



BZ-PT-SH2

HDMI 18Gbps Repeater
with 4K Scaler

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 service life of your equipment.

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1. Introduction

The BZ-PT-SH2 is a HDMI Repeater with one input and one output port, it can do scaler up/down/pass-through. Furthermore, both input and output HDMI support video resolution up to 4K2K@60Hz (YUV444) and HDMI high resolution digital audio formats bypass, LPCM 2CH, Dolby TrueHD, Dolby Digital Plus, Dolby Atmos and DTS-HD Master Audio, audio sampling rate up to 192 kHz. HDCP 2.2 and CEC bypass supported.

2. Features

- ✧ HDMI 6G 20M Re-timer & Repeater with scaling
- ✧ Amplifies and equalizes the HDMI signal to provide high quality audio and video
- ✧ HDMI extension transmission over long cable and supports multiple layers cascading
- ✧ 20 meters HDMI high-speed cable extender (input max 10 meters, output max 10 meters at 4K2K@60Hz)
30 meters HDMI high-speed cable extender (input max 18 meters, output max 12 meters at 4K2K@30Hz)
40 meters HDMI high-speed cable extender (input max 25 meters, output max 15 meters at 1080p)
- ✧ Supports scaling up/down between 4K and 1080p (no frame rate conversion)
- ✧ HDCP 2.2 or HDCP 1.4 indicator
- ✧ Dolby® TrueHD, DTS-HD Master Audio™, and LPCM digital audio streams up to 7.1 channels
- ✧ HDCP/3D/CEC/Lip-Sync pass-through

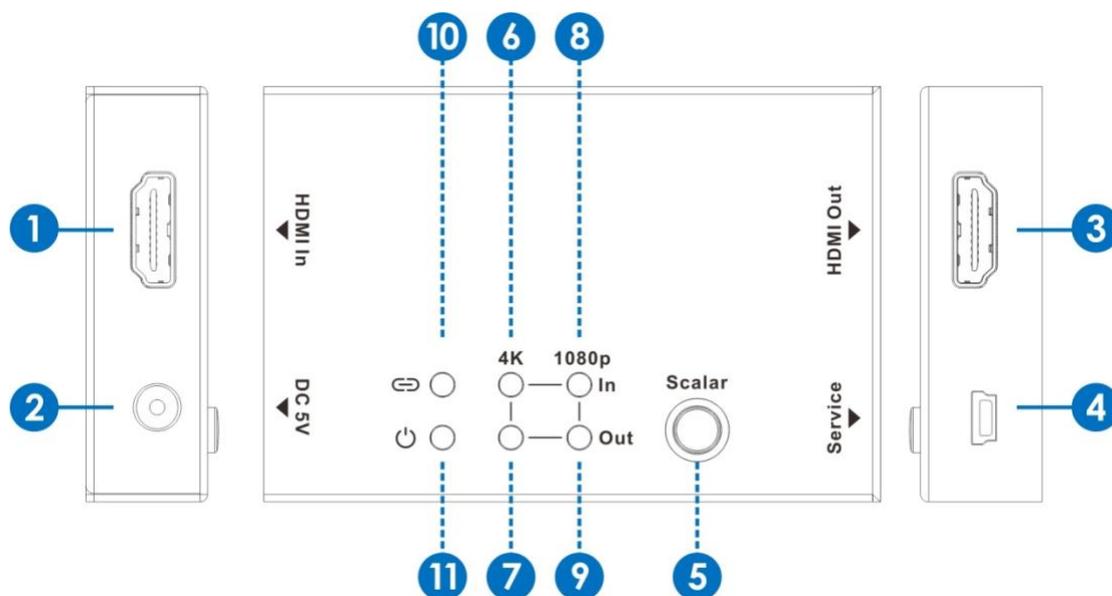
3. Package Contents

- ✧ 1 x HDMI 18Gbps HDMI repeater with scaler
- ✧ 1 x 5V/1A Power Adaptor
- ✧ 1 x User Manual

