

Quick Start Guide

GV-Compact DVR V2



Thank you for purchasing GV-Compact DVR. This guide is designed to assist the new user in getting immediate results from the GV-Compact DVR. For advanced information on how to use the GV-Compact DVR, please refer to *GV-Compact DVR User's Manual* on Software DVD.

1 Introduction

Welcome to the *GV-Compact DVR V2 Quick Start Guide*. In the following sections, you will learn about the basic installations and configurations of the GV-Compact DVR V2 (GV-LX4C2 / GV-LX4C2V). For a detailed user's manual, see *GV-Compact DVR V2 User's Manual* on the GV-Compact DVR V2 software DVD.

Packing List

Standard Model (GV-LX4C2)

- D-Type Video Cable x 1
- Power Adaptor 12V, 5.0A x 1
- AC Power Cord x 1
- Lock Key x 2
- GV-Compact DVR V2 Remote Control x 1
- GV-Compact DVR V2 Quick Start Guide x 1
- GV-Compact DVR V2 Software DVD x 1
- GV-NVR Quick Start Guide x 1
- GV-NVR Software DVD x 1



- D-Type Audio/TV/Spot Monitor Cable x 1



- 1 to 4 Camera Power Cable x 1



Anti-Vibration Model (GV-LX4C2V)

- Cigarette Lighter Power Adaptor x 1



- GV-Compact DVR V2 Quick Start Guide x 1
- GV-NVR Quick Start Guide x 1

- D-Type Video Cable x 1
- 1 to 4 Camera Power Cable x 1
- D-Type Audio/TV/Spot Monitor Cable x 1
- Lock Key x 2
- GV-Compact DVR V2 Remote Control x 1
- GV-Compact DVR V2 Software DVD x 1
- GV-NVR Software DVD x 1

Anti-Vibration Model of ACC Version (GV-LX4C2V)

- Power Cable x 1



- Shorting Cable



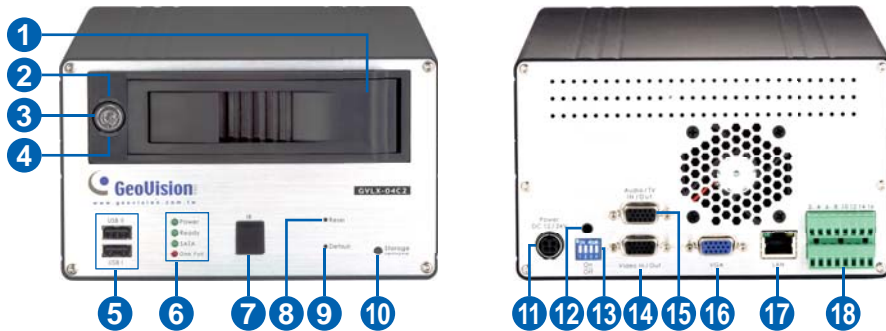
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- GV-NVR Quick Start Guide x 1
- GV-NVR Software DVD x 1

Options

Optional devices can expand your GV-Compact DVR V2's capabilities and versatility. Contact your dealer for more information.

External IR Receiver	The external IR receiver, with a 5-meter cable (16.4 feet), allows long-distance remote control of GV-Compact DVR V2.
GV-GPS 232 Receiver	GV-GPS 232 Receiver, with RS-232 interface, is a Global Position System receiver. It can be applied to vehicle tracking and location verification.
2.5" to 3.5" HDD Converter	The HDD converter allows you to install a 2.5" SATA HDD into GV-Compact DVR V2.
GV-Relay V2	Working with this module, GV-Compact DVR V2 can drive the loads of relay outputs over 5 volts.
WiFi USB Adaptor	The WiFi USB Adaptor is designed to connect the GV IP devices to the wireless network. This product complies with IEEE 802.11 b/g/n (Draft 3.0) standards for wireless networking.
Power Adaptor of DC 12V, 5.0A	The power adaptor is used to power on the Anti-Vibration Model of ACC Version without connecting to the vehicle.

