



## BG-UHD-1X4HDBT

# 1 × 4 HDBaseT™ Splitter



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, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

## Table of Contents

<b>1. Introduction .....</b>	<b>3</b>
<b>2. Features.....</b>	<b>3</b>
<b>3. Package Contents.....</b>	<b>4</b>
<b>4. Specifications.....</b>	<b>4</b>
<b>5. Operation Controls and Functions.....</b>	<b>6</b>
<b>5.1 Transmitter Pa.....</b>	<b>6</b>
<b>5.2 Receiver Panel.....</b>	<b>7</b>
<b>6. HDBT Receiver .....</b>	<b>10</b>
<b>7. Web GUI User Guide .....</b>	<b>12</b>
<b>8. Application Example .....</b>	<b>17</b>
<b>9. Mission Statement.....</b>	<b>17</b>
<b>10. Warranty Information.....</b>	<b>18</b>

## 1. Introduction

The BZ-UHD-1x4HDBT 1x4 HDBaseT splitter is an advanced signal distribution amplifier that can distribute one HDMI signal to four HDBaseT outputs each up to 230ft/70m through a single Cat6/6a cable. Max video resolution up to 4K2K@60Hz (4:4:4). A local HDMI loop out can allow two units cascading to a 1x8 splitter. Two-way IR and RS-232 are supported as well.

## 2. Features

- ☆ HDMI 2.0b, HDCP 2.2 compliant.
- ☆ Up to 4K2K@60Hz (4:4:4) 18Gbps.
- ☆ Supports all HDMI audio formats pass-through.
- ☆ HDBaseT up to 230ft/70m through a single Cat6/6a cable
- ☆ RS-232 and two-way IR supported
- ☆ Local HDMI loop out for cascading usage
- ☆ 24V POC on all HDBaseT ports
- ☆ Transmission distance: ※Over CAT6 cable
  - 70 meters: 1080P @60Hz36bit;
  - 40 meters: 1080P @60Hz@48bit; 1080P @120Hz@24bit;
  - 4K2K@50/60Hz (YUV420), 4K2K@50/60Hz (YUV444)
- ☆ POC (Power over Cable), either TX or RX is powered by one

24V@2.7A power supply.

※ See the description 1

☆ Bi-directional infrared control signal transmission.

※ See the description 2

☆ Bi-directional RS-232 signal transmission.

※ See the description 3

### 3. Package Contents

- ① 1x 1×4 HDBaseT Splitter
- ② 4x HDBaseT Receivers
- ③ 4x Wideband IR Blaster cables
- ④ 4x Wideband IR Receiver cables
- ⑤ 1x 24V/2.7A Locking Power Adapter
- ⑥ 5x Phoenix connectors (5 pins male)
- ⑦ 4x Phoenix connectors (3 pins male)
- ⑧ 1x User Manual

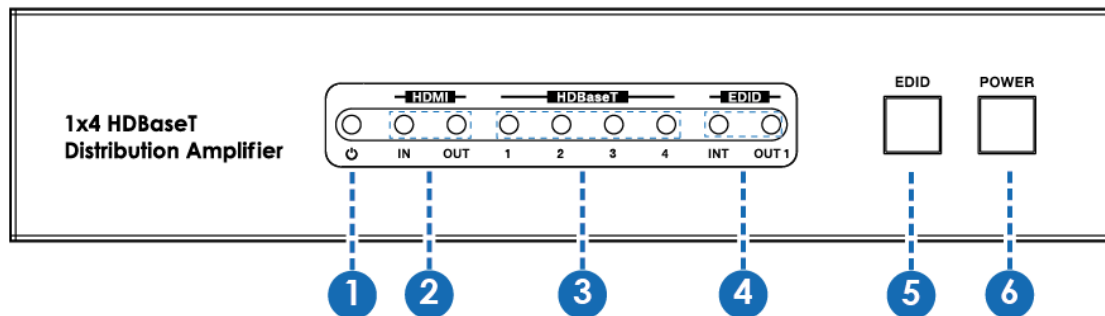
### 4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	594MHz[18Gbps]
Video Resolutions	up to 4K60Hz, 1080P@60Hz
Color Depth	10-bit, 12-bit
Color Space	RGB/YCbCr 4:4:4, YCbCr 4:2:2
Transmitter	Input ports: 1x HDMI Type A [19-pin female] 5x IR INPUT [Phoenix jack]

