GeoVision inc
The Vision of Security

GV-FR Panel

User's Manual



- **GV-FR Panel V1**
- **GV-FR Panel V2**
- **GV-FR Panel V2-QR**

Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use.

FRPANELV2V130-UM-A

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August 2026

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[Technical Support Policy]

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Recognition and Authentication Considerations

Face Recognition Distance:

- GV-FR Panel delivers optimal face recognition results when the faces of the targets are within 1 m (3.3 ft) of GV-FR Panel V1, and 2 m (6.6 ft) of GV-FR Panel V2.

Lighting Conditions:

- GV-FR Panel is designed for indoor use only. Avoid exposing it to direct sunlight as it may affect its face recognition performance.

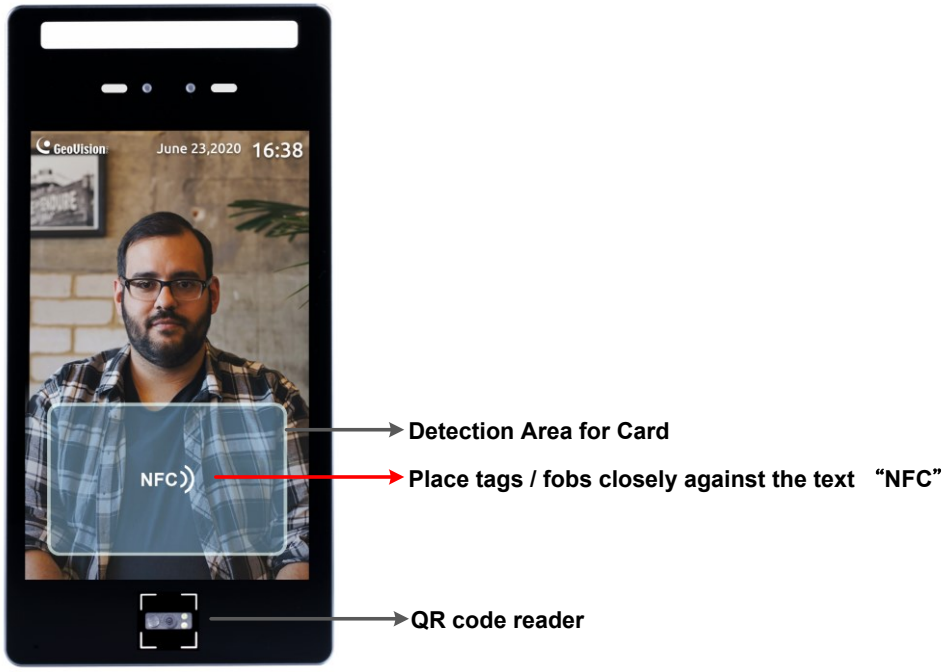
Face Recognition Limitations:

- GV-FR Panel may not be able to recognize faces wearing any type of sunglasses.

Detection Area of Cards, Tags / Fobs, QR Codes:

- When swiping **cards**, place them **closely** against the touch screen for optimal detection effect.
- Only available for GV-FR Panel V1. When swiping **tags / fobs**, place them **closely** against the text “NFC” on the touch screen for optimal detection effect.
- When scanning **QR codes**, keep a distance of 10-15 cm (4-6 in) from the reader for effective scanning.

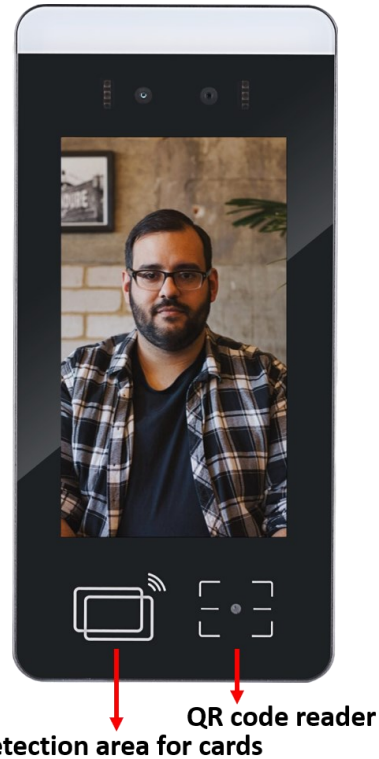
GV-FR Panel V1:



GV-FR Panel V2:



GV-FR Panel V2-QR:

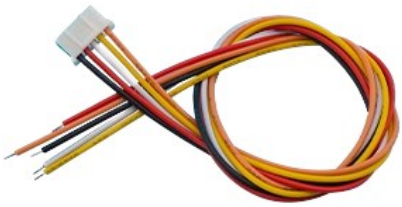


Chapter 1 Introduction

Welcome to the *GV-FR Panel Quick Start Guide*. In the following sections, you will learn the basic installations and configurations of GV-FR Panel. For details, see the *GV-FR Panel User's Manual*.

1.1 Packing List

1.1.1 GV-FR Panel V1

1. GV-FR Panel V1 	2. Wall Mount Bracket Kit   For GV-Mount800 For GV-Mount801
3. Wiegand cable 	4. USB Host PH2.0-4P cable 
5. RJ-45 cable 	6. USB OTG PH2.0-4P cable 
7. Power cable 	

1.1.2 GV-FR Panel V2

1. GV-FR Panel V2 or GV-FR Panel V2-QR

GV-FR Panel V2 (includes the data cable attached to the rear panel)	GV-FR Panel V2-QR (includes the data cable attached to the rear panel)
	