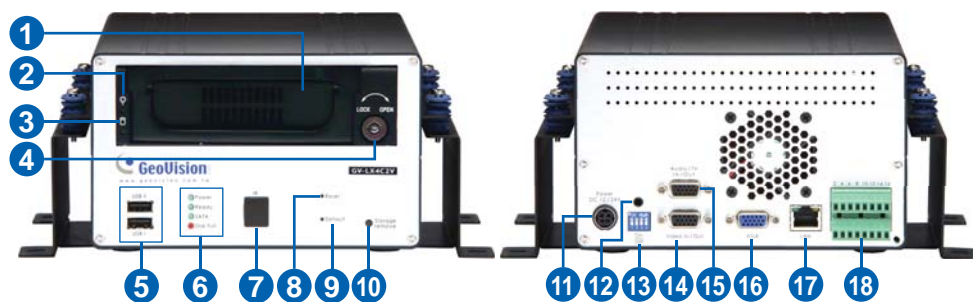
Standard Model (GV-LX4C2)



No.	Name	Description
1	HDD Drive Bay	Installs the SATA hard drive for recording.
2	HDD Power LED	Turns on when the power is supplied.
3	Key Lock	Locks and unlocks the HDD drive bay.
4	HDD Activity LED	Blinks when the HDD is reading or writing data.
5	USB Ports	Connects to the USB storage device, Wireless LAN adaptor and/or mobile Internet device.
6	System LED	<ul style="list-style-type: none"> • Power LED: Turns on when the power is supplied. • Ready LED: Turns on when the unit is ready for use. • SATA LED: Turns on when the HDD is reading or writing data. • Disk Full LED: Turns on when the HDD is full.
7	IR Receiver	Receives data from the infrared remote control.
8	Reset Button	Restarts the unit, and keeps all current configurations.
9	Default Button	Sets all configurations to factory settings. See <i>8 Restoring to Default Settings</i> in the <i>Quick Start Guide</i> .
10	Storage Removal Button	Stops recording and removes the HDD from the system.
11	DC Power Input (12V)	Connects to power supply.
12	External IR Receiver Port	Connects to the optional External IR Receiver.

13	75 Ω	When using the Loop function, turn the switches to OFF positions. The switch number is corresponding to the channel number. The default setting is ON.
14	Video In/Out	Using the supplied D-Type Video Cable for video inputs and outputs. <ul style="list-style-type: none"> • Inputs (4 Blue Connectors/CH1-4): Connects to cameras. • Outputs (4 Black Connectors/CH1-4): Loops out each camera input to monitors.
15	Audio/TV In/Out	Using the supplied D-Type Audio/TV/Spot Monitor Cable for the following applications: <ul style="list-style-type: none"> • TV Output (1 Black Connector/QUAD): Connects to a TV monitor. • Spot Monitor Output (1 Black Connector/MUX): Connects to a spot monitor to display video sequentially from each video input. • Audio Inputs (4 White Connectors/MIC1-4): Connects to microphones. • Audio Output (1 Red Connector/ SPK-OUT): Connects to speakers. Note the audio output only works during playback or when receiving callback audio.
16	VGA Monitor Port	Connects to a PC monitor.
17	LAN Port	Connects to the network.
18	I/O Terminal Block	Connects to input and output devices, PTZ cameras, GPS module and etc.

Anti-Vibration Model (GV-LX4C2V)



Anti-Vibration Model of ACC Version (GV-LX4C2V)



