BZB GEAR®
Solutions to Amplify Your World™

BG-EXHKVM-70C

4K 18Gbps UHD HDMI/USB KVM Extender up to 230ft with Bi-directional IR & Audio Extraction

User Manual

TABLE OF CONTENTS

Statement	**4**
Safety Precaution	**4**
Introduction	**5**
Features	**5**
Packing List	**5**
Technical Specifications	**6**
Operation Controls and Functions	**7**
Installation Procedures	**8**
Application Example	**9**
Tech Support	**10**
Limited Product Warranty Terms	**10**
Mission Statement	**10**
Copyright	**10**

Statement

Please read these instructions carefully before connecting, operating, or configuring this product. Please save this manual for future reference.

Safety Precaution

- To prevent damaging this product, avoid heavy pressure, strong vibration, or immersion during transportation, storage, and installation.
- The housing of this product is made of organic materials. Do not expose to any liquid, gas, or solids which may corrode the shell.
- Do not expose the product to rain or moisture.
- Unplug this device during lightning storms
- Clean only with a soft dry microfiber cloth.
- To prevent the risk of electric shock, do not open the case. Installation and maintenance should only be carried out by qualified technicians.
- Do not use the product beyond the specified temperature, humidity, or power supply specifications.
- This product does not contain parts that can be maintained or repaired by users. Damage caused by dismantling the product without authorization from BZBGEAR is not covered under the warranty policy.
- Installation and use of this product must strictly comply with local electrical safety standards.
- Only use accessories specified by the manufacture
- Product specifications may be subject to technical upgrades without further notice
- Do not mix up HDMI to RJ45 transmitter and RJ45 to HDMI receiver before installation.
- Do not hot plug when it is working.

Introduction

The BG-EXHKVM-70C is an HDMI extender that includes a transmitter unit and a receiver unit. It allows HDMI signals to be transmitted up to 230ft (70m) at 4K resolutions using a CAT6/6A/7 network cable. It is perfect for outdoor advertising, video clips, monitoring systems, home entertainment, conferences, and more.

Features

- Zero latency.
- 4K@60Hz HDMI signal can be transmitted 70 meters through a CAT6/6A/7 network cable.
- The receiver can extract the digital audio from the transmitter through the S/PDIF port.
- Audio formats (Dolby True HD 7.1CH, Dolby Digital 5.1CH)
- HDR (YUV 4:4:4), EDID passback.
- Transmitter supports one HDMI loop-out.
- Supports KVM functionality (Note: USB ports on receiver designed for use with mouse and keyboard applications only).
- Lighting protection, surge protection, ESD protection.

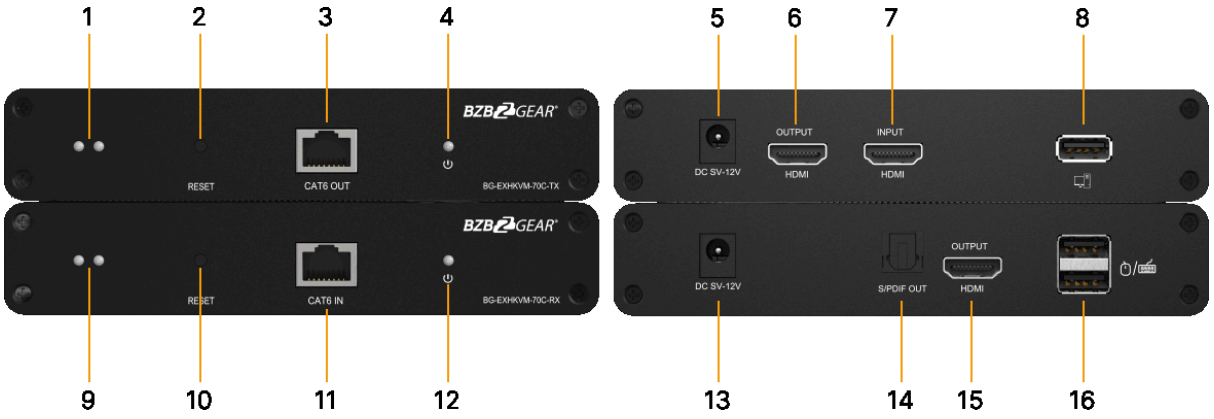
Packing List

- 1 x HDMI Extender Transmitter
- 1 x HDMI Extender Receiver
- 1 x User Manual
- 1 x USB cable
- 2 x 5V2A DC Power Supply
- 8 x Mounting brackets
- 18 x Screws
- 1x User Manual
- 1x Quick Start Guide

