# HE101-U Owner's Manual

## HDMI 2.0 Ultra HD/4K Cable Repeater



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| Manual version | Release date |
|----------------|--------------|
| 1.0            | 1/16/2017    |

# 1-1 Package Contents

**Please make sure all of the following items are included in the package:**
1) HE101-U Unit
2) Owner's Manual

# 1-2 General Specification

**Welcome!**

Congratulations on your purchase of the PureLink HE101-U Ultra HD/4K HDMI cable repeater. This manual contains information that will assist you in installing and operating the product.

PureLink HE101-U is a HDMI cable repeater that actively monitors incoming HDMI signal to compensate for signal loss when using a long HDMI cable, lower quality HDMI cable, or source device with poor HDMI signal output. It extends Ultra High Definition (UHD) and 4K signals up to 66 ft (20 m) and 1080p signals up to 132 ft (40 m).

| Item | Description |
|---|---|
| Model | HE101-U |
| Input type | HDMI Single Link , 1 port |
| Output type | HDMI Single Link , 1 port |
| Supported Input/Output Resolution | Ultra HD/4K Up to 4096 x 2160 @ 50/60Hz (RGB 4:4:4 YCbCr 4:4:4, 4:2:2, 4:2:0) |
| Connector type | HDMI 19 Pin Female Micro USB power jack |
| Supported format | HDMI 2.0 |
| HDCP Compliant | Yes, Pass thru, HDCP 2.2 |

| | |
|---|---|
| Multi-channel Audio | Yes, Pass thru |
| HDR support | Yes, Pass thru |
| CEC support | Yes, Pass thru |
| EDID | Pass thru |
| Power | HDMI (via HDMI pin# 18) or Micro USB DC +5V , 2A, Max 10W<br>* Micro USB is an optional, does not come with the unit |
| Dimension (WxDxH) | 1.1" x 2.0" x 0.8" (28 x 52 x 21 mm) |
| Weight | 0.50 lbs (0.2 kg) |

*Connector Pin Assignment*

| Part No. | Pin No. | Description | Remarks |
|---|---|---|---|
| HDMI 19pin | 1 | TMDS DATA 2P | |
| | 2 | TMDS DATA 2 Shield | |
| | 3 | TMDS DATA 2M | |
| | 4 | TMDS DATA 1P | |
| | 5 | TMDS DATA 1 Shield | |
| | 6 | TMDS DATA 1M | |
| | 7 | TMDS DATA 0P | |
| | 8 | TMDS DATA 0 Shield | |
| | 9 | TMDS DATA 0M | |
| | 10 | TMDS Clock P | |
| | 11 | TMDS Clock Shield | |
| | 12 | TMDS Clock M | |
| | 13 | CEC | |
| | 14 | RESERVED | |
| | 15 | DDC Clock | |
| | 16 | DDC DATA | |
| | 17 | GND | |
| | 18 | +5v | |
| | 19 | Hot Plug Detect | |

# 1-3 Operation and Reliability Specification

1. Operating Environment
   Temperature      : 32F ~ 104F (0℃~ 40℃)
   Humidity          : 20% ~ 90%
   Altitude          : 3,000m Max.

2. Transit Environment
   Temperature      : -13F ~ 140F (-25℃~ 60℃)
   Humidity          : 5% ~ 95%
   Altitude          : 15,000m Max.

3. Storage Environment
   Temperature      : -4F ~ -140F (-20℃~ 60℃)
   Humidity          : 20% ~ 90%
   Altitude          : 3,000m Max.

4. Reliability
   MTBF: 90% at over 50,000 hours aging test
   • In compliance with LCD Monitor reliability test standard

# 1-4 Main Features

- **Range extension up to 33 ft (10 m) for 4K60Hz 4:4:4 Ultra HDTV resolution, (5 m on the input to the HE101-U and 5 m on the output)**

- **Range extension up to 66 ft (20 m) for 4K60Hz 4:2:0 Ultra HDTV resolution, (10 m on the input to the HE101-U and 10 m on the output)**

- **Range extension up to 132 ft (40 m) for 1080p HDTV resolution, (20 m on the input to the HE101-U and 20 m on the output)**

- **Maximum bandwidth : 18 Gbps**

- **HDCP 2.2 and HDCP 1.4 compliance (pass thru)**

- **PureLink signal re-generation & repeating technology that allows the HDMI digital signal to travel longer distances**

- **Can be powered directly from the HDMI source. If the source device delivers enough 5V power to the HE101-U, it does not require optional micro USB power injected.**
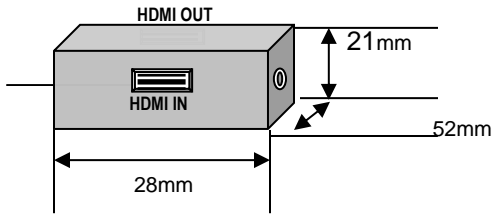
- **LED signal and power indicator**

# 1-5 Operation Guide & Mechanical Specification

**Hardware Connection**

1. Turn off the whole system before connecting.
2. Connect your video source's HDMI output port to the HE101-Us HDMI input port using standard HDMI cables (not included)
3. Connect your HDMI display's HDMI input port to HE101-U's HDMI output port
4. Plug the 5V power supply to HE101-U (optional)
5. Plug the 5V wall mount power supply into the wall outlet (optional)
6. Turn on your monitor
7. Turn on your video source

## Mechanical Specification



HDMI IN: HDMI Input Signal

HDMI OUT: HDMI Output Signals

LED Power: 5V DC Power Indicator

## Input/Output Cable Length Specification

| Resolution | Input cable length | Output cable length |
|------------|--------------------|--------------------|
| 4K60 4:4:4 | 5m | 5m |
| 4K60 4:2:0 | 10m | 10m |
| 4K30 4:4:4 | 20m | 20m |
| 2K | 20m< | 20m< |
| 1080P | 20m< | 20m< |
| 720P | 20m< | 20m< |
| 1024x768 | 20m< | 20m< |

* To achieve signal travel distance shown in above table, PureLink recommends the use of PureLink's HDMI cables (PI, ULS, and PLH series)

# 1-6 Warranty

**Manufacturer's Warranty (3-Year)**

PureLink warrants HE101-U to be free from defects in workmanship and materials, under normal use and service, for a period of three (3) years from the date of purchase from PureLink or its authorized resellers.

If the product does not operate as warranted during the applicable warranty period, PureLink shall, at its option and expense, execute one of the following as necessary:

1. Repair the defective product or part
2. Deliver to customer and equivalent product or part to replace the defective item
3. Refund to customer the purchase price paid for the defective product

All products that are replaced become the property of PureLink. Replacement products may be new or reconditioned, Repaired or replacement products or parts come with a 90-day warranty or the remainder of the warranty period. PureLink shall not be responsible for any software, firmware, information, or memory data loss of contained in, stored on, or integrated with any products returned to PureLink for repair under warranty.

**Customer Service**
Any customer service inquiries can be submitted electronically through the Q&A form on our website ([www.purelinkav.com](www.purelinkav.com)).
For immediate assistance please contact us at (201) 488-3232 to reach our customer care or tech support team.