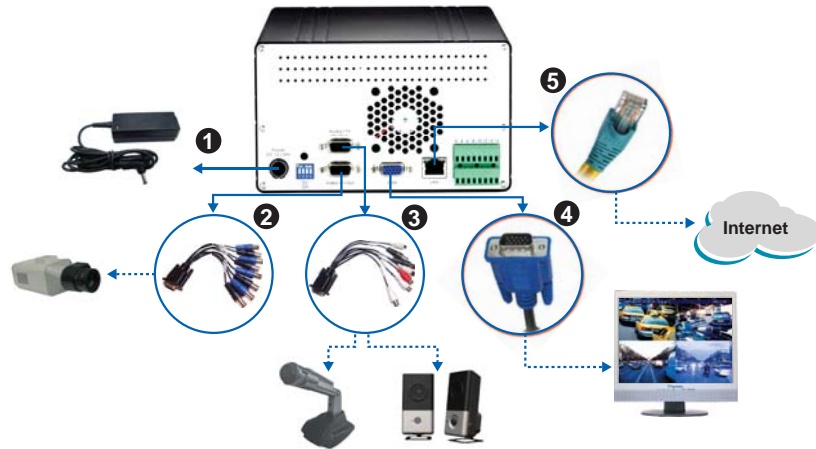
No.	Name	Description
1	HDD Drive Bay	Installs the SATA hard drive for recording.
2	HDD Power LED	Turns on when the power is supplied.
3	HDD Activity LED	Blinks when the HDD is reading or writing data.
4	Key Lock	Locks and unlocks the HDD drive bay.
5	USB Port	The two USB ports can connect the USB storage device, Wireless LAN adaptor and/or mobile Internet device.
6	System LED	<ul style="list-style-type: none"> Power LED: Turns on when the power is supplied. Ready LED: Turns on when the unit is ready for use. SATA LED: Turns on when the HDD is reading or writing data. Disk Full LED: Turns on when the HDD is full.
7	IR Receiver	Receives data from the infrared remote control.

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18	I/O Terminal	<table border="1"> <tbody> <tr> <td>Anti-Vibration Model</td> <td>Connects to input and output devices, PTZ cameras, GPS module and etc.</td> </tr> <tr> <td>Anti-Vibration Model of ACC</td> <td>Connects to input and output devices, PTZ cameras and etc.</td> </tr> </tbody> </table>	Anti-Vibration Model	Connects to input and output devices, PTZ cameras, GPS module and etc.	Anti-Vibration Model of ACC	Connects to input and output devices, PTZ cameras and etc.
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Anti-Vibration Model of ACC	Connects to input and output devices, PTZ cameras and etc.					
19	GPS Port (PS/2 Connector)	Connects to a GPS receiver.				

3 Connecting the GV-Compact DVR V2

Basic Connection

The following instructions describe the basic connection to the GV-Compact DVR V2.



1. Connect power.
 - **Standard Model:** Using the supplied power adaptor, connect to the power.
 - **Anti-Vibration Model:** Using the supplied cigarette lighter power adaptor, connect to the power. See *Powering on Anti-Vibration Model* later in the *Quick Start Guide*.
 - **Anti-Vibration Model of ACC Version:** Using the supplied power cable, connect the white and black wires to the vehicle's power and ground cables respectively. Then connect the vehicle's ACC wire to Pin 16 of the Terminal Block on the unit. See *Connecting ACC Version to the Vehicle* later in the *Quick Start Guide*.
2. Connect to cameras by using the blue connectors of the supplied D-Type Video Cable.
3. Connect to microphones and a speaker by using the supplied D-Type Audio/TV/Spot Monitor Cable. Connect microphones to the four white connectors of the cable, and a speaker to the red connector.

4. Connect video output. There are two options:
 - Using the black connector (QUAD) of the supplied D-Type Audio/TV/Spot Monitor Cable, connect to a **TV monitor**.
 - Using the VGA cable supplied by the monitor manufacturer, connect to a **VGA monitor** (as illustrated in the figure).
5. Use a standard network cable to connect the unit to the network.

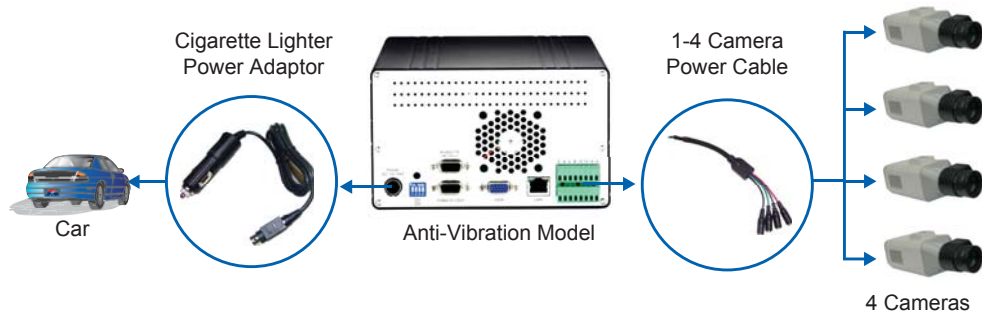
Note: The GV-Compact DVR V2 cannot work with the microphone requiring power from the unit. Use the microphone that has external power supply.