	<p>Output ports: 1x HDMI Type A [19-pin female]  5x RS-232 [Phoenix jack]  5x IR OUTPUT [Phoenix jack]  4x HDBaseT Out [RJ45]  1x LAN [RJ45, Control]</p>
Receiver	<p>Input ports: 1× HDBaseT In [RJ45]  1× IR In [3.5mm Stereo Mini-jack]</p> <p>Output ports: 1× HDMI Type A [19-pin female]  1× IR Out [3.5mm Stereo Mini-jack]  1× RS-232 [Phoenix connector]</p>
<b>Mechanical</b>	
Housing	Metal Enclosure
Color	Black
Dimensions	TX: 210mm(W) × 159mm(D) × 44mm(H) RX: 115mm(W)*65mm(D)*17mm(H)
Weight	TX: 1.19kg, RX: 206g
Power Supply	Input: AC100~240V 50/60Hz, Output: DC24V/2.7A (US/EU standards, CE/FCC/UL certified)
Power Consumption	40W
Operating Temperature	0° C ~ 40° C / 32° F ~ 104° F
Storage Temperature	-20° C ~ 60° C / -4° F ~ 140° F
Relative Humidity	20~90% RH (non-condensing)

## 5. Operation Controls and Functions

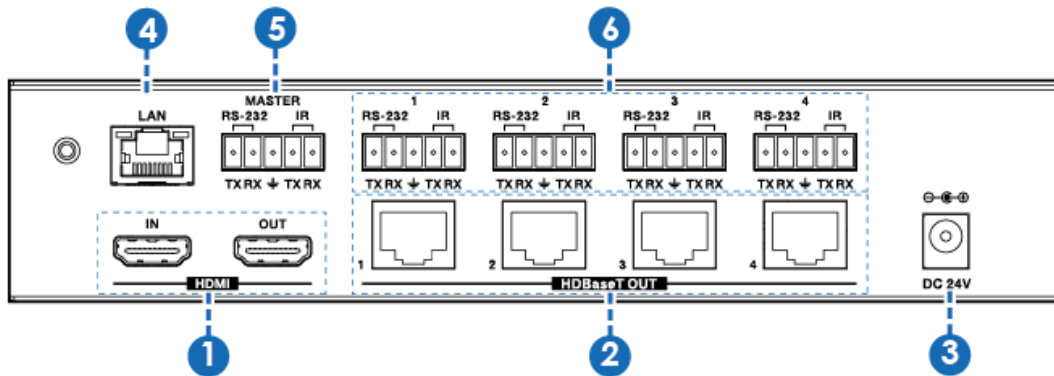
### 5.1 Transmitter Pa



Number	Name	Function descriptions
1	Power LED	Power indicator light. When the power supply is normal, the indicator LED is on.
2	HDMI LED	HDMI IN LED: When the HDMI IN port has signal input, the indicator LED is on. HDMI OUT LED: When the HDMI OUT port has an active display be connected, the indicator LED is on.
3	HDBaseT LED	When the HDBaseT OUT port connect Receiver and the Receiver has signal output, corresponding HDBaseT indicator LED is on.
4	EDID LED	EDID INT LED: When have default EDID output, the indicator LED is on. EDID OUT1 LED: The HDBaseT OUT 1 port has connected the receiver and the receiver has connected an active display. When the display EDID be copied, the indicator LED is on.
5	EDID button	Select default EDID or copy HDBaseT OUT 1 EDID.
6	POWER button	Press the button to open the power of

		<p>the unit or set it as a standby mode.  (Attention: The unit is power on status when it is powered on firstly.)</p>
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## 5.2 Receiver Panel



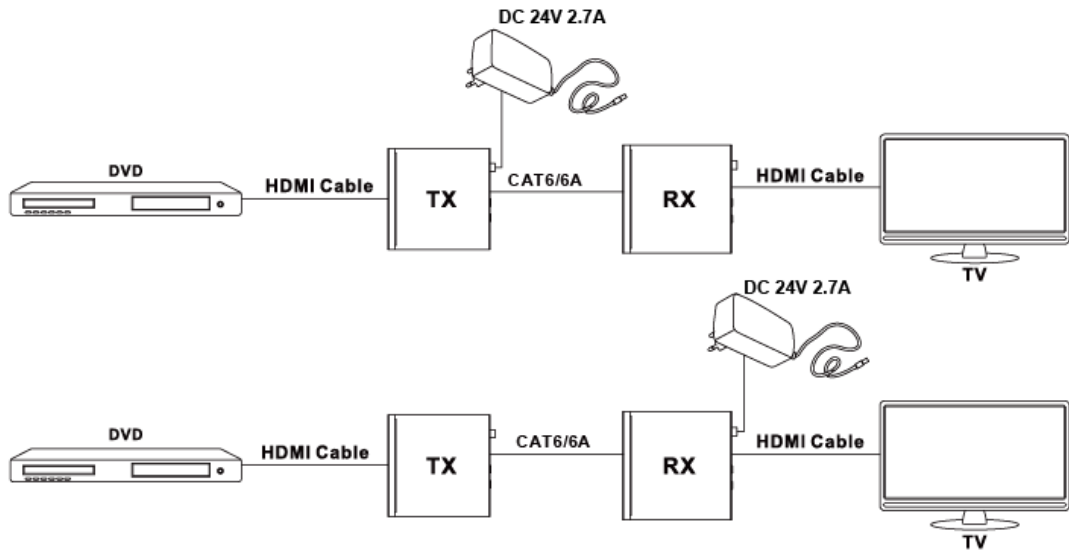
Number	Name	Function descriptions
1	HDMI	HDMI IN: Connect to the HDMI source device, such as DVD player or Set top box.
		HDMI OUT: HDMI LOOP output port. Connect to the local HDMI display device, such as HDTV or monitor.
2	HDBaseT OUT	Standard HDBaseT output port. Connect to HDBaseT Receiver with a UTP cable.
3	DC 24V	Connect 24V/2.7A adaptor to AC wall outlet for power supply.
4	LAN	Connects to an active Ethernet link by an RJ-45 cable.
5	MASTER	RS-232: Phoenix jack connects control equipment to transmit command from transmitter RS-232 to every receiver