Technical Specifications

Technical	**Transmitter**	**Receiver**
HDMI compliance	HDMI 2.0, compatible HDMI1.4	
HDCP compliance	HDCP2.2, compatible HDCP1.4	
Transmission medium	CAT6/CAT6A/CAT7	
Transmission distance	≤70 meters	
Video bandwidth	18Gbps	
Video support	1280x960, 1280x800, 1280x768, 1680x1050, 1360x768, 1366x768, 1600x900, 1024x768, 800x600, 480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 3840x2160@24/25/30/50/60Hz, 4096x2160@24/25Hz	
Audio formats	LPCM/DTS-HD/DTS-Audio/Dolby Digital 5.1CH	
HDR10(YUV4:4:4)	support	
HDMI Loop-out	support	
S/PDIF out	support	
EDID through	support	
KVM function	support	
Input TMDS signal	0.7~1.2Vp-p	
Input DDC signal	5Vp-p	
Input	HDMI IN x1, DC2.1 x1, USB-A x1	DC2.1 x1, RJ45 x1, USB-A x2
Output	HDMI OUT x1, RJ45 x1	HDMI OUT x1, S/PDIF OUT x1
HDMI connector	Type A 19 Pins,Female	
Network cable standard	CAT6/CAT6A/CAT7, follow IEEE-5688 standard	
Mechanical	**Transmitter**	**Receiver**
Material	Aluminum alloy material+crystal panel	
Dimensions (LxWxH)	150.0(L) x 107.0(W) x 28.4(H)mm	
Net weight	0.57lbs [260g]	0.57lbs [260g]
Power supply	5V/2A	5V/2A
Power consumption	4W	4W
Operation temperature	-4 ~ 140 deg;F / -20 ~ 60°C	
Storage temperature	-22 ~ 158 deg;F /-30 ~ 70°C	
Relative humidity	0～90%(no condensation)	

Operation Controls and Functions



Transmitter Panel

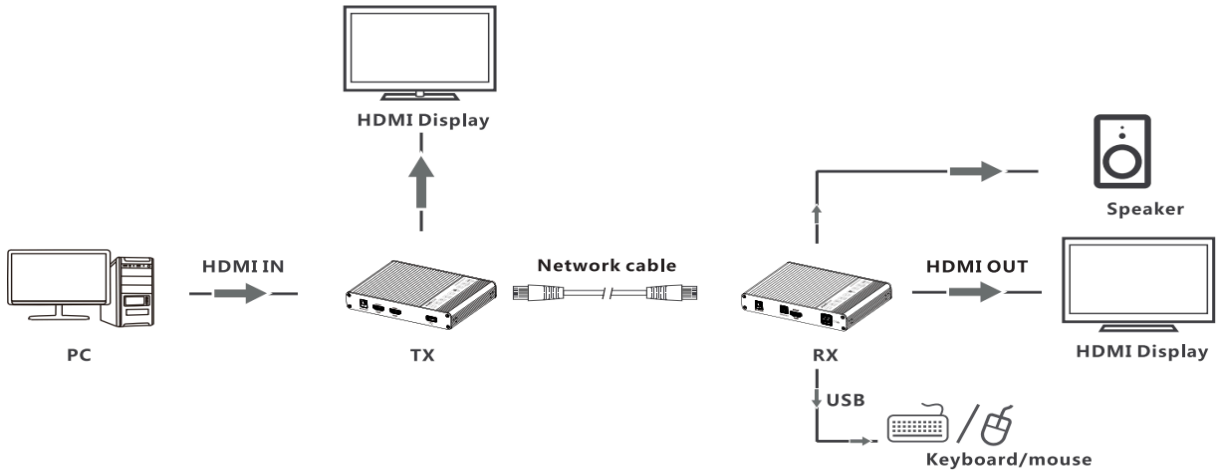
1. **KVM Light**: If connected to a computer, the indicator light is on.
    - If there is no signal transmission, the indicator light is off.
    - If there is a signal transmission, the indicator light flashes.
2. **Reset button**: Press to restart the device.
3. **RJ45 signal output**: Connect with network cable.
4. **Power signal indicator**: When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue.
5. **DCSV-12V input**: Connect with DCSV-12V power adapter.
6. **HDMI output**: Connect with an HDMI display device.
7. **HDMI input**: Connect with the source device.
8. **USB-A port**: Connect with the computer.

Receiver Panel

9. **KVM Light:** If a mouse/keyboard is connected to the USB port, the indicator light will illuminate.
10. **Reset button:** Press to restart the device.
11. **RJ45 signal input:** Connect with network cable.
12. **Power signal indicator:** When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue.
13. **DCSV-12V input:** Connect with DCSV-12V power adapter.
14. **S/PDIF out**: Output digital audio signal.
15. **HDMI output:** Connect with an HDMI display device.
16. **USB-A port:** Connect with keyboard and mouse.

Installation Procedures

1. **Connection**
   one to one:



2. **Connection instruction**

   1) Connect the source device to the HDMI in port of the transmitter with an HDMI cable and connect the HDMI output port of the receiver to the display device with another HDMI cable.

