

# **Quick Start Guide**

## **GV-Compact DVR V3**



## ) Introduction

Welcome to the *GV-Compact DVR V3 Quick Start Guide*. In the following sections, you will learn about the basic installations and configurations of the GV-Compact DVR V3. For a detailed user's manual, see *GV-Compact DVR V3 User's Manual* on the GV-Compact DVR V3 software CD/DVD.

## Models

#### The 4-Channel Unit

Model No.	Model	Description
GV-LX4C3D1	Standard	Equipped with 2 USB ports and 1 hard drive bay.
GV- LX4C3D2	Standard	Equipped with 2 USB ports and 2 hard drive bays.
GV- LX4C3D2W	Standard	Equipped with 2 USB ports, 1 hard drive bay and 1 DVD-RW drive.
GV-LX4C3V	Anti-Vibration ACC	Equipped with vibration absorbers, 2 USB ports and 1 hard drive bay.

#### The 8-Channel Unit

Model No.	Model	Description
GV-LX8CD1	Standard	Equipped with 4 USB ports and 1 hard drive bay.
GV-LX8CD2	Standard	Equipped with 4 USB ports and 2 hard drive bays.
GV-LX8CD2W	Standard	Equipped with 4 USB ports, 1 hard drive bay and 1 DVD-RW drive.
GV-LX8CV1	Anti-Vibration ACC	Equipped with vibration absorbers, 4 USB ports and 1 hard drive bay.
GV-LX8CV2	Anti-Vibration ACC	Equipped with vibration absorbers, 4 USB ports and 2 hard drive bays.

**Note:** For the Anti-vibration ACC models (GV-LX4C3V, GV-LX8CV1 and GV-LX8CV2), it is necessary to use the hard drive especially for notebook, vehicle or surveillance applications, and tightly fasten the unit on the vehicle to prevent vibration and shock hazard.

## **Packing List**

### The 4-Channel Unit

- Power Adaptor 12V, 5.0A x 1 (Standard Model)
- AC Power Cord x 1 (Standard Model)
- D-Type Video Cable x 1



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



• 1 to 4 Camera Power Cable x 1



• Power Cable x 1 (Anti-Vibration Model)



• Shorting Cable x 1 (Anti-Vibration Model)



- Lock Key x 2 (1 Bay), x 4 (2 Bays)
- Round Screws x 6 (1 Bay), x 12 (2 Bays)
- T-Cap Screw x 4 (1 Bay), x 8 (2 Bays)
- Remote Control x 1
- GV-Compact DVR Quick Start Guide x 1
- GV-Compact DVR Software CD/DVD x 1
- GV-NVR Quick Start Guide x 1
- GV-NVR Software CD/DVD x 1

## The 8-Channel Unit

- Power Adaptor 12V, 5.0A x 1 (Standard Model)
- AC Power Cord x 1 (Standard Model)
- 1 to 5 D-Type Video Cable x 1



 6 to 8 D-Type Video/TV/Spot Monitor Cable x 1



• D-Type Audio Cable x 1



• Power Cable x 1 (Anti-Vibration Model)



• Shorting Cable x 1 (Anti-Vibration Model)



• Camera Power Cable x 2



- Lock Key x 2 (1 Bay), x 4 (2 Bays)
- Round Screws x 6 (1 Bay), x 12 (2 Bays)
- T-Cap Screw x 4 (1 Bay), x 8 (2 Bays)
- Remote Control x 1
- GV-Compact DVR Quick Start Guide x 1
- GV-Compact DVR Software CD/DVD x 1
- GV-NVR Quick Start Guide x 1
- GV-NVR Software CD/DVD x 1

## **Options**

Optional devices can expand your GV-Compact DVR V3'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 V3.
GV-GPS 232 Receiver with PS/2 Connector	GV-GPS 232 Receiver is a Global Position System receiver. It can be applied to vehicle tracking and location verification. The device is designed for <b>Anti-Vibration ACC models</b> only.
2.5" to 3.5" HDD Converter	The HDD converter allows you to install a 2.5" SATA HDD into GV-Compact DVR V3.
GV-Relay V2	Working with this module, GV-Compact DVR V3 can expand the voltage load up to 10A 250V AC / 10A 125V AC / 5A 100V DC.
WiFi USB Adaptor	The WiFi USB Adaptor is designed to connect the GV IP devices to the wireless network. It complies with IEEE 802.11 b/g/n (Draft 3.0) standards for wireless networking.
Power Adaptor of DC 12V, 5A	The power adaptor is used to power on the Anti-Vibration ACC model to test the connection. The device is designed for <b>Anti-Vibration ACC models</b> only.