		<p>RS-232 port or transmit command from every receiver RS-232 port to MASTER RS-232 port.</p>
		<p>IR IN: Phoenix jack connects control equipment to transmission signal from transmitter IR IN port to every receiver IR OUT port.</p>
		<p>IR OUT: Phoenix jack connects control equipment to transmit signal from every receiver IR IN port.</p>
6	RS-232/IR	<p>RS-232: Phoenix jack connects control equipment to transmit command between Transmitter and Receiver. (Attention: Transmitter RS-232 port and receiver RS-232 port is one-to-one transmission.)</p>
		<p>IR IN: Phoenix jack connects control equipment to transmission IR signal between Transmitter and Receiver. (Attention: Transmitter IR IN port and receiver IR OUT port is one-to-one transmission.)</p>
		<p>IR OUT: Phoenix jack connects control equipment to transmission IR signal between Transmitter and Receiver. (Attention: Transmitter IR OUT port and receiver IR IN port is one-to-one transmission.)</p>



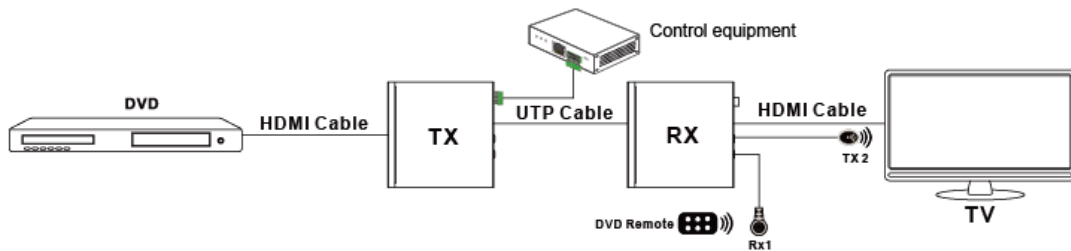
※ Description 1