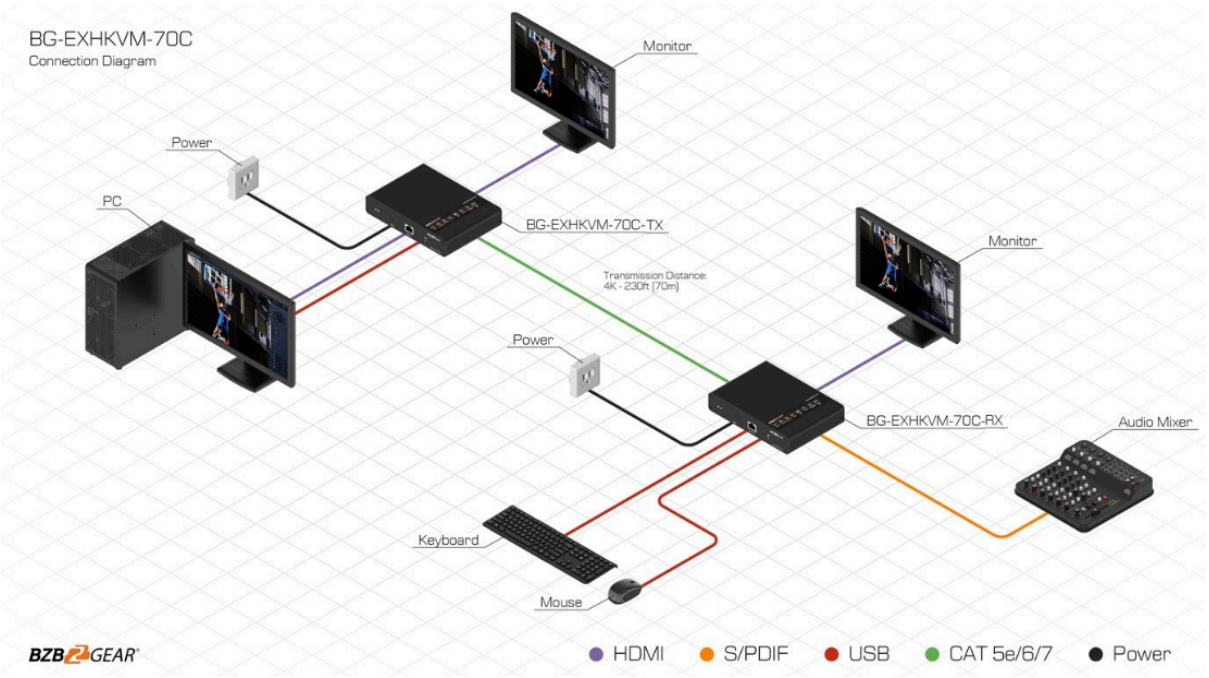
   2) Connect the CAT output port of the transmitter and the CAT input port of the receiver via a network cable (CAT6/CAT6A/CAT7).

   3) If using HDMI loopout, connect the display device to the HDMI output port of the transmitter.

   4) Plug the power supply into the device to get started.

[**NOTE**]: It is recommended to use a cable length of 2~70m. If the cable is too short, there may be no display output because the signal is too strong. If the cable is too long, the output may be poor quality.

Application Example



Tech Support

Have technical questions? We may have answered them already!

Please visit BZBGEAR's support page (bzbgear.com/support) for helpful information and tips regarding our products. Here you will find our Knowledge Base (bzbgear.com/knowledge-base) with detailed tutorials, quick start guides, and step-by-step troubleshooting instructions. Or explore our YouTube channel, BZB TV (youtube.com/c/BZBTVchannel), for help setting up, configuring, and other helpful how-to videos about our gear.

Need more in-depth support? Connect with one of our technical specialists directly:

Phone	**Email**	**Live Chat**
1.888.499.9906	support@bzbgear.com	bzbgear.com

Limited Product Warranty Terms

Pro Line: 5-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Essential Line: 3-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Cables: Lifetime Limited Product Warranty.

For complete warranty information, please visit bzbgear.com/warranty.

For questions, please call 1.888.499.9906 or email support@bzbgear.com.

Mission Statement

BZBGEAR is a breakthrough manufacturer of high-quality, innovative audiovisual equipment ranging from AVoIP, professional broadcasting, conferencing, home theater, to live streaming solutions. We pride ourselves on unparalleled customer support and services. Our team offers system design consultation, and highly reviewed technical support for all the products in our catalog. BZBGEAR delivers quality products designed with users in mind.

Copyright

All the contents in this manual and its copyright are owned by BZBGEAR. No one is allowed to imitate, copy, or translate this manual without BZBGEAR's permission. This manual contains no guarantee, standpoint expression or other implies in any form. Product specification and information in this manual is for reference only and subject to change without notice.

All rights reserved. No reproducing is allowed without acknowledgement.