## **The 4-Channel Unit**

#### **Standard Model**





GV-LX4C3D1









GV-LX4C3D2W

#### Anti-Vibration ACC Model





GV-LX4C3V

No	Name	Description	
1	USB Port	Connects the USB storage device, Wireless LAN adaptor and/or mobile Internet device.	
2	System LED	<ul> <li>Power LED: Turns on when the power is supplied.</li> <li>Ready LED: Turns on when the unit is ready for use.</li> <li>HDD LED: Turns on when the HDD is reading or writing data.</li> <li>Disk Full/ Fault LED: Turns on when the HDD is full or read/write error occurs.</li> </ul>	
3	IR Receiver	Receives data from the infrared remote control.	
4	External IR	Connects to an optional External IR receiver.	
5	Reset Button	Restarts the unit, and keeps all current configurations.	
6	Default Button	Sets all configurations to factory settings.	
7	Storage Removal Button	Stops recording and dataches the HDD from the system.	
8	HDD Activity LED	Blinks when the HDD is reading or writing data.	
9	HDD Power LED	Turns on when the power is supplied.	
10	Key Lock	Locks and unlocks the HDD drive bay.	
11	HDD Drive Bay	Installs the SATA hard drive for recording.	
12	DVD-RW Drive	Writes the DVD disc for data backup.	
13	DC Power Input (12V)	Connects to power supply.	

14 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.	
15 Video In/Out	<ul> <li>Inputs (4 Blue Connectors/CH1-4): Connects to cameras.</li> <li>Outputs (4 Black Connectors/CH1-4): Loops out each camera input to monitors.</li> </ul>	
16 Audio/TV In/Out	<ul> <li>TV Output (1 Black Connector/QUAD): Connects to a TV monitor.</li> </ul>	
	<ul> <li>Spot Monitor Output (1 Black Connector/MUX): Connects to a spot monitor to display video sequentially from each video input.</li> </ul>	
	<ul> <li>Audio Inputs (4 White Connectors / CH1-4): Connects to microphones.</li> </ul>	
	<ul> <li>Audio Output for playback (1 Red Connector/ AUD-OUT): Connects to speakers. Note the audio output only works during playback or when receiving callback audio.</li> </ul>	
17 VGA Monitor Port	Connects to a PC monitor.	
18 LAN Port	Connects to the network.	
19 I/O Terminal Block	Connects to input and output devices, PTZ cameras, and etc.	
20 External IR	Connects to an optional External IR receiver.	
21 GPS Port	Connects to a GPS 232 receiver.	

## **The 8-Channel Unit**

#### **Standard Model**





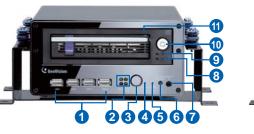
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## GV-LX8CD2



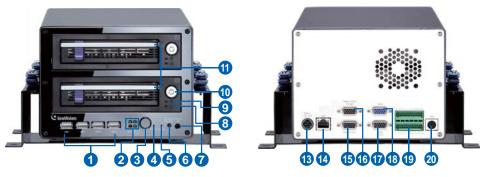


#### **Anti-Vibration ACC Model**





GV-LX8CV1



GV-LX8CV2

No	Name	Description	
1	USB Port	Connects the USB storage device, Wireless LAN adaptor and/or mobile Internet device.	
2	System LED	<ul> <li>Power LED: Turns on when the power is supplied.</li> <li>Ready LED: Turns on when the unit is ready for use.</li> <li>HDD LED: Turns on when the HDD is reading or writing data.</li> <li>Disk Full/ Fault LED: Turns on when the HDD is full or read/write error occurs.</li> </ul>	

