



# **GCB01HD**

HD Ground Loop Isolator

User Manual

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# 1. Introduction

The GCB01HD is a passive high efficient and reliable ground loop isolator for HDCVI / HDTV / AHD / Analogue Video Signal over Coaxial Cable. It's magnetic isolation technology adoption can effectively solve the interference issues caused by different ground potential during the signal transmission, which improves the video anti-interference capability and effectively eliminate tearing and scrolling pictures. The devices embedded lightning protection system improves the stability.

## 2. Key Features

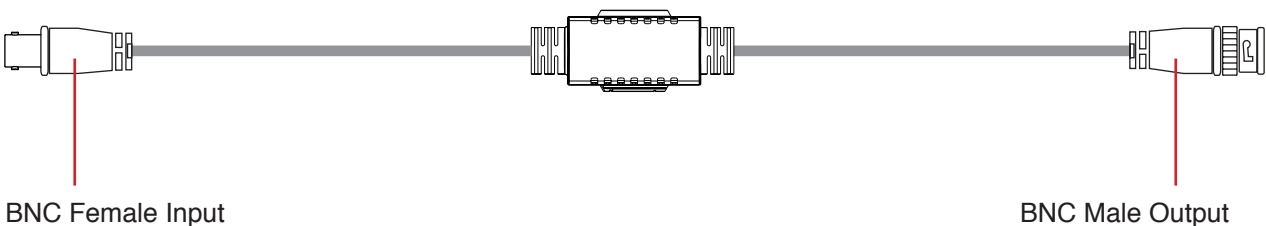
- Passive, No Power Required
- Eliminate Video Distortion caused by Ground Loops Circuit
- Eliminate issues such as Image Tearing, Cross-Talk, Rolling etc.
- Fully Compatible with HDCVI, HDTV, AHD, Analogue Video Signals
- Built-In 800v Insulated Voltage
- Excellent Anti-interference Capability, Superior Lighting-Protection, ESD and EFT Capability
- Support Unibody, with Small Volume

## 2. Technical Specification

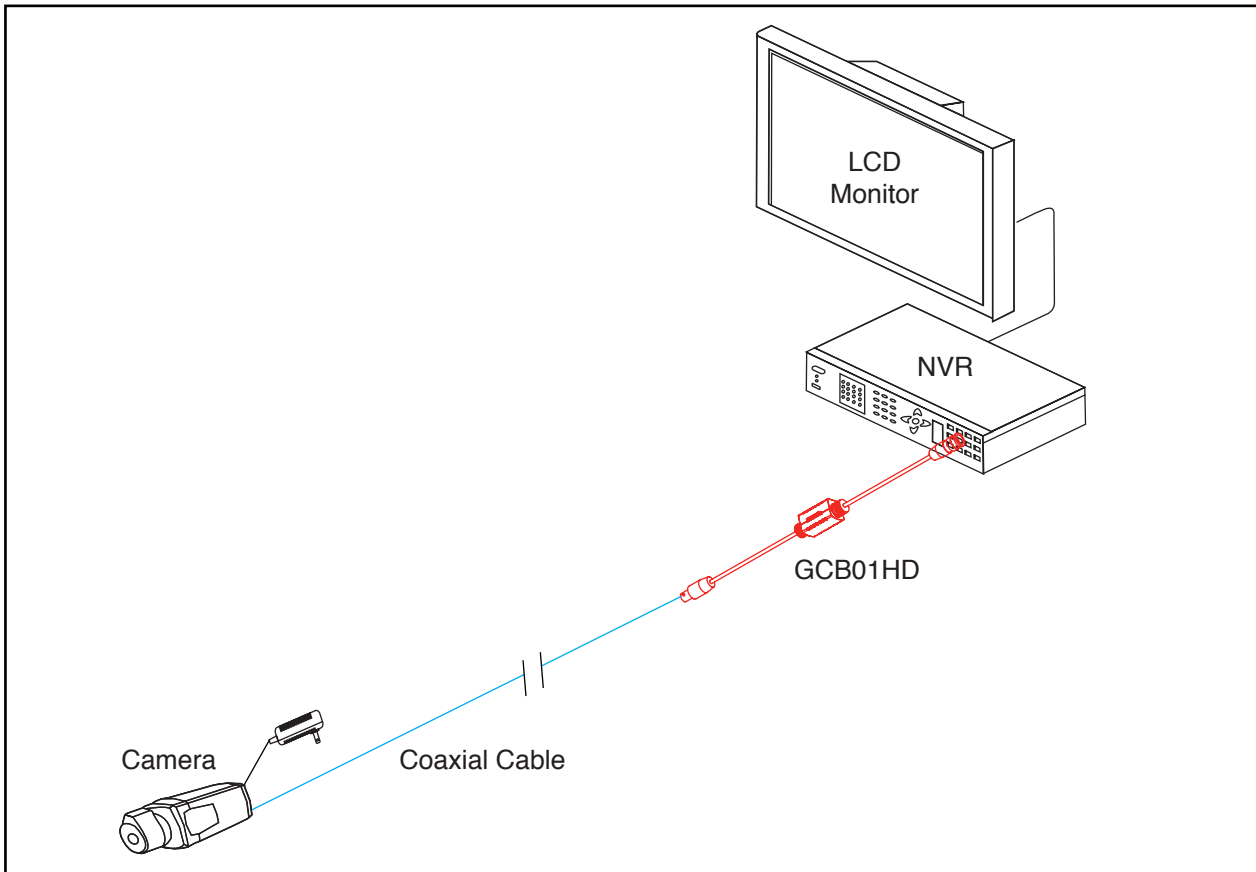
Model Number	GCB01HD
Insertion Loss	0.5dB
Frequency Response	5Hz-70MHz
Input Impedance	75Ω
Output Impedance	75Ω
Isolation Voltage	800V (Minimum)
Isolation Resistance	100M Ω
Surge Protection	Level3 Per IEC61000-4-5
ESD Protection	Contact Discharge: 6KV, Air Discharge: 8KV, Per IEC61000-4-2
Operation Temperature	-10°C ~ 55°C
Storage Temperature	-40°C ~ 85°C
Humidity	0~95% (Non-Condensing)
Dimensions (L x W x H)	41 x 24.5 x 21.6 mm
Weight	51g

\*Design and Specifications are subject to change without notice.

## 3. Board Diagram



## 4. Application Diagram



### NOTE

Please use RG59 or above Coaxial Cable or CAT5e/6 Cable to reach the longest transmission distance.

## 5. Installation Steps

1. Turn off the power supply of all the related devices before the installation to prevent damage to the product.
2. Check if the coaxial cable and other transmission lines are occupied by other devices.
3. Connect the Male BNC of the device to the NVR.
4. Connect the Female BNC of the device to the camera with coaxial cable.
5. Check if the device is working and that the installation is correct. Make sure all connections are reliable.
6. Power on the system.
7. Make sure the system can work regularly.

## 6. Troubleshooting

Please follow below if the device doesn't work:

- Please make sure you have followed the instruction to install the device.
- The transmission distance depends on the signal source and cable quality, please do not exceed the maximum transmission distance.
- Please replace a failure device with a proper one to check if the device is damaged.
- If the problem still exists, please contact the dealer.



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