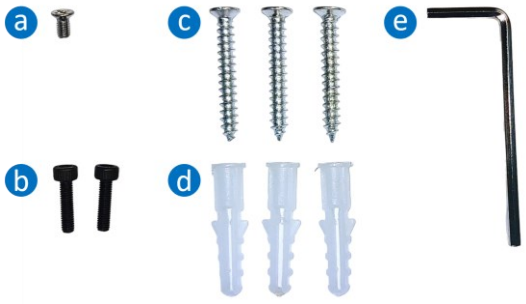
2. Wall Mount Bracket Kit



3. Power Adapter DC 12V 3A



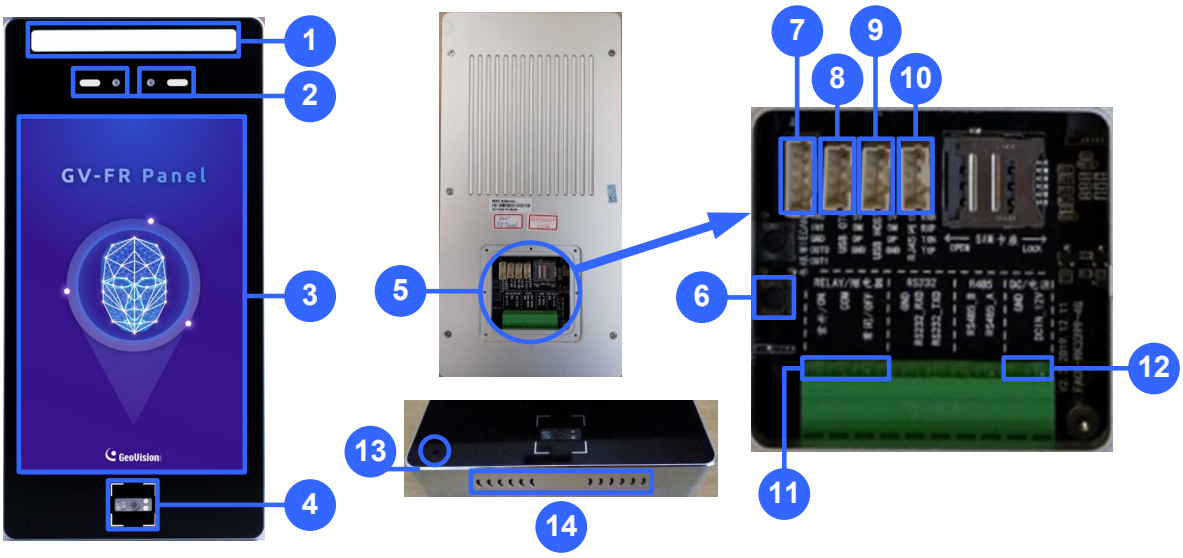
4. Screw Kit



(a) Short Screw (5 mm / 0.20 in) x 1
(b) Socket Screw (10 mm / 0.39 in) x 2
(c) Long Screw (29 mm / 1.14 in) x 3
(d) Plastic Anchor (29 mm / 1.14 in) x 3
(e) Allen Wrench x 1

1.2 Overview

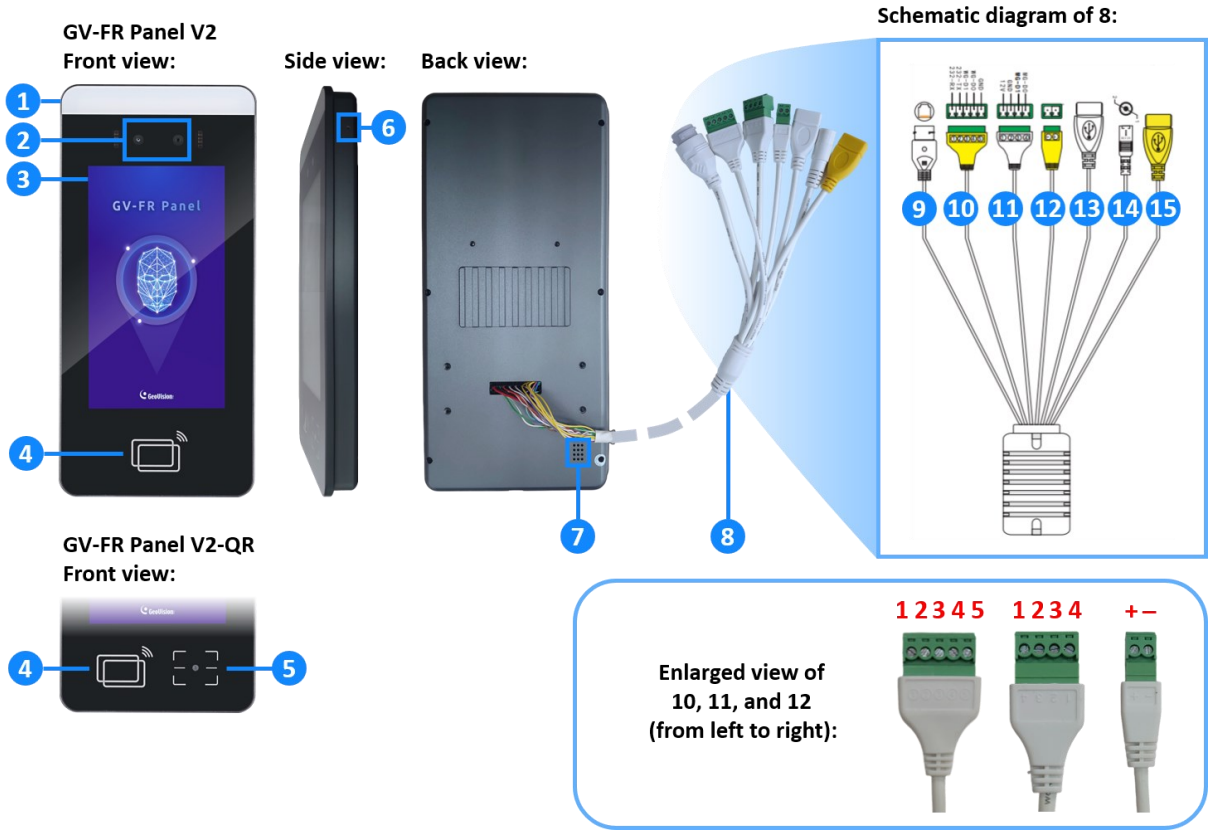
1.2.1 GV-FR Panel V1



No.	Name	Function
1	LED Light	• White LED: Turns on LED lighting when its radar sensor detects motion. • Green LED: Turns on when recognizing registered faces. • Red LED: Turns on when detecting unknown faces.
2	Built-in Cameras	Captures real-time live images at the front of the panel.
3	Touchscreen Panel	Displays the live images captured by the built-in cameras and accesses its local settings.
4	QR Code Reader	Reads QR codes used for access control. (The QR code LED turns on when detecting motion around.)
5	Rear Panel	Contains all the ports of the GV-FR Panel V1. (See No. 6 – 10.)
6	Reset Button	Restarts the GV-FR Panel V1.
7	Wiegand Port	Connects to 3rd-party controllers. (See *Chapter 7 Third-Party Controller Integration* in the *User's Manual*.)
8	USB OTG PH2.0-4P Port	Connects to a PC for data backup and/or firmware upgrade via the supplied USB OTG PH2.0-4P cable. (Currently not functional.)
9	USB Host PH2.0-4P Port	Connects to a USB keyboard or mouse via the supplied USB Host PH2.0-4P cable.