POC (Power over Cable) Application Example



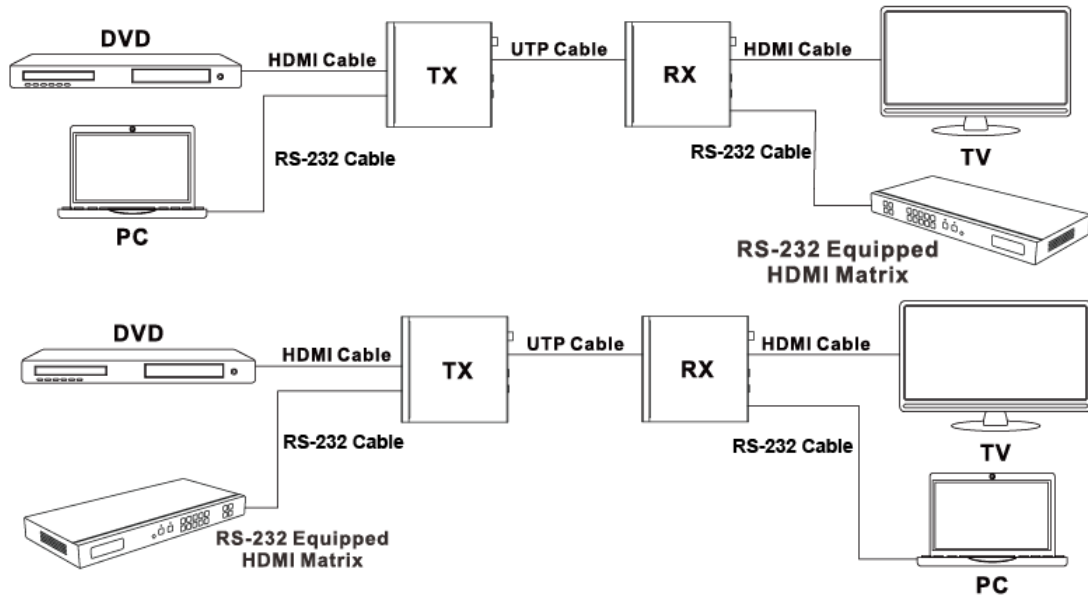
※ Description 2

Bidirectional Infrared control Application Example

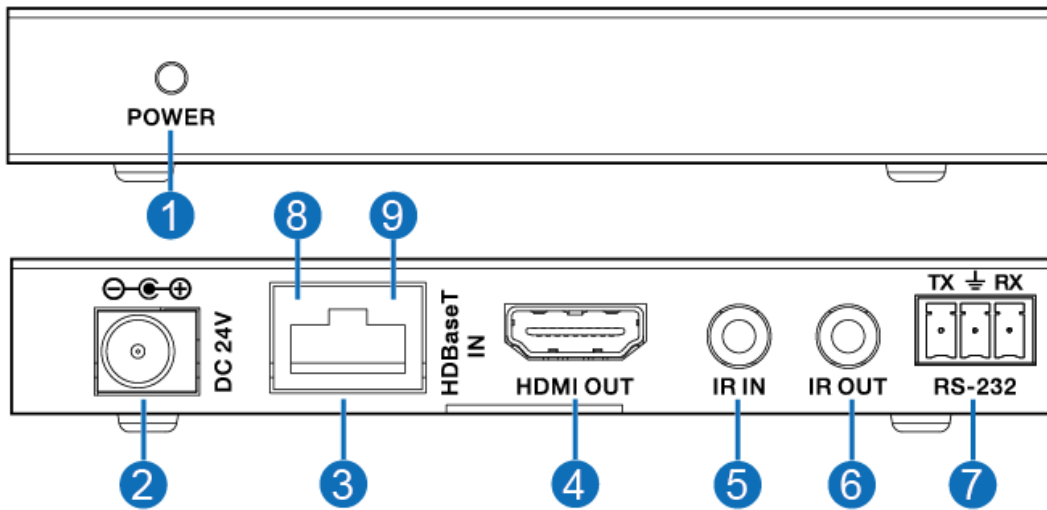


※ Description 3

Bidirectional RS232 control Application Example



## 6. HDBT Receiver

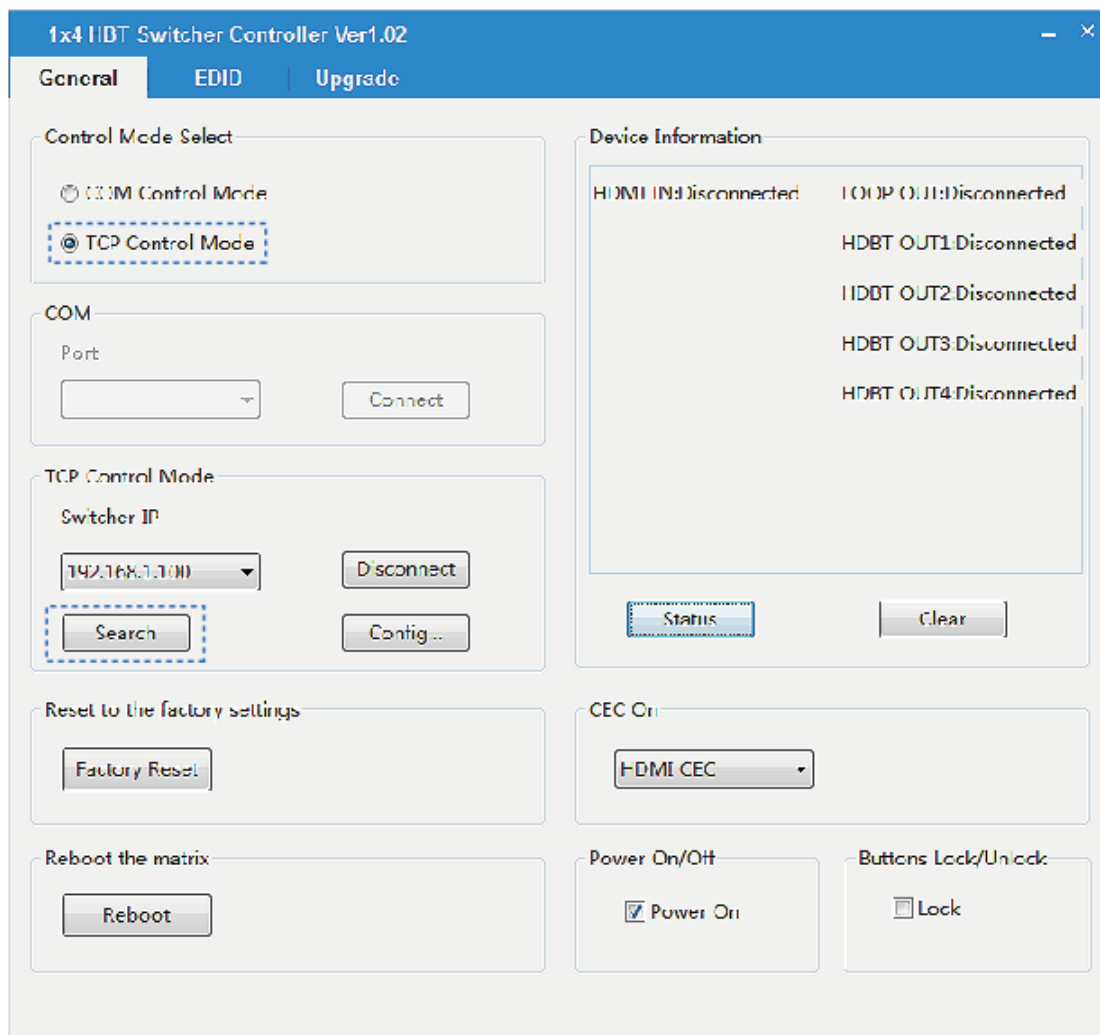


Number	Name	Function description
1	POWER	This LED illuminates when the device is connected with power supply.
2	DC 24V	Plug the 24V DC power supply into the unit. (If the device connect to the matrix, the receiver doesn't need local power supply due to POC from the matrix.)
3	HDBaseT IN	Standard HDBaseT signal input port.

		Connect to splitter HDBaseT output with a UTP cable.
4	HDMI OUT	HDMI output port. This slot is where you connect the HDTV or monitor with HDMI cable.
5	IR IN	Channel 1 IR Receiver. Connect with Wideband IR Rx.
6	IR OUT	Channel 2 IR Transmitter. Connect with Wideband IR Tx.
7	RS-232	Connect to a PC or control system with phoenix jack for transmission of RS-232 commands.