4. Specifications

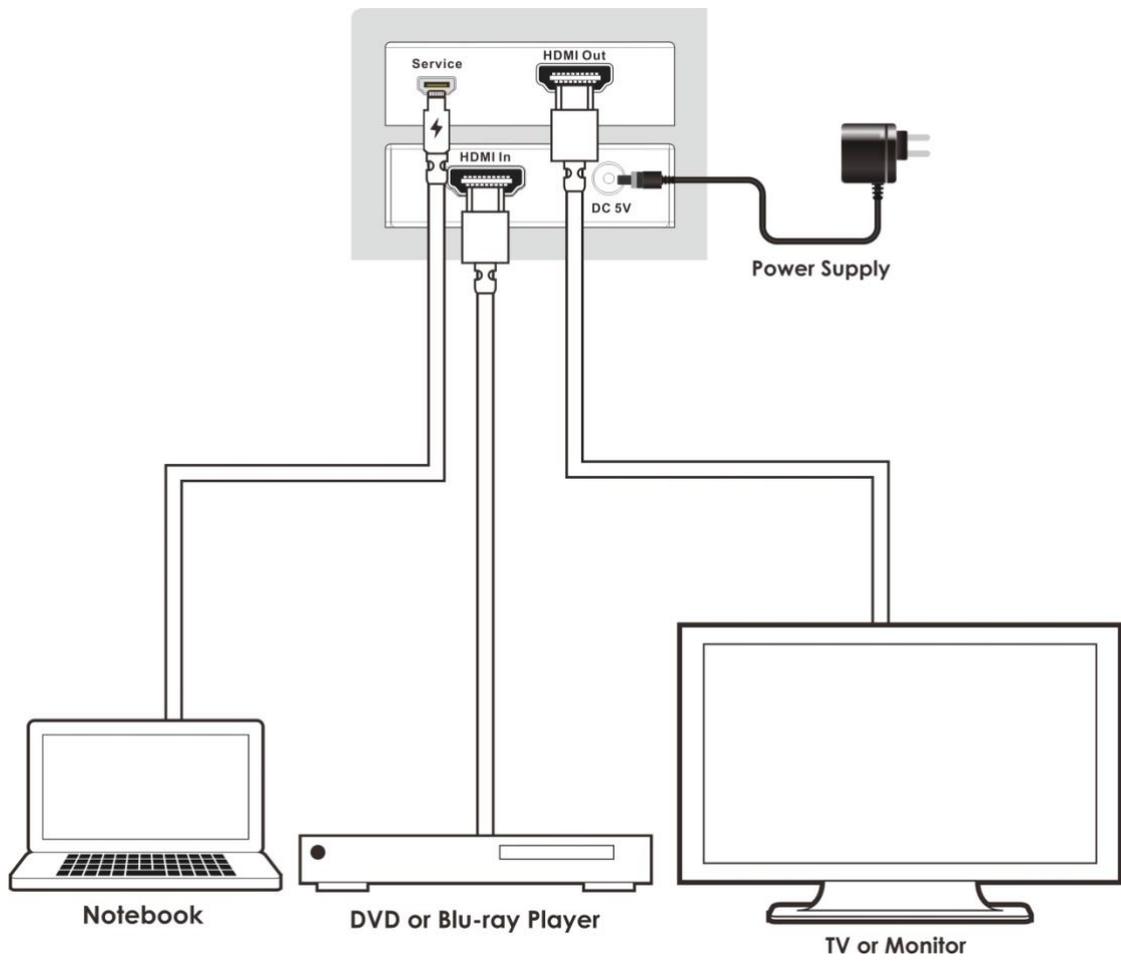
Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18 Gbps
Video Resolutions	up to 4K2K@50/60Hz (YUV4:4:4),4K2K@30Hz,1080P@120Hz, and 1080P 3D@60Hz
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	10-bit, 12-bit
HDMI Audio Formats (Pass-through)	LPCM 2/5.1/7.1CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio
ESD Protection	Human body model — ±8kV (air-gap discharge) & ±4kV (contact discharge)
Connections	
Inputs	1x HDMI Type A [19-pin female]
Outputs	1x HDMI Type A [19-pin female]
USB Connector	1x Mini-USB (firmware upgrade only)
DC POWER	5V-1A DC-JACK
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	81mm [W] x 55mm [D] x 16mm [H]
Weight	400g
Power Supply	Input: AC100 - 240V 50/60Hz Output: DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	3W(Max)
Operation Temperature	32 - 104°F / 0 - 40°C
Storage temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

5. Operation Controls and Functions



1. HDMI In: HDMI signal input port
2. DC-5V: 5V-1A power in
3. HDMI Out: HDMI signal output port
4. Service: Firmware update port
5. Scaler: scaling up/down between 4K and 1080p/pass through
6. 4K In: 4K HDMI signal input blue LED indicator
7. 4K Out: 4K HDMI signal output blue LED indicator
8. 1080p in: 1080p HDMI signal input blue LED indicator
9. 1080p Out: 1080p HDMI signal output blue LED indicator
10. Detect the signal input blue LED indicator
11. Power input red LED indicator

6. Connection Diagram



7. 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.

8. 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.

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.

For complete warranty information, please visit BZBGear.com/warranty or scan the QR code below.



*Terms and conditions apply. Registration is required.