For details on looping video out on monitors and displaying each video sequentially on a spot monitor, see *Connecting Optional Video Output Devices, Chapter 3* in the *Compact DVR V2 User's Manual* on the software DVD.

For details on installing the hard drive, see *Installing Hard Drive, Chapter 3* in the *Compact DVR V2 User's Manual* on the software DVD.

Powering on Anti-Vibration Model

1. Use the supplied **Cigarette Lighter Power Adaptor** to connect the DC power input on the unit and car's cigarette light socket.
2. Optionally, to power on cameras through the vehicle power supply, connect the black wire of the supplied **Camera Power Cable** to pin 10 of the terminal block and the green wire to pin 11.



When the Anti-Vibration model is connected to the vehicle power supply, the unit will automatically start after you turn on the vehicle ignition. Power is supplied to the unit as long as the vehicle ignition is on.

Important:

1. Before you power on the unit, ensure to lock the HDD drive bay. Or the HDD Power LED will not turn on when you power on the unit.
2. If any video is lost after startup, the buzzer will start beeping. To stop beeping, press any button on the Remote Control.
3. When you want to remove the hard disk from the unit, please press the **Storage Removal** button on the unit for five seconds to stop recording first.

Powering on Anti-Vibration Model of ACC Version

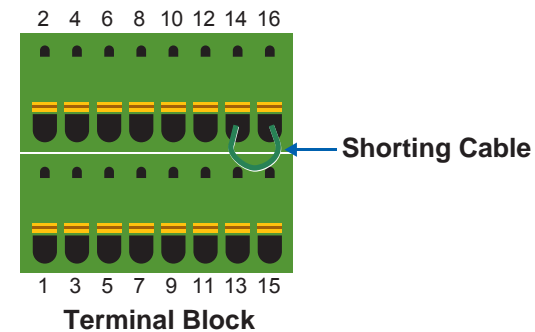
Connecting ACC Version at Other Places

Before connecting the ACC version to a vehicle, you can power on the unit for testing and setup.

Items required:

- Supplied **Shorting Cable**
- Additional **power adaptor** (DC 12V, 5.0A), which can be purchased from GeoVision.

1. Connect the Shorting Cable to **Pin 14** and **Pin 16** of the terminal block on the unit.

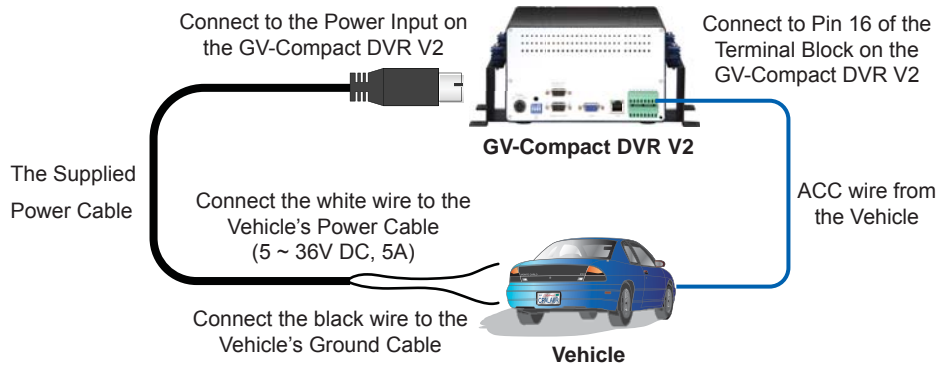


2. Power on the unit by using a power adaptor. The unit automatically starts after powering up for 5 seconds.
3. Set up the settings of the unit, such as storage, images, recording and etc through its OSD or Web interface.
4. Remove the power adaptor. The unit turns off immediately after powering off.

