

# USER MANUAL

**HDMI Extender up to 200M Distance** 

# EXT-200-LAN

# **1.Introduction**

HDMI Over Ethernet is based on TCP/IP standard. It transmits your HD display with the high resolutions up to 120 meters away from your HDMI or DVI-D source by using one CAT5e/6 cable. With the advantage of TCP/IP standard, you can extend your HD video to multiple displays by using an Ethernet Switch.



HDTV Resolutions	480p,576p,720p,1080p
Audio	Sample rate:32kHz,44.1kHz,48kHz
IR remote control	38kHz;NEC
HDMI	HDMI 1.3
HDCP	HDCP 1.2
Power adapter	Input : 100V-240V(50-60Hz) Output:5V/1A
Power consumption	HDMI Sender:3W HDMI receiver:3W
Size(L-W-H)	92x79x20mm
Weight	240g x 2
Operating Temperature/Humidity	0°C-70°C/10%-80%RH(no condensation)
Storage Temperature/Humidity	-10 $^{\circ}$ C-80 $^{\circ}$ C/5%-90%RH(no condensation)

# **2.Specifications**

- ➢ Following TCP/IP standard.
- Support HDMI1.3 protocol.
- HDCP1.1 & 1.2 protocol compliant
- Support point-to-point mode, one point-to-many mode and cascade connection mode.
- Support IR extender function allows IR remote control of Source devices from remote viewing location by sending IR commands received in the vicinity of the Display back to the Source devices.
- Multiple Tx's can be connected to a Managed Gigabit switch with VLAN/IGMP support therefore sending 1080p video signals to Rx connected to the Gigabit switch to show different sources on the HDMI displays. See further explanation in section 7. VLAN Support

# **3.PACKAGE CONTENTS**

Before attempting to use this unit, please check the packaging and make sure the following items are contained in the shipping carton:

- 1) Main unit No. 1 Sender , Main unit No. 2 Receiver
- 2) Two pieces of 5V DC Power Supply.
- 3) one piece of IR transmitter and one piece of IR receiver
- 4) Quick Set Up Guide

# **4.Panel Descriptions**

HDMI Transmitter



5V/1A	Supply power for the Transmitter
Reset	Hold down the key for 5 seconds
IR-out	Connect IR transmitter this Port
HDMI-in	Connect HDMI sink source to this Port

# **HDMI** Receiver



5V/1A	Supply power for the Receiver
Reset	Hold down the key,the model will re-start
IR-in	Connect IR Receiver this Port
HDMI-out	Connect HDMI sink device to this Port

# **5.**Connection and operation

1) Connect the HDMI source (such as DVD, PS3, STB ) to the HDMI IN of Sender.

2) Connect the IR sender to the Sender IR OUT Port, and Be Directed at HDMI video source's IR receiver.

- 3) Connect the HDMI out of Receiver to HDTV display.
- 4) Connect the IR receiver to the Receiver IR IN Port.
- 5) Use one Cat5e/6 cable up to 120m to connect the Sender and Receiver.
- 6) Plug two pieces of 5V power supply into the Sender and Receiver.
- 7) Power on the HDTV display and HDMI source.

# **6.Application diagrams**

#### Application 1 – Point To Point



#### Application 2 – Point To MultiPoint



# 6. IP settings – GUI

When typing the IP address as found on the Transmitter or Receiver he Graphical User Interface is displayed. Connect the laptop or PC that is connected from the LAN port of the laptop or PC to the RJ45 port of the Transmitter or Receiver. It is important to bring the IP address of the laptop or PC in range with the IP address of the Transmitter or Receiver. (see below)

Internet Protocol Version 4 (TCP/IPv4	4) Properties	
General		
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.		
Obtain an IP address automatically		
• Use the following IP address:		
IP address:	192.168.1.10	
Subnet mask:	255.255.255.0	
Default gateway:	192.168.1.0	
Obtain DNS server address autor	natically	
Ose the following DNS server add	dresses	
Preferred DNS server:	· · ·	
Alternate DNS server:	· · ·	
Validate settings upon exit Advanced		
	OK Cancel	

# 6.1 Status Display

In Status Display the Device status is shown with System Version and Rate Config (Input resolution and Output resolution. This is for Transmitter device or Receiver device.



# 6.2 System Config – Network config

In Network config the device IP settings can be modified to bring all devices in the same range of your desired network. When you are using your production network it is advised to bring the receivers and transmitter in a VLAN set up in order to keep the transmission data for video isolated from your common network traffic.



# 6.3 System Config – Output display config

The output resolution can be changed by picking an available resolution fro the drop-down list or you can match it with the Input resolution.

← → C ③ 192.168.1.213/SetPas	ssword.html
H264	Output display config
Status Display	Output resolution: input
System config	SET UP
Network config	
Output display config ◀	
System update	
Reset	
Reboot	

# 6.4 System Config – System update

If a new system version is available in order to upgrade potential new or improved functionality this can be done by the System update button where a specific file can be uploaded. This would only be needed when communicated by GeMNeXT.



# 6.5 Reset

To reset the device it is needed to press the Reset button on the back of the device for 5 seconds.



After this the device would be reset and this would automatically result in a changed IP address to a default IP address. Please note this default address is not the IP address described on the label on the device.

Transmitters:	192.168.1.168	
Receivers:	192.168.1.160	

If you need to bring the unit back to the required IP settings you had entered before please change it back to those IP settings again. See 6.2 System Config – Network Config

$\leftrightarrow$ $\rightarrow$ C (i) 192.168.1.213/Reset.	tml
H264	Reset
Status Display	Clicking this button will restore all settings of the encoder to the factory default state.
System config	Kedut
Network config	
Output display config	
System update	
Reset 🔸	
Reboot	

# 6.6 Reboot

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To reboot the device press the Reboot button in the Interface.

← → C ① 192.168.1.213/Reb	ot.html
H264	Reboot
Status Display	Clicking this button device will reboot.
System config	Reboot
Network config	
Output display config	
System update	
Reset	
Reboot 🔸	