

# BG-STREAM-D

IP/UVC to HDMI 2.0 Stream Decoder

## User Manual







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## Statement

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

## Safety Precaution

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- 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.
- 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.



## Introduction

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The BG-STREAM-D IP/UVC to HDMI 2.0 is a cutting-edge video processing unit that supports various video and audio formats, offering seamless connectivity via RJ45 and USB 3.0 inputs and delivering output through HDMI 2.0. Capable of handling high-resolution video up to 4096x2160p at 60/50fps, it is ideal for professional AV setups, live streaming, and broadcasting. This device supports various streaming protocols, including RTSP, RTMP, HLS, TS, SRT, NDI HX, and Dante AV-H, ensuring compatibility with numerous streaming platforms. The integrated web UI simplifies system configuration, while features like hardware compression, real-time recording, and firmware upgradability cater to modern video production needs. Its compact design (103.8mm x 71.2mm x 26mm) allows easy integration into existing AV infrastructures.

## Features

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- Versatile Connection Options: Supports IP, USB-A 3.0, and HDMI 2.0 connections
- High-Quality Video Processing: Capable of resolutions up to 4K@60Hz with downscaling ability
- Comprehensive Audio Support: Utilizes AAC-LC codec with a configurable bit rate range from 32Kbps to 384Kbps
- Advanced Network Capabilities: Includes DHCP support and Power over Ethernet (PoE) functionality
- Extensive Protocol Support: Covers RTSP over UDP/TCP/Multicast/HTTP, RTMP, TS over IP, HLS, NDI, and Dante AV-H
- User-Friendly Interface: Features an accessible web UI for easy system configuration
- UVC Device Support: Ensures compatibility with a wide range of devices.
- Real-Time Mode Recording: Enables immediate recording functionality.
- Secure and Durable Design: Includes a secure locking DC jack power input.
- Efficient Hardware Compression: Supports H.265/H.264/AVC encoding.
- Firmware Upgradeable: Allows for easy updates to enhance functionality.

## Packing List

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- 1x BG-STREAM-D
- 1x 12V DC Adapter



## Specifications

| Technical Specifications |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Max FPS                  | 4096×2160p@60/50fps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Recording Modes          | Hardware Compression, Real-Time Mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Input Interfaces         | Video <ul style="list-style-type: none"> <li>1×RJ45 ( RTSP/RTMP/HLS/TS/SRT/NDI HX/Dante AV-H Support )</li> <li>1×USB3.0 Type A (UVC) input</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                |
| Output Interfaces        | Video <ul style="list-style-type: none"> <li>1×HDMI2.0</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Video Support            | H.265/H.264/AVC, Baseline/Main/High Profile<br>Supported HDMI output Resolutions <ul style="list-style-type: none"> <li>4096×2160p@60/50fps</li> <li>4096×2160p@30/25/24fps</li> <li>3840×2160p@60/50fps</li> <li>3840×2160p@30/25/24fps</li> <li>1920×1080p@60/50fps</li> <li>1920×1080p@30/25/24fps</li> <li>1920×1080i@60/50fps</li> <li>1280×720p@60/50fps</li> <li>1280×1024p@60fps</li> <li>1280×960p@60fps</li> <li>1024×768p@60fps</li> <li>800×600p@60fps</li> <li>640×480p@60fps</li> <li>720×480p@60fps</li> <li>720×576p@50fps</li> </ul> |
| Audio Support            | <ul style="list-style-type: none"> <li>AAC-LC</li> <li>Configurable bit rate range from 32Kbps to 384Kbps</li> <li>Sample rate: 48KHz, 16bit</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                               |
| Network Features         | <ul style="list-style-type: none"> <li>1×RJ45 for 10/100/1000Mbps Ethernet</li> <li>DHCP Client</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Streaming Protocols      | <ul style="list-style-type: none"> <li>NDI Support ( Separate License with NDI Required )</li> <li>Dante AV-H ( Separate License with Dante AV-H Required )</li> <li>RTSP over UDP/TCP/Multicast/HTTP</li> <li>RTMP ( Publish )</li> <li>TS over IP</li> <li>HLS</li> </ul>                                                                                                                                                                                                                                                                           |
| Power Supply             | <ul style="list-style-type: none"> <li>12V DC input</li> <li>POE input</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Unit Dimensions          | <ul style="list-style-type: none"> <li>103.8mm×71.2mm×26mm</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |



## Operation Controls and Functions

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### Front and Rear Panel

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1. Factory Restore Button: Use a pin to press and hold for 3 seconds
2. UVC In: UVC source input
3. HDMI Out: HDMI 2.0 output for viewing or monitoring
4. Stream/PoE In: PoE enabled ethernet port
5. DC Power In: 12V DC power supply input



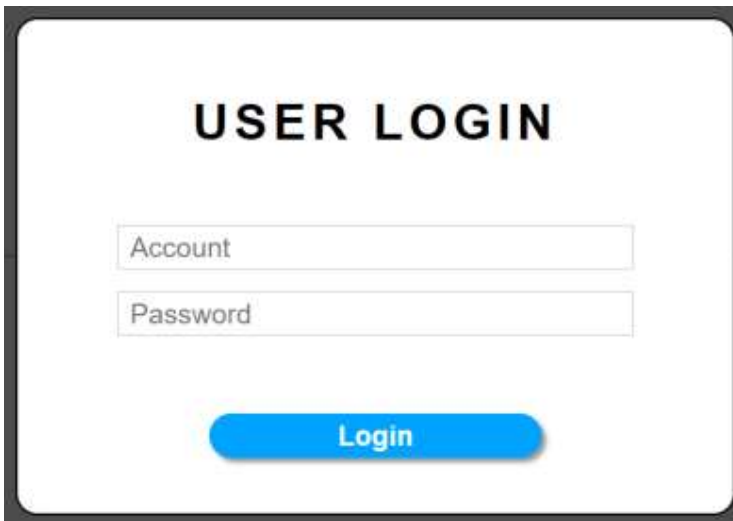
## Web UI

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To access the BG-STREAM-D Web UI, open an IP Finder tool and search for the device's IP address. Identify the correct IP address by matching it with the device's MAC address, then use it to open the control interface.

The Web UI is an intuitive interface that allows users to easily control the BG-STREAM-D from a standard PC or portable devices (e.g., Android, iPhone, iPad, etc.), providing a more convenient and flexible control experience.

### ***Access and Login Instructions***



Username: admin  
Password: 0000



## Connection Diagram



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## Troubleshooting

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| Problems                       | Causes                                                                                                                                         | Solutions                                                                                                                                                                                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No Power / All LED off         | Power supply not connected, connected fully, or wrong power supply.                                                                            | Check if the power supply is connected correctly and the output voltage value is within recommended specifications.                                                                                                                                                      |
| No sound or sound issues       | The HDMI connection is faulty, the audio format is not supported by the displays, or the source player is set to another port for audio output | Check if the HDMI cables are connected correctly.<br>Check if the audio format is supported by the display and that a user has not changed the supported audio format on the player's audio output. Ensure output settings from the HDMI source device as set correctly. |
| No picture or picture flickers | The HDMI cable may be faulty or the category cable quality is faulty.                                                                          | Check if the HDMI and category cable connections are correct and undamaged.<br>Change to another good working HDMI cable or category cable (CAT6 or better cable is recommended).                                                                                        |



## Tech Support

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Have technical questions? We may have answered them already!

Please visit BZBGear's support page ([bzbgear.com/support](https://bzbgear.com/support)) for helpful information and tips regarding our products. Here you will find our Knowledge Base ([bzbgear.com/knowledge-base](https://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](https://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:

| <b>Phone</b>   | <b>Email</b>                                                 | <b>Live Chat</b>                              |
|----------------|--------------------------------------------------------------|-----------------------------------------------|
| 1.888.499.9906 | <a href="mailto:support@bzbgear.com">support@bzbgear.com</a> | <a href="https://bzbgear.com">bzbgear.com</a> |

## Limited Product Warranty Terms

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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](https://bzbgear.com/warranty).

For questions, please call 1.888.499.9906 or email [support@bzbgear.com](mailto:support@bzbgear.com).



## Mission Statement

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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

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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.

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