### MAINTENANCE

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner of benzine to clean this unit.

## **PRODUCT SERVICE**

1) **Damage requiring service:** The unit should be serviced by qualified service personnel if:

(a)The DC power supply cord or AC adaptor has been damaged;

(b)Objects or liquids have gotten into the unit;

(c)The unit has been exposed to rain;

(d)The unit does not operate normally or exhibits a marked change in performance; (e)The unit has been dropped or the cabinet damaged.

2) **Servicing Personnel:** Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.

3) **Replacement parts:** When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.

4) **Safety check:** After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

#### WARRANTY

If your product does not work properly because of a defect in materials or workmanship, our Company (referred to as "the warrantor") will, for the length of the period indicated as below, **(Parts(2)Year,Labor(90) Days)** which starts with the date of original purchase ("Limited Warranty period"), at its option either(a) repair your product with new or refurbished parts, or (b) replace it with a new of a refurbished product. The decision to repair or replace will be made by the warrantor. During the "Labor" Limited Warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

# HDMI Extender over Ethernet MODEL:LM-EX23 Operating Instructions

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Operating Instructions

## **HDMI Extender over Ethernet**

### MODEL:LM-EX23 Operating Instructions



#### **Dear Customer**

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

#### FEATURES

- 1. Flexible and scalable HDMI 1080p High Quality Video Broadcasting with Gigabit Ethernet LAN.
- 2. Extends 1080p HDMI signals up to 120m over a single UTP Cat5e/6 cable.
- 3. Multicasting and broadcasting architecture, adding more displays without adding LAN bandwidth loading.
- 4. Support Point-to-Point, Point-to-Many network configuration.
- 5. Support unlimited cascading.
- 6. Extend, split, and daisy-chain HDMI, IR using CAT-5e cables
- 7. HDCP compliant

#### NOTICE

Our company reserve the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.

## HDMI Over IP One source to more display function

1. Connect one HDMI Cable between the HDMI output port of source device and the HDMI input port of Transmitter unit

2. Connect one HDMI Cable between the HDMI input port of display and the HDMI output port of Receiver unit.

3. Connect one UTP Cat5e or better cables between the RJ45 port of Transmitter unit and RJ45 port of Receiver unit.

4. Connect the included 5V DC power supplies to both Transmitter unit and Receiver unit.

5. Power on the output device first and the source second.

## **Connecting Diagram**

- 1). EX23-TX with 1 HDMI input port and 4 RJ45 output ports, it can be connected with LM-EX23-RX and LM-EX22-RX.
- LM-EX23-RX with 1 HDMI output port and 4 RJ45 output ports, it can be connected with LM-EX23-RX and LM-EX22-RX.
- 3). LM-EX22-TX with 1 HDMI input port and 1 RJ45 output port.
- 4). LM-EX22-RX with 1 RJ45 input port and 1 HDMI output.



## One to many( A )



#### LM-EX22-TX work with LM-EX23-RX.

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Operating Instructions

**Operating Instructions** 



\*LM-EX23-TX work with LM-EX22-RX. One to many( C )



\*Connect LM-EX23-RX with LM-EX23-RX and LM-EX22-RX to achieve large cascade.

### TABLE OF CONTENTS

Specifications Package Contents Panel Descriptions Connecting and Operating Typical Application Maintenance Product Service Warranty

## SPECIFICATIONS

Operating Temperature	-5 to +35 ℃ (+23 to +95 )	
Operating Humidity	5 to 90%RH (No Condensation)	
Support Video Format	DTV/HDTV:480i/576i/480P/576P/720P/1080i/1080P	
Output Video	HDMI,HDCP	
Audio Sampling rate	32kHz, 44.1kHz and 48kHz	
Transmission Distance	1080P @60Hz120m(Maximum) over single CAT5E/6	
Power consumption	5V/2A DC ,Power consumption: Transmitter : 5W(Max).Receiver 5W(Max).	
Dimension (L×W×H)	L145xW85x28mm	
IR frequency range	38kHz	
Net Weight	Receiver:340g,Transmitter:340g	
TX&RX	Default IP address:192.168.168.55; MAC address:00:0b:78:00:60:01 Default IP address:192.168.168.56; MAC address:00:0b:78:00:60:02	

Note1: Specifications are subject to change without notice. Mass and dimensions are approximate.

Note2: one TX to many RX or many TX connect to many RX, IP and MAC address must be different.

## **PACKING CONTENTS**

- 1) Main Unit. Transmitter & Receiver HDMI Extender
- 2) Power adapter DC 5V 2A x2 PCS
- 3) IR-TX cable & IR-RX cable
- 4) Operating Instructions

## PANEL DESCRIPTIONS

**Receiver Panel** 



(2) (3) (5) (4)1) ċ DC/5V Reset IR RX HDMI Output 3 2 ٢ Þ нот HDMI Over IP 4 3 2 1 Status Receiver 0 0.0 0 0 Power 6 (7)(8)

1Link ports	2 HDMI Output	③ IR-RX port	
④Reset button	⑤Power input port	6 Status of Link connection	
$\widehat{\mathcal{T}}$ Status of device running $\widehat{\otimes}$ Indicator of power input			

⑦Status of device running ⑧Indicator of power input