8	Connection Signal Indicator Lamp	<p>※Illuminate: The Transmitter and Receiver are in good connection status.</p> <p>※Flashing: The Transmitter and Receiver are in poor connection status.</p> <p>※Dark: The Transmitter and Receiver are not connected.</p>
9	Data Signal Indicator Lamp	<p>※Illuminate: The HDMI signal with HDCP.</p> <p>※Flashing: The HDMI signal without HDCP.</p> <p>※Dark: No HDMI signal.</p>

## 7. Web GUI User Guide

The Splitter can be controlled via Web GUI through LAN port. You must know current Splitter IP address. The static IP address is 192.168.1.100. You can connect PC Web GUI through dynamic IP address. In this unit, you can get the IP address via PC Controller. Firstly, opening Splitter PC Controller software, as following page:

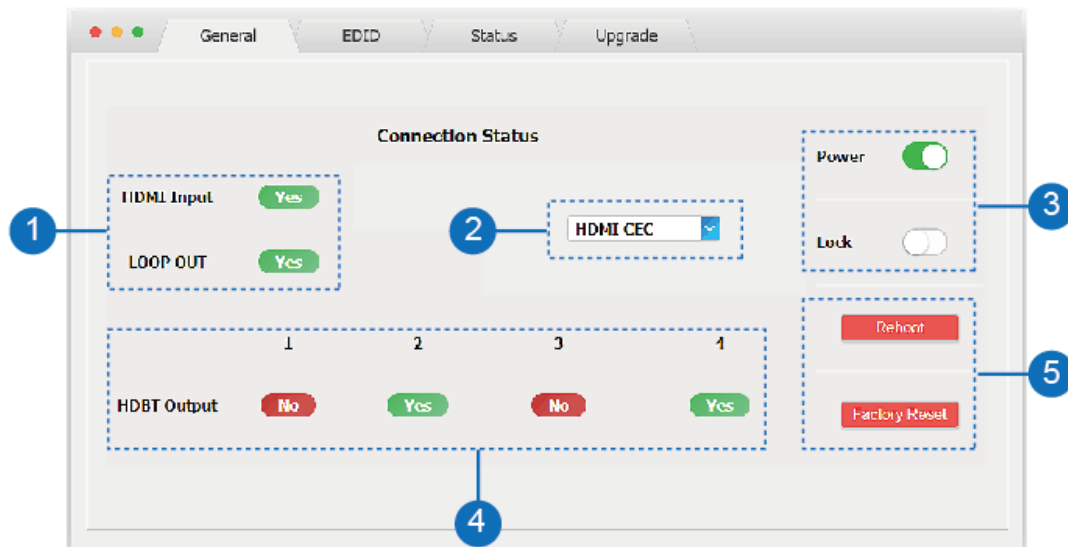


Then select the “TCP Control Mode” port, click the “Search” button. At this moment, you can get current IP address. You can set the IP address to your PC/laptop/mobile Internet Explorer and click “Search”

to enter Web GUI page.

