (example shown of TX's setting only, RX's setting is identical)

				<u> </u>	
Tx Device: 4 Nume	TX ID	Rx Device: 4	Nane	TX Connected	È l
TX_1	86	10	RX_TV32	90	
TX_2	60	15	EX_TV37	86	
ТХ_3	90	94	RX-TV41	60 Sca	n resul
TX_4	77	23	RX_TV60	77	
					ノ

# Figure 3

# **Device Name setting**

• Click on a default device name and enter the desired name in the pop-up box.

Device: 4	Change Name		
Nane		Nane	TX Connected
TX_1	TX_1	RX_TV32	90
TX_ 2		RX_TV37	86
ТХ_ 3	OK Cande	RX-TV41	60
TX_ 4		RX_TV60	77

Figure 4

# **Device Channel setting**

• Select the channel for the device using the scroll list.

evice Scan Time: 3	Seconds			Start Scan
evice: 4		-Ex Device: 4-		
Nun-e	TX ID	RX ID	Nane	TX Connected
TX_1	87 -	10	RX_TV32	90
TI_2	83 84 85	15	RX_TV37	86
TX_3	83 84 85 86 87 88 88	94	RX-TV41	60
TI_4	91 92 93 94 95 96 97 98 98	23	RX_TV60	77
	96 97 98 = 99 -			



• Click the Update button when complete to store all the settings made.

# Mode setting

• Click on the Mode button to change the required mode name.

					Save Mode
Nane	TI ID	RX ID	Nane	TX Connec	
TX_1	90	94	RE-TV41	86	
TX_2	86	10	RI_TV32	90	NEW_MODE01
TX_3	60	15	RE_TV37	77	
TX_4	77	23	KX_TV60	60	OK Cande
	1. Adjust th for the inpu			pre	Edit the name of the mode, press "OK" tton to save
	SAVE MODE	IEL MODE		NEW_MODEOO	

### Figure 6

Click the Update button when complete to store all the settings made under the current Mode name.

#### Selecting the operation Mode

 Click on the Mode button to change to the required mode and switch to the settings stored previously under that name.

Device: 0		Rx Device: 0		
Nane	TX ID	RX ID	Nane	TX Connected
TX_1	90	94	RX-TV41	60
TX_2	86	10	RI_TV32	90
ТХ_З	60	15	RX_TV37	77
TX_4	77	23	RX_TV60	60

## SPECIFICATIONS

Voltage/Current	DC 5V 2A
Power consumption	TX: <4W RX: <4W
HDMI compliance	HDMI 1.3
HDCP compliance	HDCP 1.4
HDMI input resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz
HDMI output resolution	1080p@60Hz
Audio formats	РСМ
Max transfer rate	18Mbps
Input/output TMDS signal	0.7~1.2Vp-p
Input/output DDC signal	5Vp-p (TTL)
Transmission length	CAT5 80m / CAT5E 100m /CAT6 120m
IR remote control	Supports IR passback with 20-60KHz frequency
Transfer method	Over CAT6
Connector	RJ45
Working temperature	0~60°C
Storage temperature	-20~ 70°C
Humidity	0~95%RH (no condensation)
Dimension (RX & TX)	133(W) x 83.8(D) x 23.8(H)mm
Material	Alloy
Weight	TX: 260g RX:250g

#### **CLEANING & MAINTENANCE**

• Clean the outside casing with a soft cloth lightly moistened with mild soap and water. Never use any abrasive or solvents.

CPC Farnell declares that the radio equipment for wireless transmitter/receivers is in compliance with Radio Equipment Directive 2014/53/EU



# INFORMATION ON WASTE DISPOSAL FOR CONSUMERS OF ELECTRICAL & ELECTRONIC EQUIPMENT.

When this product has reached the end of its life it must be treated as Waste Electrical & Electronic Equipment (WEEE). Any WEEE marked products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used. Contact your local authority for details of recycling schemes in your area.