GV-LX8CD2W

3	IR Receiver	Receives data from the infrared remote control.	
4	Default Button	Sets all configurations to factory settings.	
5	Reset Button	Restarts the unit, and keeps all current configurations.	
6	Storage Removal Button	Stops recording and dataches the HDD from the system.	
7	External IR	Connects to an optional External IR Receiver.	
8	HDD Activity LED	Blinks when the HDD is reading or writing data.	
9	HDD Power LED	Turns on when the power is supplied.	
10	Key Lock	Locks and unlocks the HDD drive bay.	
11	HDD Drive Bay	Installs the SATA hard drive for recording.	
12	DVD-RW Drive	Writes the DVD disc for data backup.	
13	DC Power Input (12V)	Connects to power supply.	
14	LAN Port	Connects to the network.	
15	Video In/Out	<ul> <li>Inputs (5 Blue Connectors/CH1-5): Connects to cameras.</li> <li>Outputs (5 Black Connectors/CH1-5): Loops out each camera input to monitors.</li> </ul>	
16	Video In/Out & TV-Out	<ul> <li>Inputs (3 Blue Connectors/CH6-8): Connects to cameras.</li> <li>Outputs (3 Black Connectors/CH6-8): Loops out each camera input to monitors.</li> <li>TV Output (1 Black Connector/QUAD): Connects to a TV monitor</li> <li>Spot Monitor Output (1 Black Connector/MUX): Connects to a spot monitor to display video sequentially from each video input.</li> </ul>	
17	Audio In/Out	<ul> <li>Audio Inputs (8 Red Connectors/CH1-8): Connects to microphones.</li> <li>Audio Output for playback (1 White Connector/AUD-OUT): Connects to speakers. Note the audio output only works during playback or when receiving callback audio</li> </ul>	

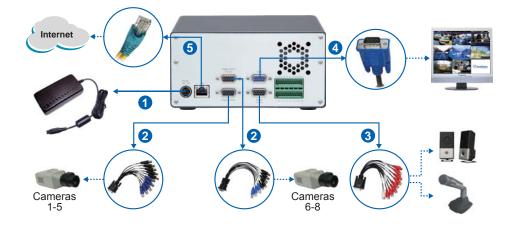
18 VGA Monitor Port	Connects to a PC monitor.
19 I/O Terminal Block	Connects to input and output devices, PTZ cameras, and etc.
20 GPS Port	Connects to a GPS 232 receiver.

#### **Basic Connection for Standard Models**

#### The 4-Channel Unit



#### The 8-Channel Unit



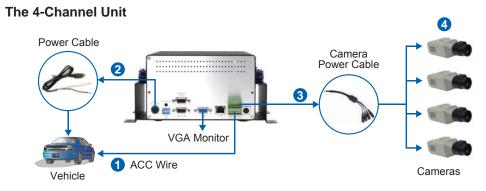
- 1. Connect to power by using the supplied power adaptor.
- 2. Connect to cameras.
  - **4-Ch:** Using the blue connectors of the supplied D-Type Video Cable, connect to cameras.
  - 8-Ch: Using the blue connectors of the supplied 1 to 5 D-Type Video Cable, connect to cameras 1 to 5. Using the blue connectors of the supplied 6 to 8 D-Type Video/TV/Spot Monitor Cable, connect to cameras 6 to 8.
- 3. Connect to microphones and a speaker.
  - **4-Ch:** Using the supplied D-Type Audio/TV/Spot Monitor Cable, connect microphones to the four white connectors and a speaker to the red connector.
  - **8-Ch:** Using the supplied D-Type Audio Cable, connect microphones to the eight red connectors and a speaker to the white connector.
- 4. Connect video output. There are two options:
  - A. **4-Ch:** Using the black connector (QUAD) of the supplied D-Type Audio/TV/Spot Monitor Cable, connect to a **TV monitor**.
    - **8-Ch:** Using the black connector (QUAD) of the supplied 6 to 8 D-Type Video/TV/Spot Monitor Cable, connect to a **TV monitor**.
  - B. Using the VGA cable supplied by the monitor manufacturer, connect to a VGA **monitor** (as illustrated in the figure).
- 5. Connect to the network by using the standard RJ-45 cable.

**Note:** The GV-Compact DVR V3 cannot work with the microphone requiring power from the unit. Use the microphone that has external power supply.

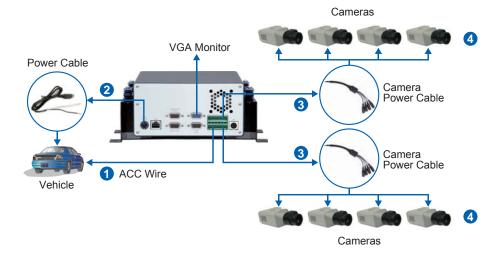
For details on looping video out on monitors and displaying each video sequentially on a spot monitor, see *Connecting Optional Video Output Devices*, *Chapter 3* in the *Compact DVR V3 User's Manual* on the software CD/DVD.