The Web GUI looks like:

## General page



① HDMI Input: Display current the HDMI Input port status. The “Yes” has connected source device and “No” represent not connection.

LOOP OUT: Display current the LOOP OUT port status. The “Yes” has connected display device and “No” represent not connection.

② This is a drop-down list button:

HDMI CEC/HDBT1 CEC/HDBT2 CEC/HDBT3 CEC/HDBT4 CEC: If the five outputs end connect display device that is standby status, you can select a drop-down button to open the display device.

ALL: Open all the display device.

(Attention: Supports only the display device with CEC function.)

③ Power switch. The Splitter will work when open this switch.

Otherwise, the Splitter will standby. Lock switch. Open this switch, press

the Splitter on-panel button will mute.

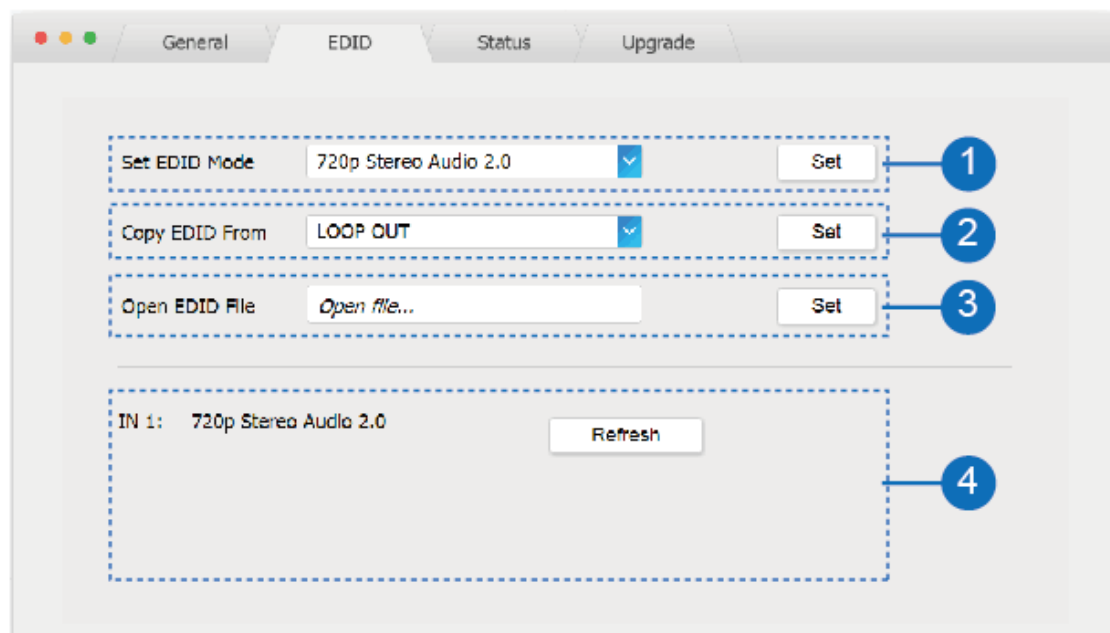
Close this switch, it will unmute.

④ HDBT Output: Display current the HDBT Output port status. The “Yes” has connected display device and “No” represent not connection.

⑤ Reboot button: Click this button will reboot device.

Factory Output button: Click this button will set to factory reset.