10	RJ-45 Port	Connects to the network via the supplied RJ-45 cable.
11	Relay Output	Contains the following 3 relay pins: NO, COM, and NC.
12	2-Pin Power connector	Connects to power via the supplied 2-pin power cable and an optional power adapter.
13	Microphone	Receives audio. (Enabled by default.)
14	Speaker	Sounds when typing the settings on the touchscreen, swiping a card, and scanning the QR code.
Note: The SIM card slot and RS-485 and RS-232 ports are not functional.		

1.2.2 GV-FR Panel V2



No.	Name	Function
1	LED Light	• Green LED: Turns on when recognizing registered faces. • Red LED: Turns on when detecting unknown faces.
2	Built-in Cameras	Captures real-time live images at the front of the panel.
3	Touchscreen Panel	Displays the live images captured by the built-in cameras and accesses its local settings.
4	Card Reader	Reads ID cards or tags.
5	QR Code Reader	Reads QR codes used for access control.
6	Microphone	Receives audio.
7	Speaker	Sounds when playing the audio clip “Please wear a face mask,” when users type the settings on the touchscreen, swipe a card, scan the QR code, and when customer support gives instructions remotely.
8	Data Cable	Contains all the ports of GV-FR Panel V2. (See No. 9 – 15.)
9	RJ-45 Port	Connects to the network using a user-supplied Ethernet cable. (See *2.1 Connecting GV-FR Panel* in the *Quick Start Guide*.)

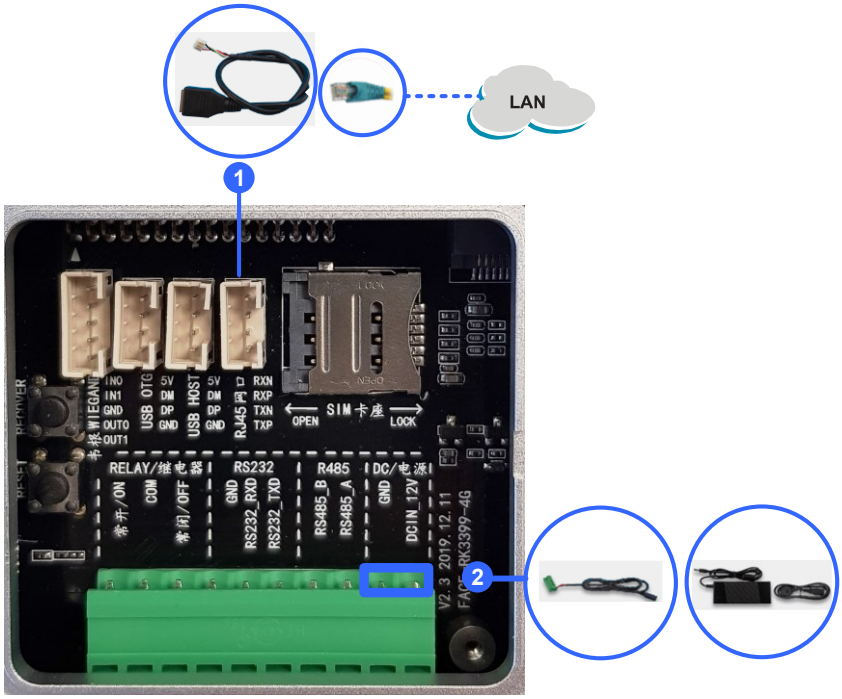
10	Wiegand Output	Connects to 3rd-party controllers. (See *Chapter 7 Third-Party Controller Integration* in the *User's Manual*.) Contains the following 5 pins: 1. 232-RX (Not functional.) 2. 232-TX (Not functional.) 3. Wiegand Output Data 0 4. Wiegand Output Data 1 5. GND Note: The Wiegand Output pins (Data 0 and Data 1) and the GND pin must be connected when integrating with a third-party controller.
11	Wiegand Input	Contains the following 4 pins: 1. 12V (Not functional.) 2. GND (Not functional.) 3. Wiegand Input Data 1 (Not functional.) 4. Wiegand Input Data 0 (Not functional.)
12	Relay Output	Contains the following 2 relay pins: COM (+) and NO (-).
13	USB Host PH2.0-4P Port	Connects to a USB keyboard or mouse.
14	Power Input	Connects to power using the supplied power adapter. (See *2.1 Connecting GV-FR Panel* in the *Quick Start Guide*.)
15	USB OTG PH2.0-4P Port	Not functional.

Chapter 2 Installation

2.1 Connecting GV-FR Panel

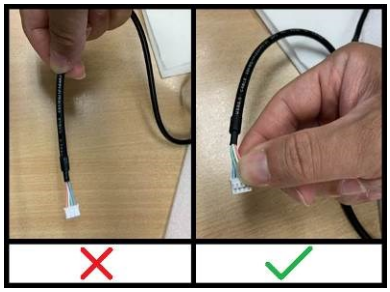
2.1.1 GV-FR Panel V1

To connect GV-FR Panel V1, follow the steps below.



