Specifications

		Local Unit	Remote Unit
Input		HDMI x 1	N/A
Output		HDMI x 1	HDMI x 2
Top Panel LEDs	Video OK LED	x 1	x 1
	Link OK/ Power LED	x 1	x 1
Learn Audio Config Button		x 1	N/A
3D-video Supported		Yes	
Max. Video Resolution		Full HD (1920 x 1080) WUXGA (1920 x 1200)	
Extension Distance		800M (1080p) 1600M (1080i)	
Connection		Fiber Optics	
Power Consumption (Max.)		3 W (each Unit)	
Weight (g)		435	430
H x W x D (mm)		24 x 75 x 150 (each Unit)	

Limited Warranty
IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY FOR DIRECT OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFIT, LOSS OF BUSINESS, OR FINANCIAL LOSS WHICH MAY BE CAUSED BY THE USE OF THE PRODUCT EXCEEDS THE PRICE PAID FOR THE PRODUCT.

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The direct vendor also reserves the right to revise or update the product or documentation without obligation to notify any user of such revisions or updates. For further information, please contact your direct vendor.
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IR Transceiver   IR Receiver   (optional)

Duplex Multi-Mode Optical Fiber Installation

1. The OM3 Multi-Mode untwisted-pair fiber optics cable (50/125 and 62.5/125) terminated with SC duplex connectors is recommended to use for the interconnection between Local Unit and Remote Unit. The table below shows the specifications.

Cable Diameter (micron)	50/125μM		62.5/125μM	
Video Signal	1080i	1080p	1080i	1080p
Max. Cable Length (meter)	1000	1000	350	350

2. Users may need to order appropriate cable lengths conforming to the application environment; however, the maximum cable length should not exceed 1,600 meters; otherwise, the signal degradation may occur especially for video resolution.
3. Do not exceed the cable bend radius. Fiber optic cable can be broken when kinked or bent too tightly, especially during pulling.
4. Do not twist the cable. Twisting the cable can stress the fibers. Tension on the cable and pulling ropes can cause twisting.
5. Don't look into the ends of any fiber optic cables. Exposure to invisible laser radiation may result.
6. Follow the cable manufacturer's recommendations. Fiber optic cable is often custom designed for the installation and the manufacturer may have specific instructions on its installation.

Before Installation
● Determine where the Local and Remote Unit will be located
● Use SC to SC duplex Multi-Mode fiber optics cable (50/125 or 62.5/125) for the interconnection between Local and Remote Unit
● Make sure that the Fiber cable length is long enough for the connection between the Local Unit and the Remote Unit to prevent having to splice fiber. Try to complete the installation in one pull
● Never attempt to disassemble or reassemble the enclosure for any purpose. This may cause personal injury and/or property damage.

⚠ **Caution**

Do not stare into beam or view directly into the ends of any fiber optic cables. Exposure to invisible laser radiation may result. The laser beam can cause injury to the eye.

Features
● Extend the Video Signal up to 1600~2000M @ 1080i / 800~1000M @ 1080p far away via Fiber Optics Multi-Mode technology
● Pure digital transmission with Zero Compression
● EDID Learning function increases display capability
● IR extending function available
● Compliant with HDMI 1.3b specification
● 3D-video, HDCP compliant and Blu-ray ready
● No any software and driver installation required

Package Contents
|	
HDMI Extender Local Unit	x 1
HDMI Extender Remote Unit	x 1
Power Adapter Set	x 2
Power Adapter with necessary AC Cord or	
Plug-in Power Adapter or	
USB Power Cable	
User's Manual	x 1
Multi-Mode SC-SC duplex Fiber Optic Cable (for test)	x 1
Foot Pad Set	x 2
Optional: IR External Sensor Kit	x 1

System Requirements
1. HDCP compliant Monitors with HDMI interface for the HDCP video source
2. HDMI Cable

HDMI Extender over Fiber

3D Version

▫ The final specification is the actual product based.
▫ Features and functions may be added or changed after the manual was written. Please visit our website to download the latest version of manual for reference.

PP5-F3AM57Z-001   CE FC RoHS

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① Product Description

L1 L2 L3   R1 R2 R3

L4   R4
L5   R5

Local Unit   Remote Unit

Le L6 L7   R6 R7
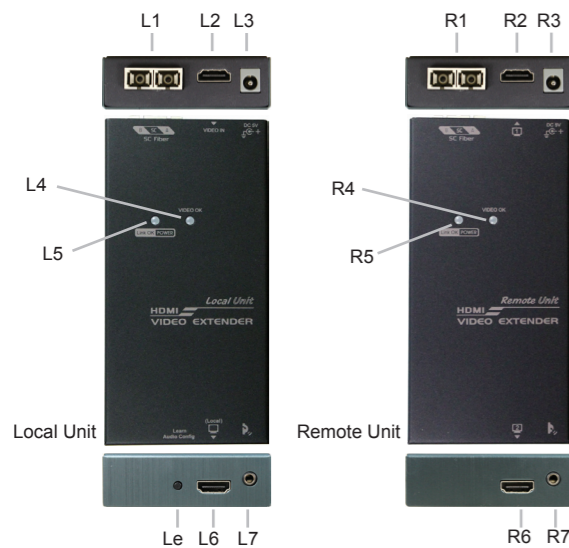
L1	R1	SC-SC Fiber Interface	Connect the Multi-Mode optical fiber to this port
L2		HDMI Connector	Connect to the HDMI source
	R2	HDMI Connector	Connect to the HDMI monitor
L3	R3	Power Supply	Apply the proper power to the unit
L4	R4	Video OK LED	Yellow: Video Signal OK / EDID Configuration
L5	R5	Link OK / Power LED	Green: Power On Blue : Connect to a powered-on extender unit
L6	R6	HDMI Connector	Connect to the HDMI monitor
L7	R7	IR Control Jack	Plug the external sensor here (L7:Transceiver / R7:Receiver)
Le		Learn Audio Config Button	EDID Configuration