## EDID page



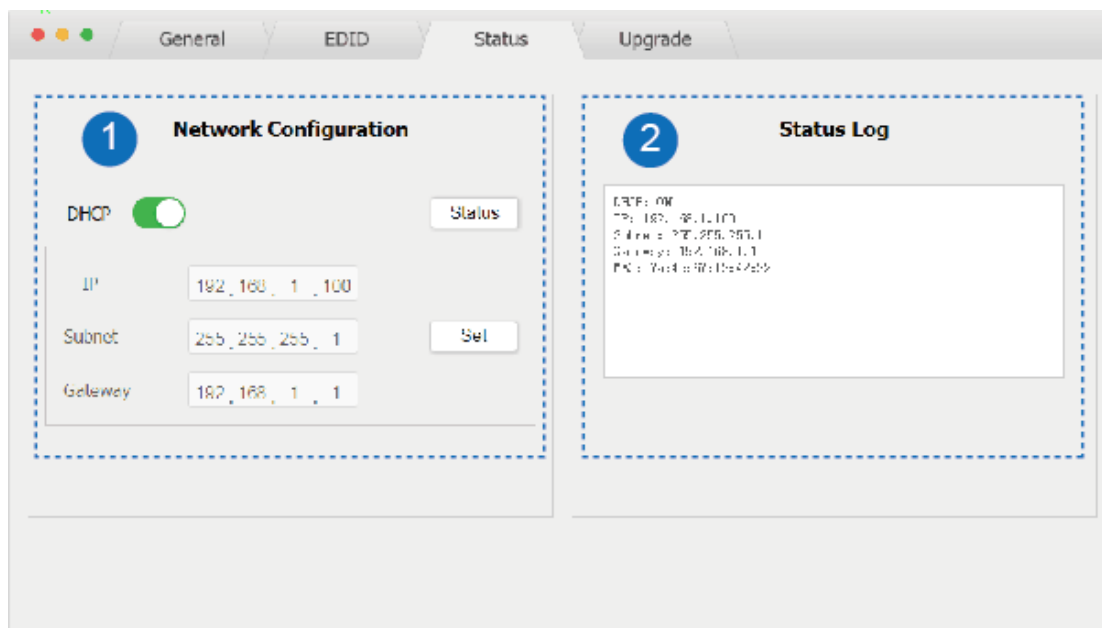
① Set EDID mode to input source, then click the “Set” button.

② Copy EDID from output port to input source, then click “Set” button.

③ Open EDID file to source device, then click “Set” button.

④ Click “Refresh” button to refresh currently source device EDID mode. It will display the latest input EDID mode status.

## Status page



### ① Network Configuration

#### ◆ In DHCP open status:

HDCP switch: Obtain the network configuration information, including IP address, Subnet, Gateway. Then click “Set” button to save DHCP status.

#### ◆ In DHCP close status:

HDCP switch: If the DHCP switch has been closed, user can set IP, Subnet and Gateway address. In this moment, click the “Set” button to save current status information. (Attention: If user have set the IP address, click the “Set” button. In this moment, user need set the IP address again to your PC/laptop/mobile Internet Explorer and click “Search” to enter Web GUI page.)

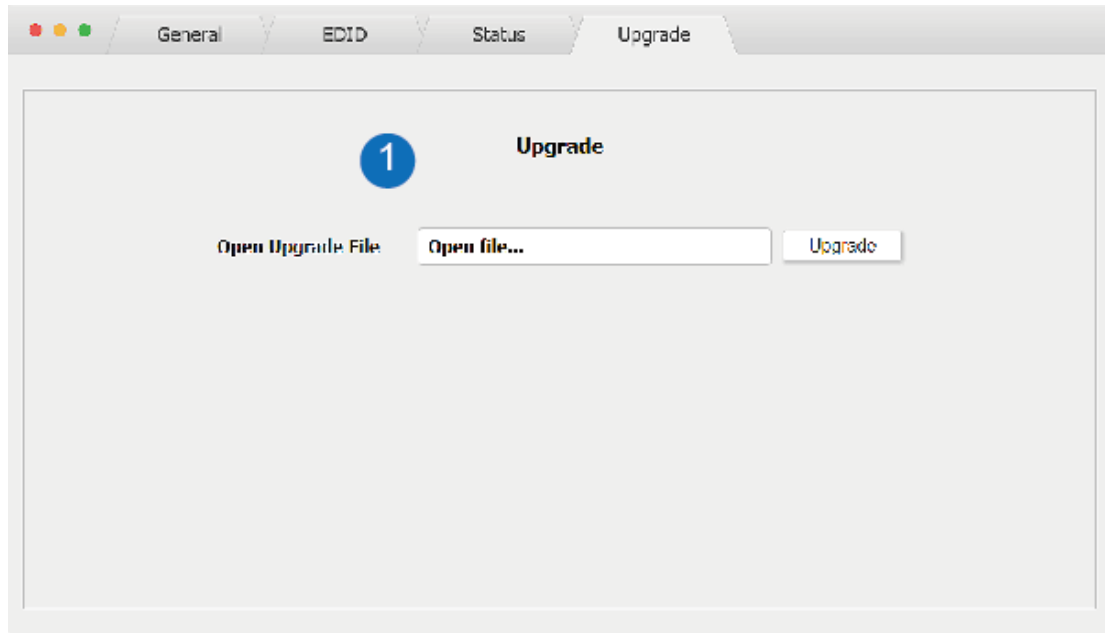
Status button: Click this button will refresh current network

configuration information to display in Status Log. In this unit, Mac

address can check only, you cannot set it.

② Display the network configuration information.

