

BENESTON 3G-SDI Distribution Amplifier User's Manual

1. Product Overview

SDI Distribution Amplifier is a professional-grade device that converts high resolution HD/3G-SDI video signals and distortion-free mode distributed into multiple sets of signals without delay.

This product can be widely used in broadcasting, video production, medical imaging, live stage shooting, and environments that require simultaneous transmission of a single image signal source to multiple display devices.

2. Features

Full digital uncompressed mode: ensures that the image signal maintains high definition during the distribution process, and uncompressed processing avoids signal loss.

No software settings required: it supports hot-swappable and plug-and-play functions, simplifying the operation process.

Multiple output modes: 1 input / 2 outputs, 1 input / 3 outputs, 1 input / 4 outputs and other models. (Suitable for different needs.)

Support high speed: up to 2.97Gbps 3G-SDI video transmission rate, downward compatible HD-SDI and 3G-SDI signals.

Automatic equalization and retiming: built-in automatic cable equalizer and clock retiming functions ensure signal transmission quality.

Indicator lights: power status, image connection status, input and output..etc., to facilitate user installation and commissioning.

Designed to work for a long time: using industrial-grade chips, resistant to high and low temperatures, and adaptable to various working environments.

Instantaneous high-voltage protection design: professional industrial chip design effectively prevents electromagnetic wave radiation interference and instantaneous high-voltage impact, ensuring stable communication quality.

3. Technical Specifications

- Input signal: SD-SDI, HD-SDI, 3G-SDI
- Output signal: SD-SDI, HD-SDI, 3G-SDI
- Connection terminal: BNC terminal, the distribution quantity is optional (2, 3, 4, 8 or multiple channels can be customized)
- SD-SDI (270Mbps), HD-SDI (1.485Gbps), 3G-SDI (2.97Gbps)
- Operating temperature: -10°C ~ 55°C
- Working humidity: 0% ~ 90%
- Power Supply: DC12V
- Power consumption: 5W

4. Connection Method

SDI splitters are connected through BNC terminals.

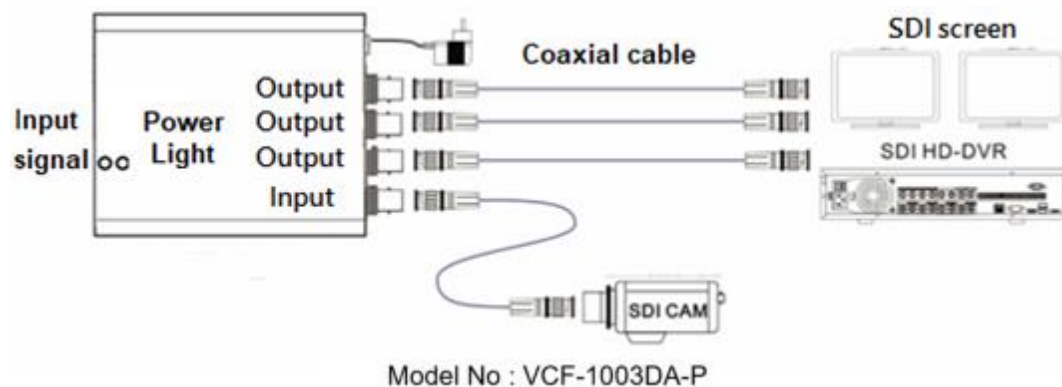
Common modes include:

SDI output port on one end to the SDI input port on the other end to transmit image signals from one device to the other.

Splitter connection:

A set of SDI signals is distributed into multiple sets of video signals through a splitter, and then transmitted through multiple SDI output ports to different devices.

Application:



5. Use & Maintenance

Installation and commissioning:

Choose the appropriate equipment model according to actual needs.

Use coaxial cables to correctly connect the input and output ports of the splitter to the corresponding devices.

Enter the correct power supply; check the indicator light status of the distributor, and confirm that the device is operating normally.

Routine maintenance:

regularly check whether the cables and connecting terminals are secure to avoid loosening or damage.

Clean the dust on the surface of the equipment and keep the equipment clean.

Check the equipment installation environment to ensure good ventilation and avoid high temperature and humidity.

Troubleshooting:

If the device fails to work properly, first check whether the power supply is delivering power correctly and whether the indicator light status is normal.

Check whether the cable connection is correct and whether there is any disconnection or short circuit.

If the problem is still not resolved, please contact us.

6. Precautions

Do not unplug or plug in cables while the equipment is in operation to avoid damaging the equipment or causing signal interruption.

Do not use the device in harsh environments such as humidity, high temperatures, or high magnetic fields.

Please do not disassemble or modify the internal structure of the device without permission to avoid affecting the performance and safety of the device.

7. Contact Us

If you have any questions or need technical support, please call the company's service hotline or the dealer's hotline.

Specific product functions and performance parameters may vary depending on the actual product model and batch.

This manual is for reference only.
Please refer to the actual product.

Video Access Technology Corp.

4/F-11, No.6, Lane 609, Sec. 5, Chongxin Rd.,
Sanchong Dist., New Taipei City, Taiwan.
(Tong Cheng Industrial Zone)

Tel: 886 2 2999 8383

Fax: 886 2 2999 0303

www.videoaccess.com