

# BG-H3GS

Mini HDMI to 3G-SDI Converter

## User Manual







## TABLE OF CONTENTS

Statement	4
Safety Precaution	4
Introduction	5
Features	5
Packing List	5
Specifications	6
Connection and Operation	7
Application Example	7
Tech Support	8
Limited Product Warranty Terms	8
Mission Statement	8
Copyright	8



## 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.
- 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

---

The BG-H3GS allows HDMI signals to be shown on SDI displays while ensuring a high bit rate of 2.970 Gbit/s to provide a high-resolution signal without any loss. For professionals this means that it is now easier to convert your high-definition HDMI signal with audio to SDI for long distance transmissions and display your work on SDI displays.

The BG-H3GS supports multiple input resolutions such as 480i, 720p, 1080i, and up to 1080p60. A 1080p60 HDMI signal will convert to 3G-SDI for transmission up to 100m (328ft). For even longer range transmissions 480i will convert to SD-SDI and can be transmitted up to 300m (984ft).

## Features

---

- Converts an HDMI source to be shown on an SDI display.
- SDI interface operates at bitrates of 2.970 Gbit/s, 2.970/1.001 Gbit/s, 1.485 Gbit/s, 1.485/1.001 Gbit/s and 270 Mb/s.
- HDMI Input Resolutions: 480i@59.94, 576i, 720p@50/59.94/60, 1080i@50/59.94/60, 1080p@23.98/24/25/29.97/30/50/59.94/60.
- Converts HDMI signal to SDI: 480i/576i to SD-SDI (SMPTE 259M-C, at bitrates of 270 Mbit/s 720p/1080i to HD-SDI (SMPTE 292M, at bitrates of 1.485 Gbit/s or 1.485/1.001 Gbit/s) 1080p to 3G-SDI (SMPTE 424M/425M-AB, at bitrates of 2.970 Gbit/s and 2.970/1.001 Gbit/s)
- Supports SDI output distance up to 100m/328ft (3G-SDI), 200m/656ft (HD-SDI), or 300m/984ft (SD-SDI)

## Packing List

---

- 1 x HDMI to SDI Converter
- 1 x 5V1A DC Power Supply Adaptor
- 1 x User Manual

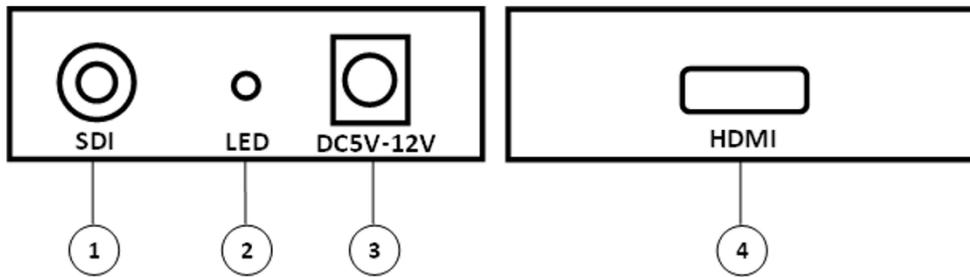


## Specifications

Input Port	1 x HDMI
Output Port	1 x BNC (SDI/HD-SDI/3G-SDI)
SDI Transmission Rates	2.970 Gbit/s and 2.970/1.001 Gbit/s
Input and Output Resolutions	480i, 576i, 720p@50/59.94,60,1080i @50/59.94/60 1080p@23.97/24/25/29.97/30/50/59.94/60
Power Supply	DC 5V -12V
ESD Protection Human Body Model	±8kV (air-gap discharge) ±4kV (contact discharge)
Dimensions	80mm x 41mm x 25 mm (3.2 in x 1.6 in x 0.9 in)
Weight	150g (5.3 oz)
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)
Power Consumption	5W

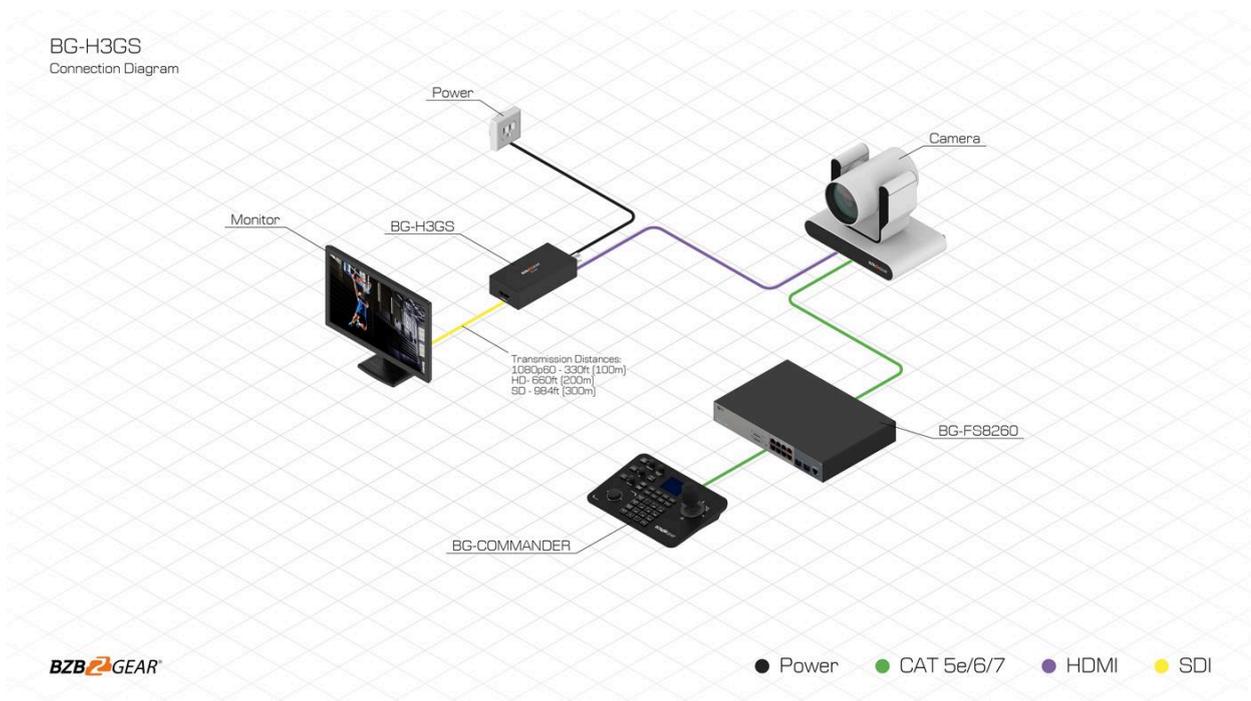


## Connection and Operation



1. **SDI OUT:** Connect to SDI display with a coaxial cable.
2. **Power LED:** This red LED illuminates when the device is connected to the power supply.
3. **DC IN:** Port for the 5V-12V DC power supply.
4. **HDMI IN:** Connect to the HDMI source with an HDMI cable.

## Application Example





## Tech Support

---

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	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](https://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.