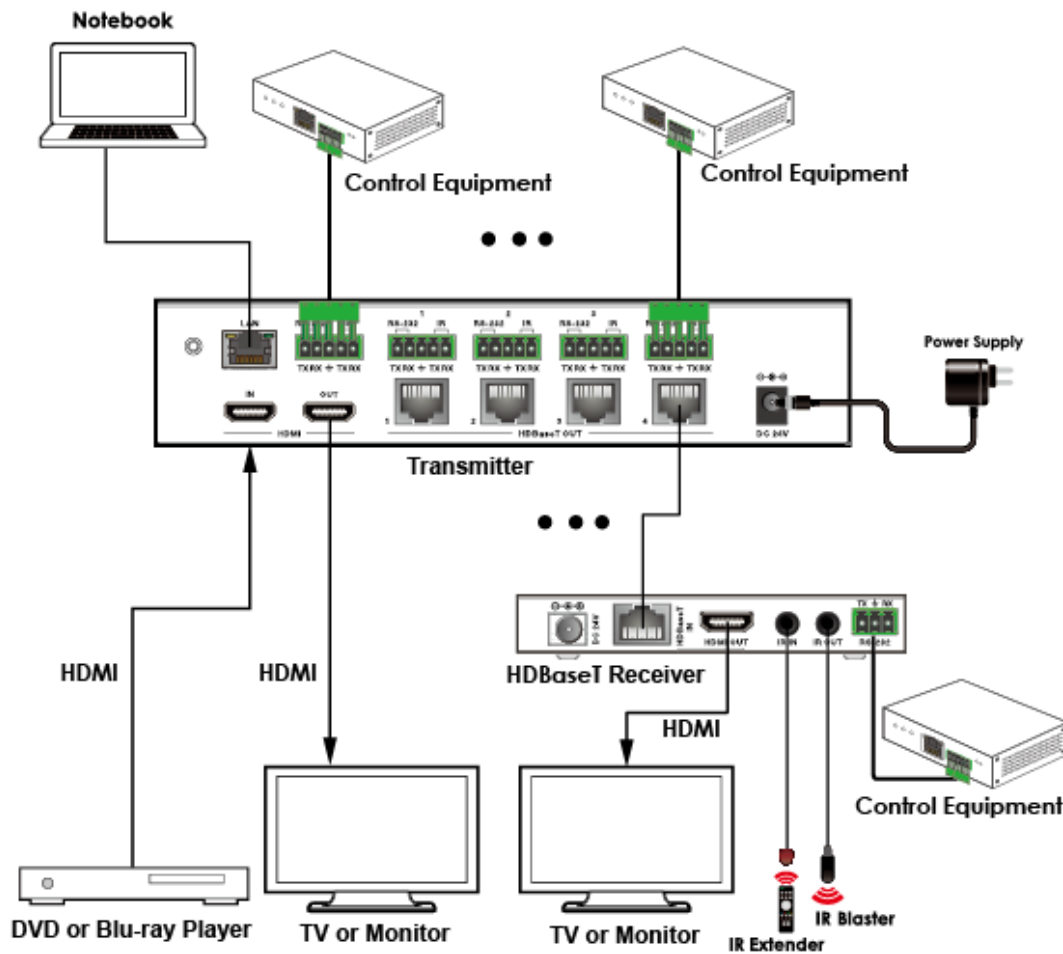
## Upgrade page



① Open upgrade file to upgrade.



## 8. Application Example



## 9. Mission Statement

BZB Gear manifests from the competitive nature of the audiovisual industry to innovate while keeping the customer in mind. AV solutions can cost a pretty penny, and new technology only adds to it. We believe everyone deserves to see, hear, and feel the advancements made in today's AV world without having to break the bank. BZB Gear is the solution for small to medium-sized applications requiring the latest professional products in AV.

We live in a DIY era where resources are abundant on the internet. With that in mind, our team offers system design consultation and expert tech support seven days a week for the products in our BZB Gear catalog. You'll notice comparably lower prices with BZB Gear solutions, but the quality of the products is on par with the top brands in the industry. The unparalleled support from our team is our way of showing we care for every one of our customers. Whether you're an integrator, home theater enthusiast, or a do-it-yourselfer, BZB Gear offers the solutions to allow you to focus on your project and not your budget.

## **10. Warranty Information**

### **BZB Gear | Second Year Assurance**

BZB Gear wants to assure you peace of mind. We're so confident in the quality of our products that along with the manufacturer's one-year limited warranty, we are offering free second-year warranty coverage upon registration\*!

Taking advantage of this program is simple, just follow the steps below:

1. Register your product within 90 days of purchase by visiting [BZBGear.com/warranty](https://BZBGear.com/warranty).

2. Complete the registration form. Provide all necessary proof of purchase details, including serial number and a copy of your sales receipt.

For questions, please call 1.888.660.2962 or email [support@bzbgear.com](mailto:support@bzbgear.com).

For complete warranty information, please visit [BZBGear.com/warranty](http://BZBGear.com/warranty) or scan the QR code below.



\*Terms and conditions apply. Registration is required.