For details on installing the hard drive, see *Installing Hard Drive*, *Chapter 3* in the *Compact DVR V3 User's Manual* on the software CD/DVD.

#### **Basic Connection for Anti-Vibration ACC Models**



The 8-Channel Unit



#### To power on Anti-Vibration ACC Models:

- Connect the ACC wire from the vehicle to Pin 16 (4-Ch) or Pin 24 (8-Ch) on the terminal block. For details see *Connecting Anti-Vibration ACC Models to the Vehicle* later in the Quick Start Guide.
- 2. Connect the Power Cable to the unit and to the vehicle.

#### To power on cameras through the vehicle power supply:

3. **4-Ch:** Connect the black wire of the Camera Power Cable to **Pin 10** and red wire to **Pin 11** on the terminal block.

8-Ch: Connect the black wires of the Camera Power Cables to Pin 18 or Pin 20, and the red wires of the Camera Power Cables to Pin 17 or Pin 19 on the terminal block.

4. Connect the Camera Power Cable to cameras.

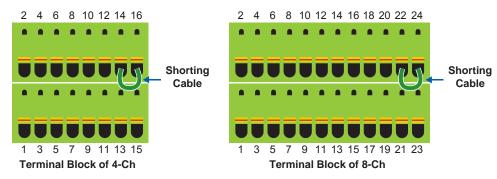
When the Anti-Vibration ACC model is connected to the vehicle power supply, the unit will automatically start after you turn on the vehicle ignition. Power is supplied to the unit as long as the vehicle ignition is on.

## **Testing Anti-Vibration ACC Models**

Before connecting the ACC model to a vehicle, you can power on the unit at other places for testing and setup.

Items required:

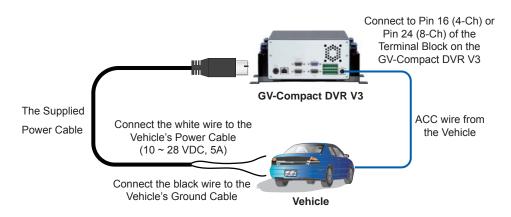
- Supplied Shorting Cable
- Additional power adaptor (DC 12V, 5A), which can be purchased from GeoVision.
- 1. Connect the Shorting Cable to **Pins 14** and **16** (4-Ch) or **Pins 22** and **24** (8-Ch) on the terminal block.



- 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.

## **Connecting Anti-Vibration ACC Models to a Vehicle**

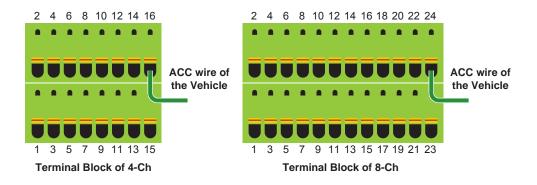
You need to connect the ACC model to ACC wire and power wire on the vehicle.



## Connecting the ACC Wire

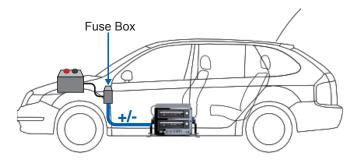
The following instructions are based on installation on a **Toyota Zace Surf**. Since each vehicle differs in design, refer to the owner's manual of your vehicle for details or have the installation done by a properly trained technician.

- 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.
- Connect the ACC wire from the cigarette lighter fuse to Pin 16 (4-Ch) or Pin 24 (8-Ch) on the terminal block.



#### **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 unit 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 unit.
  - **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. When the black ground wire is connected correctly, the unit will automatically

shut down 30 seconds after the car's power is off. If the unit does not shut down, try to connect the black ground wire using the other method.

4. Turn on the car ignition and the unit should start automatically within 5 seconds. Turn off the car ignition and the unit should shut down 30 seconds after the car ignition is off.

For details, see 3.3.2 Connecting to a Vehicle, Chapter 3 in GV-Compact DVR V3 User's Manual on the software CD/DVD.

## 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 **I** button. You will be prompted to confirm the action.
- 4. Select **YES** and press the **H** 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:

- 1. The maximum space of one partition is 200 GB.
- 2. The connected USB mass storage device must also be formatted according to above instructions before use.

## Assigning an IP Address

By default, the IP address of your GV-Compact DVR V2 is assigned by the DHCP server unless your router does not support DHCP. In this case, the default IP address will be 192.168.0.10. However, there are two ways to assign an IP address to the unit: Using OSD Menu and Connecting with a PC

For detail on assigning an IP address using the Web interface of the GV-Compact DVR V3, see Connecting with a PC, Chapter 5 in GV-Compact DVR V3 User's Manual on the software CD/DVD.