② Installation

Users can connect the video source to the **Local Unit**, connect the monitor to the Local Unit and/or **Remote Unit**, and use a SC to SC duplex multi-mode fiber optics cable for the SC-SC fiber port connection between the Local and Remote Unit. After all device connections are completed, connect the provided power cord into an appropriate power source and plug the opposite end into the power connector on the Unit to power up.

③ Operation

The LEDs on the Extender Units show the real-time status indicating the linking and communication between the Local Unit and Remote Unit. Users can identify the present status through the LED indicator on the top.
The quality of the output signal will depend largely upon the quality of video source, cable and display device used. Low quality cables degrade output signal causing elevated noise levels. Please use the proper cable and make sure the display device is capable of handling the resolution and refresh rate selected.

NOTE:
1. The system will disable the video output signal when it detects non-HDCP compliant display(s) on playing the HDCP video source. All the connected output displays MUST be HDCP compliant, when the video source is HDCP compliant.
2. 2D monitor might disable the video output signal when it detects 3D video source. All the connected output displays MUST be 3D compliant, when the video source is 3D-video .

EDID Configuration (Local Unit only)
In some cases display problems may occur due to incorrect EDID communication between the display monitor and the unit or inappropriate EDID data programmed by display manufactures. By pressing Learn *Audio Config* button on the top panel of local unit, it enables to learn EDID from EDID compliant monitors or has the system automatically optimized all valid (Audio and/or Video) outputs for minimum requirement. The following diagram is the summary of EDID Configuration.

Mode 1: Auto Mixing + EDID Learning
Step 1. Press *Learn Audio Config* Button for 3 seconds.
Step 2. Release the button right after the *Video OK* LED flashes yellow quickly.
Step 3. Next, when it flashes yellow twice, it indicates learn successfully and the system will reboot.
(Otherwise, if it flashes 4 times, it signifies failed learning. Please try again.)

Now the system enters **Auto Mixing & Learn Local Monitor Audio EDID mode**. Therefore, it will copy local monitor (Audio) EDID and the system automatically optimizes all valid (Video) outputs for minimum requirement and all connected monitors use learned (Audio) EDID of the local monitor.

Mode 2: EDID Learning
Step 1. Press *Learn Audio Config* Button for 6 seconds.
Step 2. Release the button right after the *Video OK* LED Indicator flashes yellow slowly.
Step 3. Next, when it flashes yellow twice, it indicates learn successfully and the system will reboot.
(Otherwise, if it flashes 4 times, it signifies failed learning. Please try again.)

Now the system enters **Learn Local Monitor EDID mode**. Thus, it will learn local monitor (Audio + Video) EDID and all connected monitors use learned (Audio + Video) EDID of the local monitor.

Mode 3: Auto Mixing
Step 1. Press *Learn Audio Config* Button for 9 seconds.
Step 2. Release right after the *Video OK* LED Indicator goes off.
Step 3. Next, when it flashes yellow twice, it indicates learn successfully and the system will reboot.
(Otherwise, if it flashes 4 times, it signifies failed learning. Please try again.)

Now the system enters **Auto Mixing mode**. In this way, the system automatically optimizes all valid outputs (Audio + Video) for minimum requirement.

LED Indicator

Press *Learn Audio Config* Button for…	Video OK LED Indicator	Status
3 seconds	Yellow: Flash quickly	Auto Mixing (Video) & Copy local monitor EDID (Audio)
6 seconds	Yellow: Flash slowly	Copy Local Monitor EDID (Video + Audio)
9 seconds	Off	Auto Mixing (Video + Audio)
	Yellow: Flash twice	Successful copy & System reboot
	Yellow: Flash 4 times	Failed copy

EDID Configuration

Mode / EDID	Video EDID	Audio EDID
Auto Mixing & EDID Learning	**Auto Mixing : Min. (of all)** Automatically optimize all valid (Video) outputs for minimum requirement	Learn local monitor (Audio) EDID and all connected monitors use the learned (Audio) EDID
EDID Learning	Learn local monitor (Video) EDID and all connected monitors use the learned (Video) EDID	Learn local monitor (Audio) EDID and all connected monitors use the learned (Audio) EDID
Auto Mixing	**Auto Mixing : Min. (of all)** Automatically optimize all valid (Video) outputs for minimum requirement	**Auto Mixing : Min. (of all)** Automatically optimize all valid (Audio) outputs for minimum requirement