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Connecting ACC Version to the Vehicle

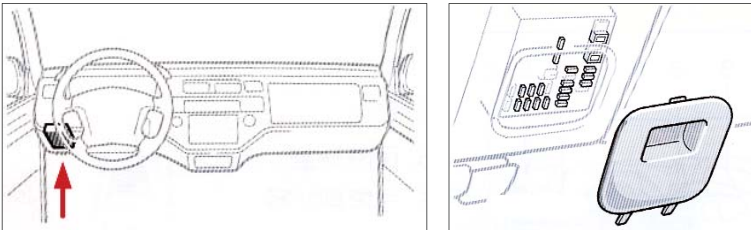
You need to connect the ACC version to ACC wire and power wire on the vehicle.



Connecting the ACC Wire

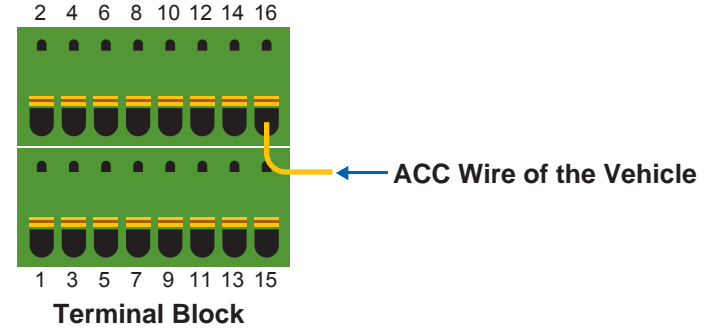
The following instructions are based on installation on a **Toyota Zace Surf**. Since each vehicle differs in design, refer to the owner's manual of your vehicle for details or have the installation done by a properly trained technician.

1. Locate and open the fuse box, which is usually located below the dashboard and to the left of the steering wheel.



2. Look for "cigarette lighter" fuse location, which is indicated in the fuse specification diagram on the fuse box or in the owner's manual.

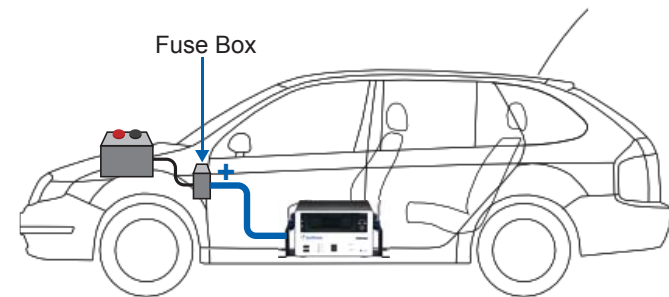
3. Connect the ACC wire from the cigarette lighter fuse to **Pin 16** of the Terminal Block on the unit.



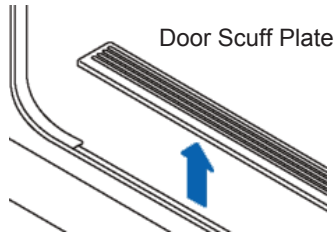
Connecting the Power Wire

Using the fuse specification diagram, locate the power cables from the fuse box. You may need to use a voltmeter to determine positive-voltage and negative-voltage cables.

1. Connect the **white** power wire of the GV-Compact DVR V2 to the **positive-voltage** power cable from the fuse box.

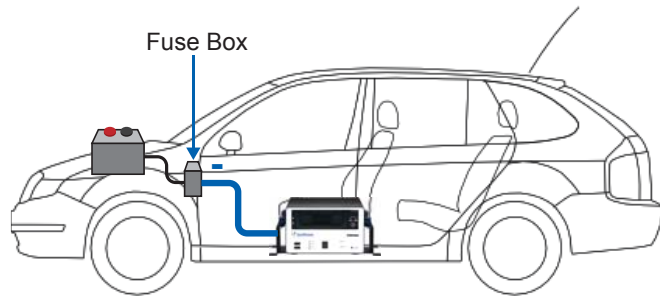


2. Remove the car door scuff plate and wire the power cable along the driver's door toward the back seat.

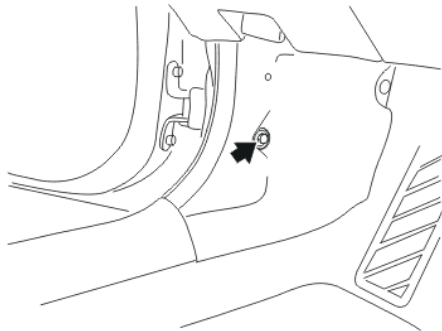


3. Use one of the two methods below to connect the **black** ground wire of the GV-Compact DVR V2.

- **Method 1:** Connect the **black** ground wire to the **negative-voltage** power cable from the fuse box.