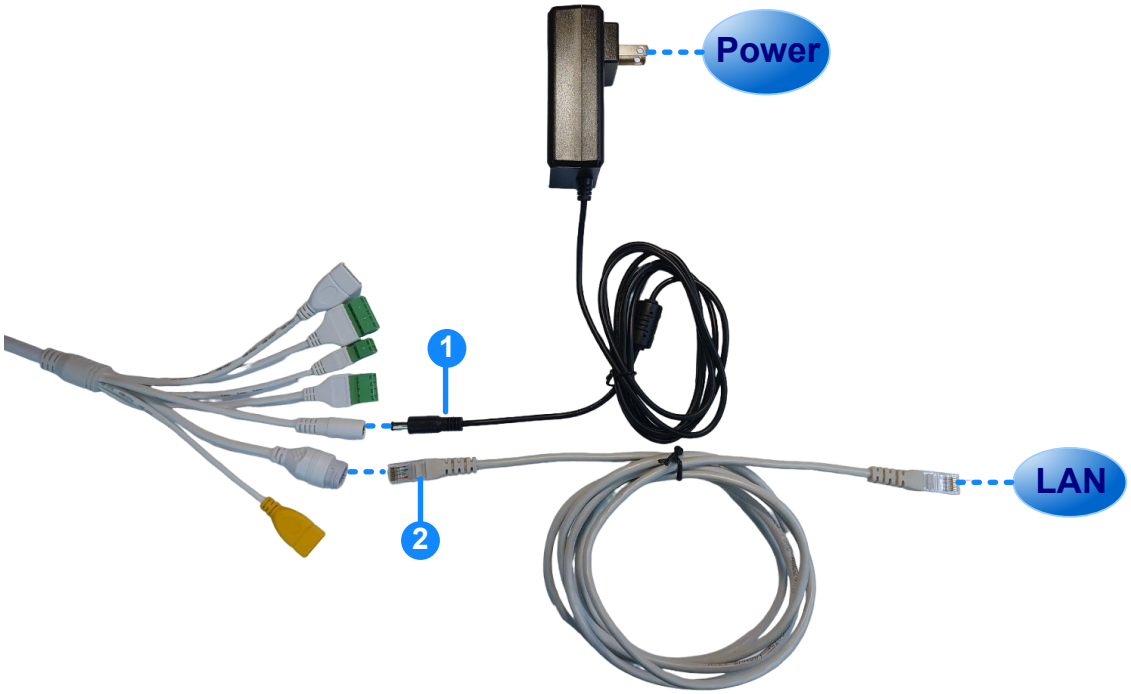
1. Connect the GV-FR Panel V1 to the network using the supplied RJ-45 cable with a user-supplied Ethernet cable.
2. Connect the GV-FR Panel V1 to power using the supplied 2-pin power cable and an optional power adapter.

Note: When unplugging a connected cable (No. 3 / 4 / 5 / 6 / 7, *1.2 Packing List*) from GV-FR Panel V1 for any reason, grip firmly onto the terminal block and pull out slowly. Do not pull the cable by the cord.



2.1.2 GV-FR Panel V2

To connect GV-FR Panel V2, follow the steps below.



1. To connect GV-FR Panel V2 to power, connect from the power input of the data cable to power using the supplied power adapter.
2. To connect GV-FR Panel V2 to the network, connect from the RJ-45 port of the data cable to the network using a user-supplied Ethernet cable.

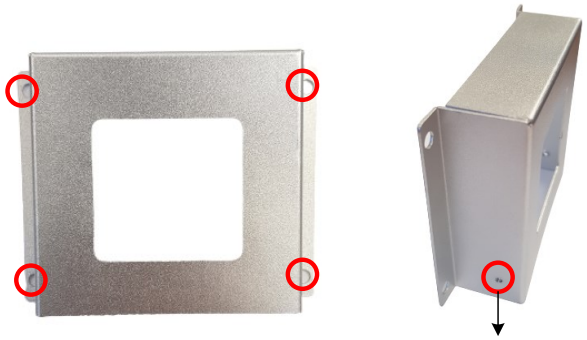
For details on the data cable, see *1.2.2 Overview* in the *Quick Start Guide*.

2.2 Standard Installation

2.2.1 GV-FR Panel V1

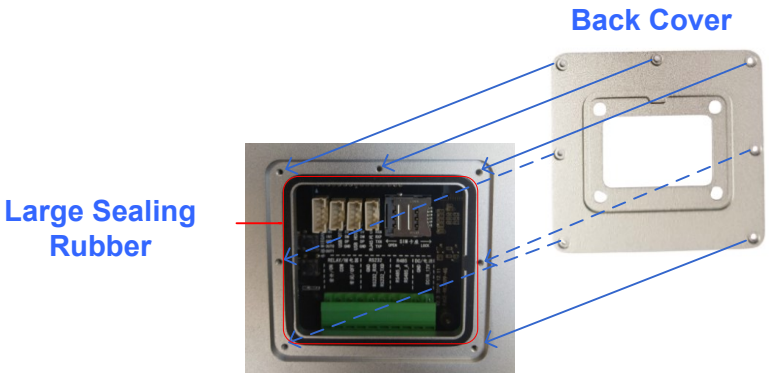
For installing GV-FR Panel V1 on a wall, follow the steps below.

1. Place the **mounting bracket** on the wall and mark the locations of the 4 screw positions as illustrated below.



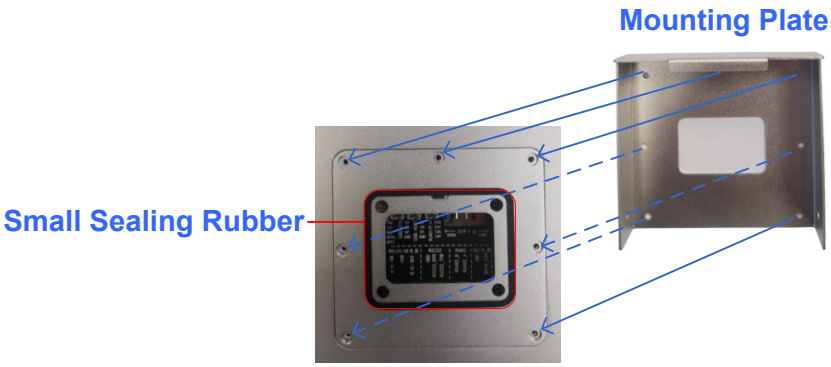
Facing the side to the ground

2. At each of the four marked screw positions on the wall, drill a hole slightly smaller than the supplied plastic screw anchors.
3. Insert the four plastic screw anchors into the drilled holes, and secure the mounting bracket to the wall using the supplied screws.
4. Secure the **large sealing rubber** and the **back cover** to the back of the GV-FR Panel V1 using the supplied screws.

