

## **Prestel EHD-PLE**

HDMI over Power Extender with one-way IR



**USER MANUAL** 

## 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

## Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

### **Table of Contents**

| I. Introduction                     | 1   |
|-------------------------------------|-----|
| 2. Features                         | 1   |
| 3. Package Contents                 | 1   |
| 4. Specifications                   |     |
| 5. Operation Controls and Functions |     |
| 5.1 Encoder Panel                   | . 3 |
| 5.2 Decoder Panel                   | . 4 |
| 5.3 IR Pin Definition.              | . 5 |
| S. Application Example              | 7   |

### 1. Introduction

This power extender is based on H.265 standard solution for distribution 1 HD source to 3 HD displays simultaneously via power line transmission within the scope of one electricity meter, and supports one-way IR control. It offers high quality video and supports resolution up to 1080P@60Hz. In addition, one HDMI loop port of encoder is available for output. This power extender is designed special to transmit high definition video & audio within one electricity meter

This power extender offers the most convenient solution for HDMI extension with long distance capability and doesn't need to connect CAT cable to transmission. It is the perfect solution for any application.

### 2. Features

- ☆ HDMI 1.3, HDCP 1.4 and DVI 1.0 compliant
- Supports HDMI HD source to HDMI HD display via power line transmission within the scope of one electricity meter
- ☆ With one-way IR control
- ☆ One HDMI loop out
- ☆ Video resolution up to 1080P@60Hz
- Audio format supports LPCM 2.0CH 32KHz/44.1KHz/48KHz
- ☆ End-to-end delays under 150ms
- ☆ Compact design for easy and flexible installation.

## 3. Package Contents

| Qty | Item                                    |
|-----|---|
| 1   | HDMI over Power Extender (Encoder)      |
| 1   | HDMI over Power Extender (Decoder)      |
| 1   | IR Blaster cable (1.5 meters)           |
| 1   | 20~60KHz IR Receiver cable (1.5 meters) |
| 2   | AC 100~240V 50/60Hz Power cable         |
| 1   | User Manual                             |

## 4. Specifications

| Technical                |   |  |  |
|--------------------------|---|--|--|
| HDMI Compliance          | HDMI 1.3  |  |  |
| HDCP Compliance          | HDCP 1.4  |  |  |
| Video Bandwidth          | 6.75Gbps  |  |  |
| Video Resolution         | 1080p, 1080i, 720p, 720i, 480p, 480i, the maximum up to 1920×1080@60Hz<br>The PC resolution is up to 1400×1050    |  |  |
| Color Space              | RGB/YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0   |  |  |
| Color Depth              | 8/10/12-bit   |  |  |
| HDMI Audio Formats       | LPCM 2.0CH 32KHz/44.1KHz/48KHz  |  |  |
| ESD Protection           | Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)  |  |  |
| Connections              |   |  |  |
| Encoder                  | Inputs: 1x HDMI Type A [19-pin female] Outputs: 1x HDMI Type A [19-pin female] 1x IR OUT [3.5mm Stereo Mini-jack] |  |  |
| Decoder                  | Inputs: 1x IR IN [3.5mm Stereo Mini-jack] Outputs: 1x HDMI Type A [19-pin female]                                 |  |  |
| Mechanical               |   |  |  |
| Housing                  | Metal Enclosure   |  |  |
| Color                    | Black   |  |  |
| Dimensions               | Encoder / Decoder:<br>135mm [W] x 96.5mm [D] x 29mm [H]   |  |  |
| Weight                   | Encoder / Decoder: 405g   |  |  |
| Power Supply             | AC 100 - 240V 50/60Hz power cable   |  |  |
| Power Consumption        | Encoder: 3.4W, Decoder: 3.5W  |  |  |
| Operating<br>Temperature | 32 - 104°F / 0 - 40°C   |  |  |
| Storage Temperature      | -4 - 140°F / -20 - 60°C   |  |  |
| Relative Humidity        | 20 - 90% RH (no condensation)   |  |  |

| Resolution / Cable Length   | 1080P@60Hz -<br>Feet / Meters |  |
|---|-------------------------------|--|
| HDMI IN / OUT   | 42ft / 15M                    |  |
| The use of "Premium High Speed HDMI" cable is highly recommended. |                               |  |

# 5. Operation Controls and Functions

### 5.1 Encoder Panel





| Name                | Function description  |
|---------------------|---|
| Power LED           | Red LED indicates that the encoder is powered.  |
| Link LED<br>(Green) | <ul><li>Flicker intermittently three times: No pair.</li><li>Flicker quickly: Paired success.</li></ul> |
| RESET button        | Press the button for 3 seconds will reset the encoder to factory default status.                        |
| AC/220V             | Connect to 100~240V AC 50/60Hz power cable.   |
| HDMI OUT            | HDMI loop output for display.   |
| HDMI IN             | HDMI source input.  |
| IR OUT              | IR port output for control of the source device.  |

### 5.2 Decoder Panel

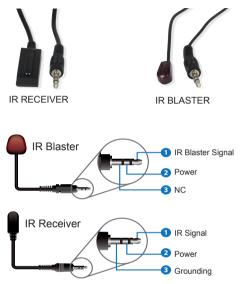




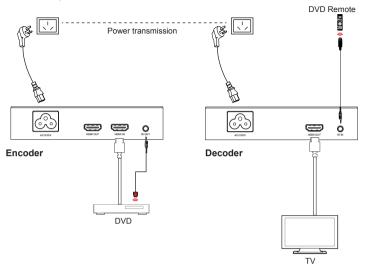
| Name                | Function description  |
|---------------------|---|
| POWER LED           | Red LED indicates that the decoder is powered.  |
| LINK LED<br>(Green) | ■ Flicker slowly: No pair. ■ Flicker quickly: Paired success.   |
| RESET button        | <ul> <li>Press quickly the button will copy the EDID of display device to source device.</li> <li>Press the button for 3 seconds will reset the decoder to factory default status.</li> </ul> |
| AC/220V             | Connect to 100~240V AC 50/60Hz power cable.   |
| HDMI OUT            | HDMI output for display.  |
| IR IN               | IR port input to receiving the signal of IR remote.   |

### 5.3 IR Pin Definition

IR Receiver and Blaster pin's definition as below:



### IR use example:



Note that IR remote sends signal distance for  $0\sim5$  meters /  $0\sim8$  meters, and angle is plus-minus 45 degrees / vertical direction .

## 6. Application Example