- **Method 2:** Connect the black ground wire to the vehicle's chassis so that the wire contacts the bare metal, for example, a metal bolt nearby.



Connect the ground wire to the vehicle's chassis, such as a metal bolt

Depending on the make and model of your vehicle, sometimes only one method will work. When the black ground wire is connected correctly, GV-Compact DVR V2 will automatically shut down 30 seconds after the car's power is off. If GV-Compact DVR V2 does not shut down 30 seconds after the car ignition is off, try to connect the black ground wire using the other method.

4. Turn on the car ignition and the GV-Compact DVR V2 should start automatically within 5 seconds. Turn off the car ignition and the GV-Compact DVR V2 should shut down 30 seconds after the car ignition is off.

When the ACC version is connected to the ACC wire of the vehicle, the unit will automatically start after you power on the vehicle for 5 seconds. Power is supplied to the unit as long as the vehicle ignition is on.

Important:

1. Before you power on the unit, ensure to lock the HDD drive bay. Or the HDD Power LED will not turn on when you power on the unit.
2. If any video is lost after startup, the buzzer will start beeping. To stop beeping, press any button on the Remote Control.
3. To power on cameras through the vehicle power supply, see *Powering on Anti-Vibration Model* earlier in the *Quick Start Guide*.

4 Formatting the Hard Drive

Follow the steps below to format the hard drive before recording.

1. Press the **Menu** button on the Remote Control.
2. Select **ADVANCED**, select **STORAGE SETTINGS**, and select **STORAGE MANAGEMENT**. The model name of the connected hard drive appears.



3. Move the focus to **DETAIL**, select **FORMAT** and press the **▶||** button. You will be prompted to confirm the action.
4. Select **YES** and press the **▶||** button to start formatting. The format progress will appear in the top right of the screen, e.g. "PART 1: 94/100". When the format is complete, the amount of free disk space will be displayed.

Note: The maximum space of one partition is 200 GB.

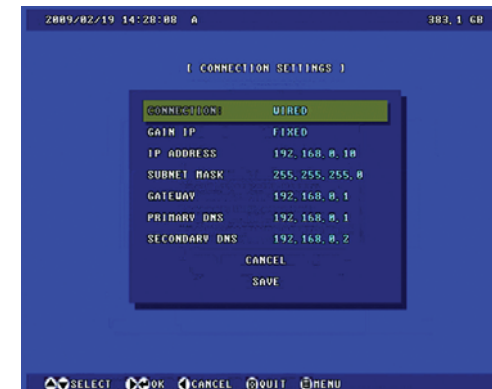
5 Assigning an IP Address

Designed for use on the network, the GV-Compact DVR V2 must be assigned an IP address to make it accessible. There are two ways to assign an IP address: Using OSD Menu and Using Web Interface.

For detail on assigning an IP address using the Web interface of the GV-Compact DVR V2, see *Connecting with a PC, Chapter 5* in *GV-Compact DVR V2 User's Manual* on the software DVD.

To use the OSD menu to assign a static IP:

1. Press the **Menu** button, select **NETWORK** and then select **CONNECTION SETTINGS**. Set a static IP, subnet mask, gateway, primary DNS and secondary DNS (optional), which are provided by your Internet Service Provider (ISP).












2. Using the network cable, connect one end to the LAN port on the rear panel of the unit, and the other end to the Internet. The GV-Compact DVR V2 is now accessible by entering the assigned IP on the browser.
3. To enable the updating of images in Microsoft Internet Explorer, you must set your browser to allow ActiveX Controls and perform a one-time installation of GeoVision ActiveX component onto your computer.