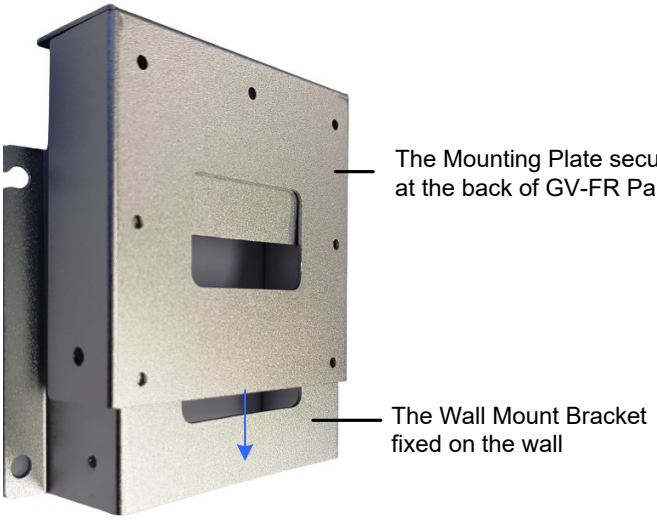


Note: Thread the necessary cables through the back cover and connect them to the panel before securing the cover.

5. Secure the **small sealing rubber** and the **mounting plate** onto the GV-FR Panel V1 using the supplied screws.



6. Secure the GV-FR Panel V1 to the wall by attaching its mounting plate onto the wall mount bracket.



7. Insert a screw on each side of the wall mount to secure it and complete the installation.

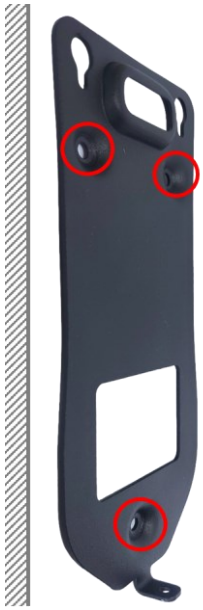


2.2.2 GV-FR Panel V2

2.2.2.1 Wall Installation

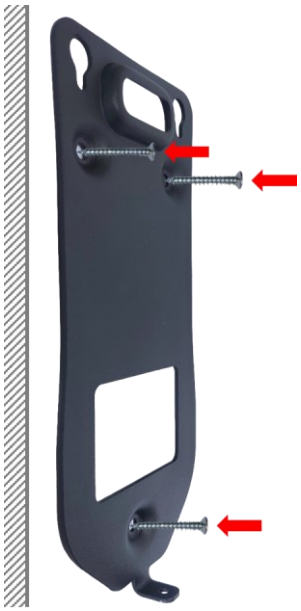
To install GV-FR Panel V2 on a wall, follow the steps below.

1. Place the mounting bracket on the wall, and mark the locations of the three screw positions as illustrated below.



2. At each of the three marked screw positions on the wall, drill a hole using a 6 mm (0.24 in) drill bit. The depth should be 35 to 40 mm (1.38 to 1.57 in).

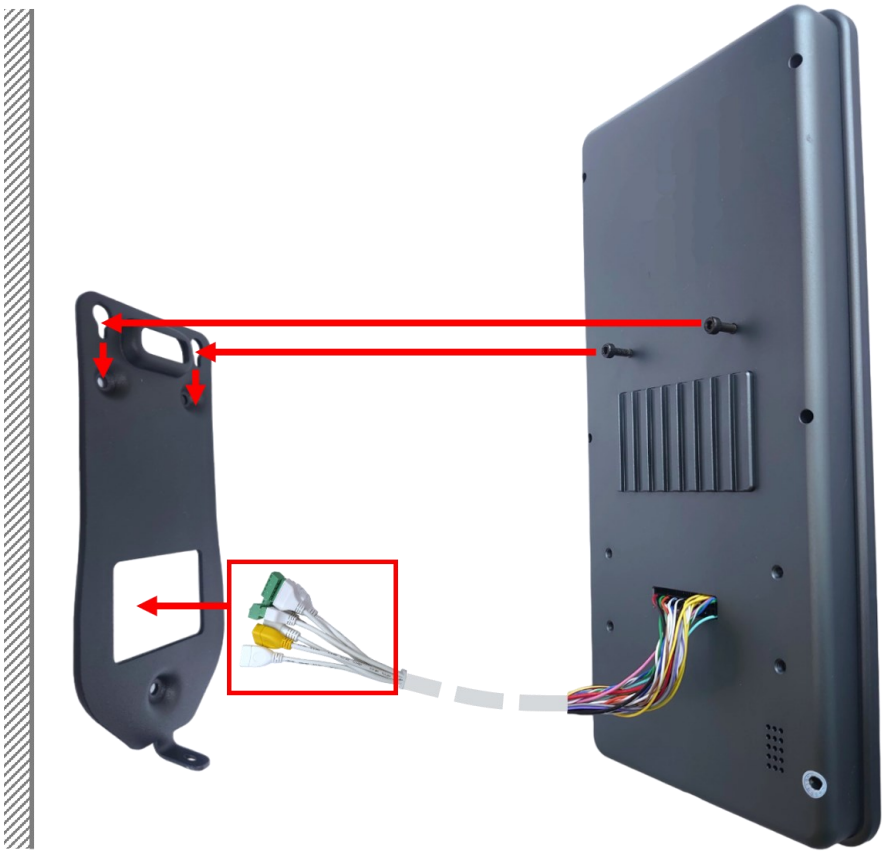
3. Insert three of the supplied plastic anchors into the drilled holes, and secure the mounting bracket to the wall using three of the supplied 29 mm (1.14 in) screws.



4. Secure two of the supplied 10 mm (0.39 in) socket screws to the back of GV-FR Panel V2. Use the provided Allen wrench if needed.



5. If a wall hole is drilled to conceal the cables, guide the data cable attached to GV-FR Panel V2 through the square hole in the mounting bracket and into the wall; if not, let it hang down from the panel without passing through the bracket. Align the two socket screws on the panel with the holes at the top of the bracket, allowing the panel to hang securely on the bracket.