To use the OSD menu to assign a static IP:

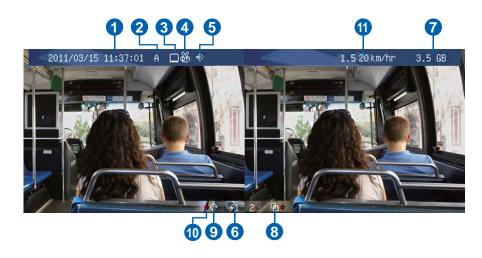
 Press the Menu button, select NETWORK and then select CONNECTION SETTINGS. Set a static IP, subnet mask, gateway, primary DNS and secondary DNS (optional), which are provided by your Internet Service Provider (ISP).

CONNECTIONS	UIRED	
GAIN IP	FIXED	
IP ADDRESS	192, 168, 8, 18	
SUBNET MASK		
GATEUAV	192, 168, 8, 1	
PRIMARY DNS	192, 168, 8, 1	
SECONDARY DNS		
	ANCEL	
	SAVE	

- Using the network cable, connect one end to the LAN port on the rear panel of the unit, and the other end to the network. The GV-Compact DVR V3 is now accessible by entering the assigned IP on the browser.
- 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's ActiveX component onto your computer.

#### Important:

- PPPoE should only be enabled, if you know which IP address the GV-Compact DVR V3 will get from the ISP. Otherwise, you must use the Dynamic DNS service to obtain a domain name linked to the GV-Compact DVR V3's changing IP address first. For details on Dynamic DNS Server settings, see Advanced TCP/IP, Chapter 6 in GV-Compact DVR V3 User's Manual on the software CD/DVD
- If **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. For details on how to restore to factory default settings, see *Restoring to Factory Default Settings, Chapter 8 in GV-Compact DVR V3 User's Manual* on the software CD/DVD.
- 3. The default login name and password for Administrator are admin.



- 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 V3.
- 3. **Monitoring icon :** Appears when the monitoring is activated.
- 4. **Manual recording icon b** or **Schedule recording icon b** : 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 detection mode icon (**): Appears when the camera is set to the recording mode of motion detection.
- 9. **Round-the-clock mode icon** S: Appears when the camera is set to the recording mode of round-the-clock.
- 10. **Recording icon** : Appears when the monitoring is started. A red icon indicates the image of the camera is being recorded.
- 11. **Vehicle speed:** Indicates the average speed of the vehicle when the GPS function is enabled. This function is only available for the Anti-Vibration ACC models (GV-LX4C3V, GV-LX8CV1 and GV-LX8CV2).

## ) Basic Operations

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



Operations	Steps
Date/Time Adjustment	Press the <b>Menu</b> button, select <b>ADVANCED</b> and then select <b>DATE AND TIME</b> .
Recording Operation	Press the <b>Rec</b> button to start recording and press the <b>Stop</b> button to stop recording.
Search and Playback	Press the <b>Search</b> button to see the search and playback options.
PTZ Control	Press the <b>Channel</b> button to display the PTZ channel and use the directional buttons to control the PTZ movement.
Channel Number and Camera Name	Press the <b>Menu</b> button, select <b>Channel Settings</b> and then <b>Channel Name</b> to change the camera name. Press the <b>Menu</b> button, select <b>Advanced</b> and then <b>Display Settings</b> to display the channel number or camera title.
Video Backup	Press the <b>Menu</b> button, select <b>Advanced</b> and then <b>Backup</b> to specify the time and channel for backing up video files.

## 8) Upgrading System Firmware

GeoVision will periodically release the updated firmware on the website. To load the new firmware into the GV-Compact DVR V3, read the important notes below and then follow the instructions.

#### Important:

- 1. While the firmware is being updated, the power supply must not be interrupted.
- 2. Do not turn the power off for 10 minutes after the firmware is updated.
- 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 V3.
- 1. In the Live View window, click the **Show System Menu** button and select **Remote Config**. This dialog box appears.

Remote Config 🛛 🛛 🔀			
Firmware	Jpgrade		
Brows	:e]		
Versior	v1.00 2010-10-20	Upgrade	
File	BX120_V100_101020.i	Cancel	

- 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 V3. In this case, please contact your sales representative and send your device back to GeoVision for repair.



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