6 Main Screen Overview

Important:

1. If **Dynamic IP Address** and **PPPoE** are enabled, you must check the current IP address from the OSD screen of **Network Status** every time before logging in the unit. Otherwise, you may enable the DDNS function that links a domain name to the unit's changing IP address first.
2. If **Dynamic IP Address** or **PPPoE** is enabled and you cannot access the unit, you may have to reset it to the factory default settings and then perform the network settings again. Refer to section 8 later in the *Quick Start Guide* to see how to restore to factory default settings.
3. To access the Web interface of the GV-Compact DVR V2, it is required to use Microsoft Internet Explorer 7.x or later.



1. **Date and time**: Indicates the current date and time when viewing live video.
2. **A / B / C**: Indicates the type of device defined for the GV-Compact DVR V2.
3. **Monitoring icon** : Appears when the monitoring is activated.
4. **Manual recording icon**  or **Schedule recording icon** : Appears when the recording is started manually or by schedule.
5. **Input icon** : Appears when the input device is installed and activated.
6. **Channel number/Camera name**: Displays the camera number or name.
7. **Hard disk status**: Indicates the amount of free space on the hard disk. When the disk is full, the status will turn to red.
8. **Motion icon** : A red icon indicates movement occurs in the video image. A white icon indicates no movement detected.
9. **Motion detection mode icon** : Appears when the camera is set to the recording mode of motion detection.
10. **Round-the-clock mode icon** : Appears when the camera is set to the recording mode of round-the-clock.
11. **Recording icon** : Appears when the monitoring is started. A red icon  indicates the image of the camera is being recorded.

7 Basic Operations

You can perform the following basic operations using the remote control.



Operations	Steps
Date/Time Adjustment	Press the Menu button, select ADVANCED and then select DATE AND TIME .
Recording Operation	Press the Rec button to start recording and press the Stop button to stop recording.
Search and Playback	Press the Search button to see the search and playback options.
PTZ Control	Press the Channel button to display the PTZ channel and use the directional buttons to control the PTZ movement.

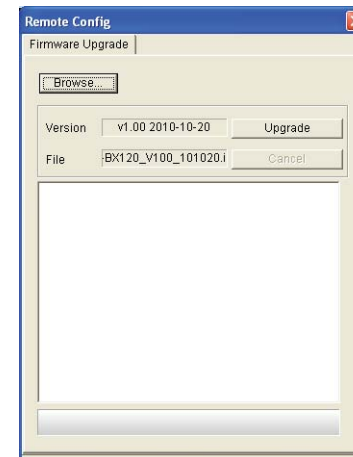
8 Upgrading System Firmware

GeoVision will periodically release the updated firmware on the website. To load the new firmware into the GV-Compact DVR V2, read the important notes below and then follow the instructions.

Important:

1. While the firmware is being updated,
 - A) the power supply must not be interrupted, and
 - B) do not unplug the Ethernet cable if the cable is the source of power supply (Power over Ethernet or PoE supported).
2. Do not turn the power off for 10 minutes after the firmware is updated.
3. If you use the IP Device Utility for firmware upgrade, the computer used to upgrade firmware must be under the same network of the GV-Compact DVR V2.

1. In the Live View window, click the **Show System Menu** button and select **Remote Config**. This dialog box appears.



2. Click the **Browse** button to locate the firmware file (.img) saved at your local computer.
3. Click the **Upgrade** button to start the upgrade.

WARNING: The interruption of power supply during updating causes not only update failures but also damages to the GV-Compact DVR V2. In this case, please contact your sales representative and send your device back to GeoVision for repair.

To restore factory default settings, follow the steps below:

1. Press and then release the **Reset** button immediately.
2. Press and hold the **Default** button until the 3 LEDs (Power, Ready and Disk Full/Fault) are on. This may take up to 30 seconds.
3. Release the **Default** button. The process of loading default values is complete, and the GV-Compact DVR V2 starts rebooting itself with the 3 LEDs turning off.
4. Wait until the Power and Ready LEDs turn on again. After this, all the settings are returned to default values.

Note: Before the **Ready LED** is on again, do not unplug the power cable; otherwise the loading of default values will fail.



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