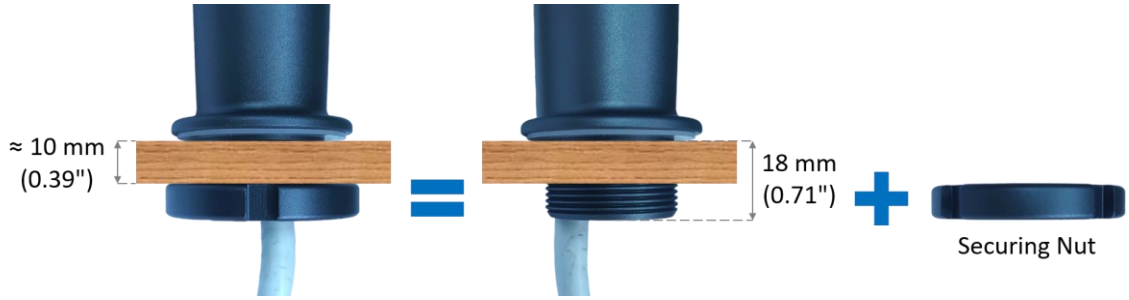
6. To complete the installation, secure the mounting bracket to GV-FR Panel V2 from the bottom using one of the provided 5 mm (0.20 in) screws.



2.2.2.2 Desktop Installation

To install GV-FR Panel V2 with Pillar Stand on a horizontal surface (such as a counter or desk), follow the steps below.

1. Select a suitable horizontal surface no thicker than approximately 10 mm (0.39 in). leaving space for the securing nut along the 18 mm (0.71 in) thread.

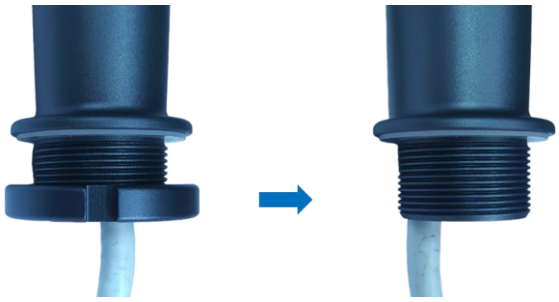


Note: The 10 mm (0.39 in) measurement is an estimate; use your discretion when selecting the surface.

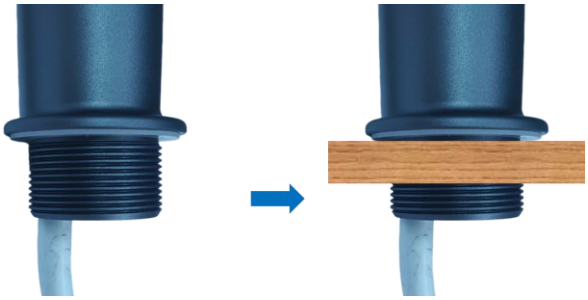
2. Drill a hole in the surface to fit the pillar stand. The hole should be slightly larger than the stand's outer diameter of 33 mm (1.30 in) to allow smooth insertion.



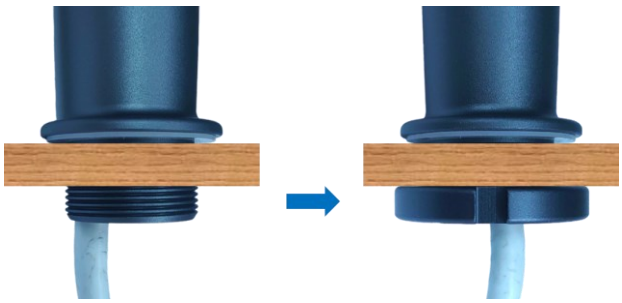
3. Detach the securing nut from the end of the pillar stand. Slide the nut along the length of the cables until it is fully removed.



4. Route the cables through the drilled hole, and then insert the pillar stand (already attached to the back of GV-FR Panel V2) through the hole until the stand sits firmly on the surface.



5. On the opposite side of the surface, thread the cables through the securing nut, and then screw the nut onto the end of the pillar stand until the stand is securely mounted.

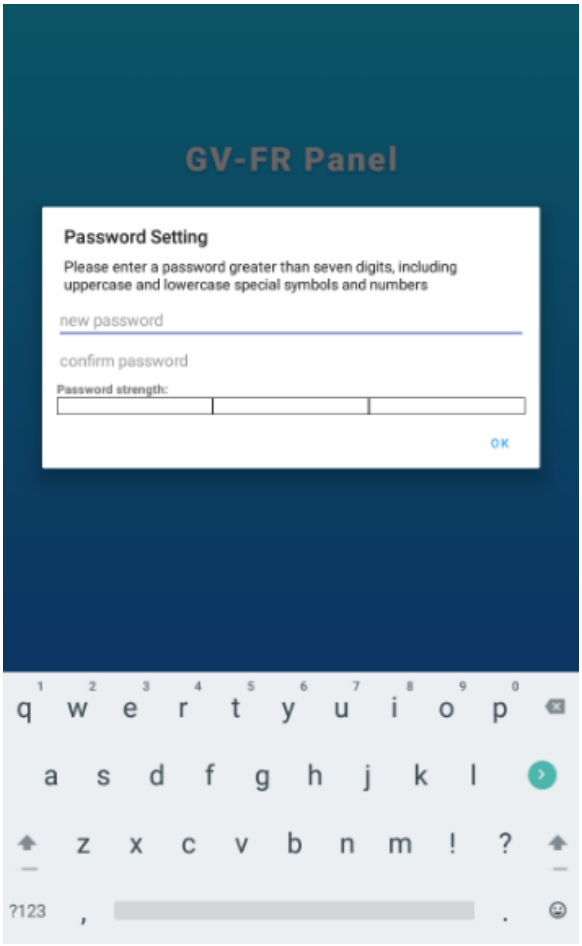


6. Adjust the tilt angle of GV-FR Panel V2 by loosening the cover on top of the pillar stand. Once you have adjusted the angle, re-tighten the cover to lock the tilt angle in place.



Chapter 3 Accessing GV-FR Panel

Upon first startup of GV-FR Panel, users are prompted to set a login password for the Administrator account. Once the password is configured, the live view from the GV-FR Panel's built-in camera will be displayed.

GV-FR Panel V1:	GV-FR Panel V2:
	

When faces are registered in and recognized by the GV-FR Panel, a confirmation screen is displayed over the live image.



Face Registration Methods

There are several methods available for registering faces, depending on your system configuration:

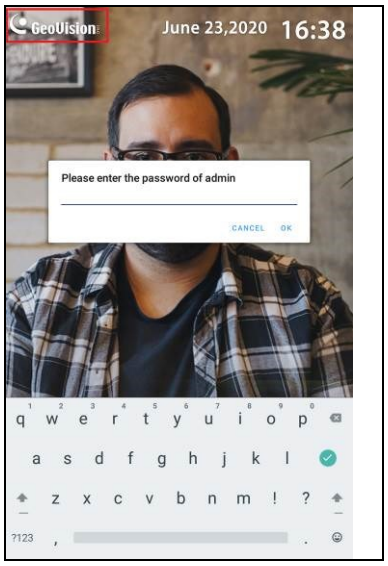
For GV-ASManager Integration
• **Via GV-ASManager:** See *Chapter 3 Access Control Integration* and *Chapter 4 User Management in GV-ASManager and GV-FR Panel* in the user's manual.
For Standalone Mode
• **Local Enrollment:** Enroll directly at the panel hardware. See the *Local Enroll Mode* option, *2.3 Local Settings in the user's manual.*
• **Web interface:** Access the panel's Web interface and navigate to **Face Management** > **Face Profiles**. See *5.3 Face Management* in the user's manual.
• **GV-Face Manager Utility:** Use the utility for batch database management. See 6.*3 GV-Face Manager for Face Database Management* in the user's manual.
• **GV-Face Mobile App:** Register faces via the mobile application. See *Chapter 5 Registering Face IDs to GV-AI FR Server / GV-FR Panel* in *GV-Face Mobile App Installation Guide*.
For GV-Cloud Integration
• **GV-Cloud Access Control:** Enroll face images and cards directly through the cloud portal. See *9.3 Enrolling Face Images and Cards* in the user's manual.

3.1 Locating the Panel on the Network

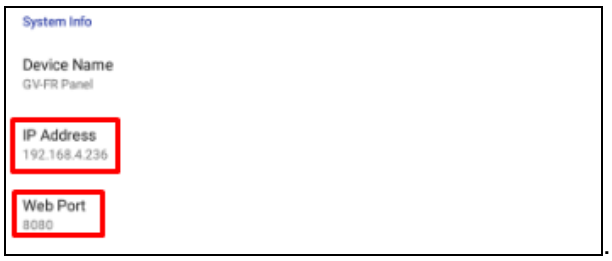
By default, GV-FR Panel is assigned an unused IP address by the DHCP server when connected to a network. This IP address remains unchanged unless you unplug or disconnect your reader from the network.

To check the IP address of your GV-FR Panel, follow the steps below.

1. On the main screen of GV-FR Panel, tap the **GeoVision logo** at the upper-left corner of the touchscreen to enter the settings page. You're prompted to type the password of its Administrator account.



2. On the settings page, find the **IP Address** and **Web Port** of the GV-FR Panel.

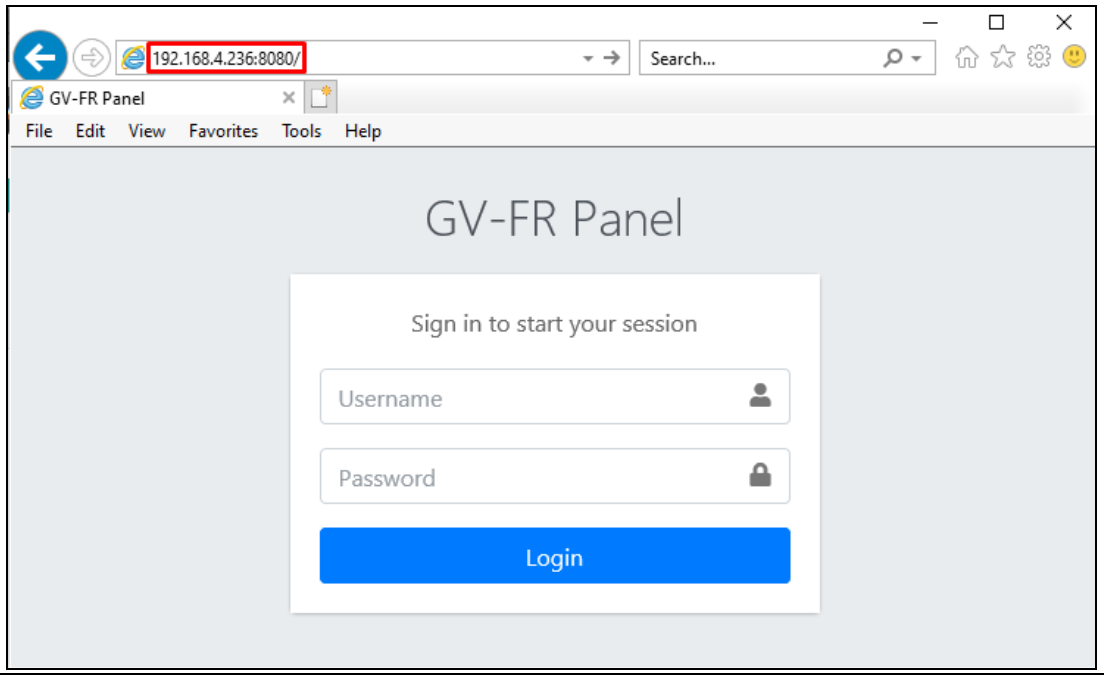


Note: If the IP address appears as "0.0.0.0," this means that the network has not been established. Plug in the Ethernet cable to obtain the IP address. See *2.1 Connecting GV-FR Panel* in the *Quick Start Guide*.

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3. On a PC, open a Web browser and enter the IP address and Web port of the GV-FR Panel in the address bar. The login page appears.

Format: [IP address]:[Port number]
Example: 192.168.4.236:8080



IMPORTANT: For accessing GV-FR Panel, it is required to add a colon and the port number (default port: 8080) after the IP address, e.g. http://192.168.4.236:8080.

4. Type *admin* for the username and type the Administrator password of the GV-FR Panel to log in.

For the detailed settings available on the Web interface of GV-FR Panel, see *Chapter 5 Administrator Mode* in the *User's Manual*.

Note:

1. You can only change the IP address directly on GV-FR Panel. To assign a static IP address to GV-FR Panel, use the local settings on the device. See *2.3 Local Settings* in the *User's Manual*.
2. You can also use GV-IP Device Utility to search for the IP address of GV-FR Panel. See *4.1 Upgrading System Firmware* in the *Quick Start Guide*.

Chapter 4 Advanced Settings

4.1 Upgrading System Firmware

GeoVision periodically updates the latest firmware to the company website. You can update GV-FR Panel's firmware through **GV-IP Device Utility** (V8.9.3 or later) from the website.

Important Notes Before You Start

Before you start updating the firmware, read these important notes:

1. While the firmware is being updated, the power supply must not be interrupted.
2. If you use GV-IP Device Utility for firmware upgrade, the computer used to upgrade firmware must be within the same network as the GV-FR Panel.
3. If firmware upgrade fails, you will need to restore the GV-FR Panel to its default settings. For details, see 4.*2 Restoring to Factory Default Settings* in the *Quick Start Guide*.

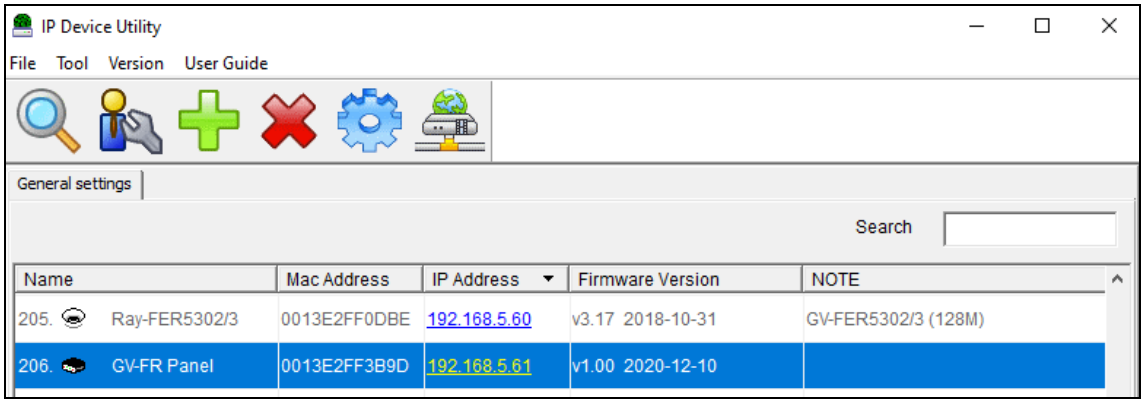
WARNING: The interruption of power supply during updating causes not only update failures but also damages to your GV-FR Panel. In this case, contact your sales representative and send your device back to GeoVision for repair.

Using the GV-IP Device Utility

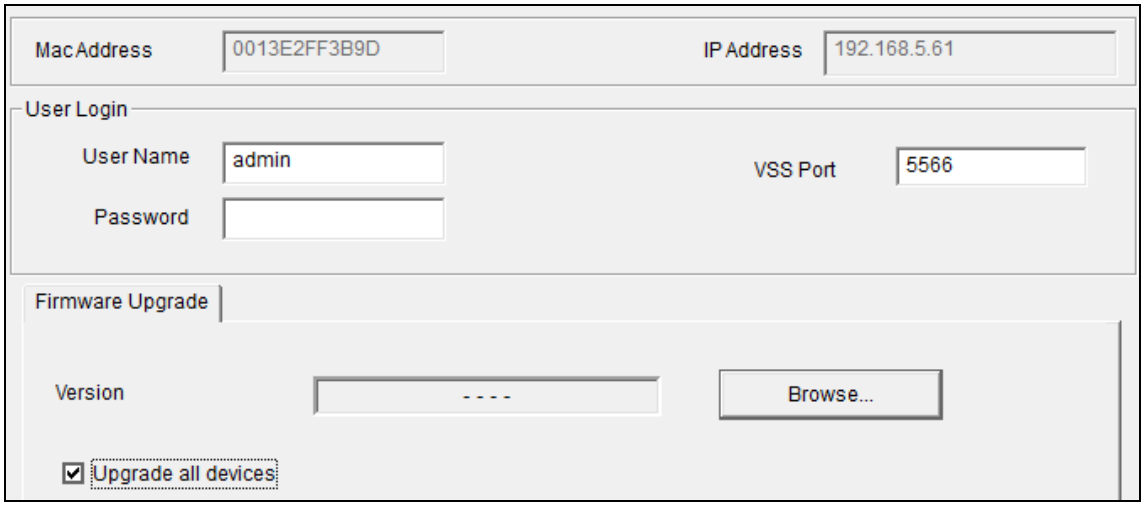
GV-IP Device Utility provides a direct way to upgrade the firmware to multiple GV-FR Panels.

Note: The computer used to upgrade firmware must be within the same network as the GV-FR Panel.

1. Once downloaded, select **GV IP Device Utility**, and follow the onscreen instructions to install the utility.
2. Double-click the **GV IP Device Utility** icon created on your desktop. This dialog box appears.



3. Click the **Search** button to locate available devices on the LAN, or click the **New** button and assign an IP address to locate a GV-FR Panel on the network.
4. Double-click on the IP address of the GV-FR Panel. This dialog box appears.



5. Click the **Browse** button to locate the firmware files (.img) saved at your local computer.
6. If you would like to upgrade all the GV-FR Panels in the list, check **Upgrade all devices**.
7. Type the **Password** of the GV-FR Panel, and click **Upgrade** to start the upgrade.

4.2 Restoring to Factory Default

If for any reason the device is not responding properly, you can restor
e it to its factory default settings through the Web interface.

1. Click **General Settings** > **System Settings**.
2. Click **Load Default**.