

Quick Start Guide

GV-Camera Reader GV-CR420



1 Introduction

Welcome to the *GV-Camera Reader Quick Start Guide*. The quick start guide covers the basic installations and configurations of GV-Camera Reader. For the detailed user's manual, see the *GV-Camera Reader User's Manual* on the supplied software DVD.

Packing List

- GV-CR420 x 1



- Mounting Plate x 1



- Standard Screw x 2



- Plastic Screw Anchor x 2



- Security Screw x 1



- Torx Wrench x 1



- DC 12V Power Adapter x 1

- GV-Camera Reader Quick Start Guide x 1

- Software DVD x 1

Compatible GV-AS Controller Versions

- **GV-AS100 / 110 / 120 / ASBox / ASNet:** Firmware version 1.05 or later
- **GV-AS210:** Firmware version 1.1.0 or later
- **GV-AS400:** Firmware version 1.04 or later
- **GV-AS810:** Firmware version 1.1.0 or later

Note: Card and Face Mode by schedule and receiving card numbers through network connection are only supported in the following firmware versions.

- **GV-AS100 / 110 / 120 / ASBox / ASNet:** Firmware version 1.06 or later
- **GV-AS210:** Firmware version 1.1.0 or later
- **GV-AS400:** Firmware version 1.04 or later
- **GV-AS810:** Firmware version 1.1.0 or later

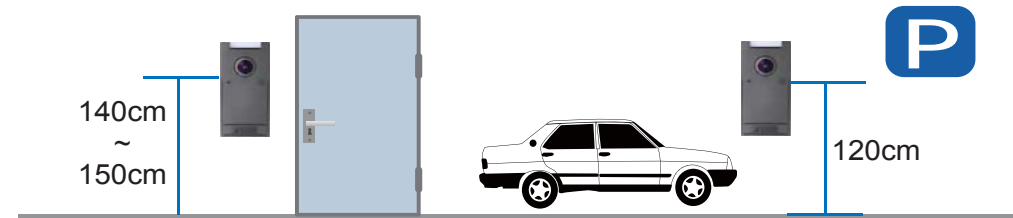
Optional Accessories

- GV-AS ID Card (13.56MHz, Mifare)
- GV-AS ID Tag (13.56MHz, Mifare)

Limitations and Optimal Installation for Face Detection

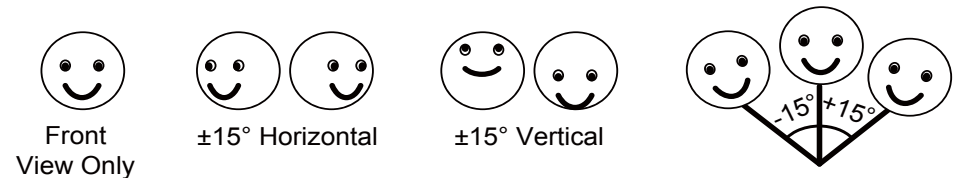
Camera Reader Installation Height:

- Building gate: about 1.4-1.5 meters above the ground.
- Parking lot gate: about 1.2 meters above the ground.



Face Detection Limitations

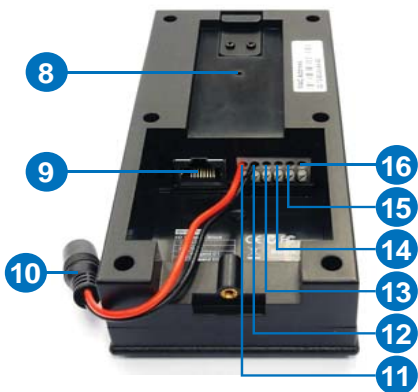
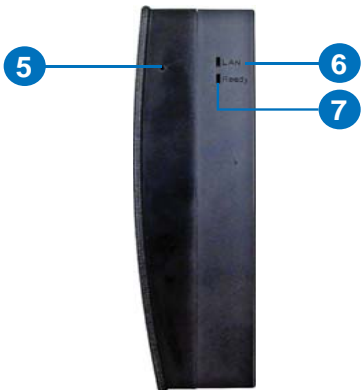
- Cardholders cannot be wearing facial masks or sunglasses.
- Detects front-view faces only. The tilt angle cannot exceed 15° degree.



Lighting Conditions

- Lighting should be sufficient with minimum illumination no less than 41-50 Lux.
- Avoid having light source directly behind the subject.

2 Overview

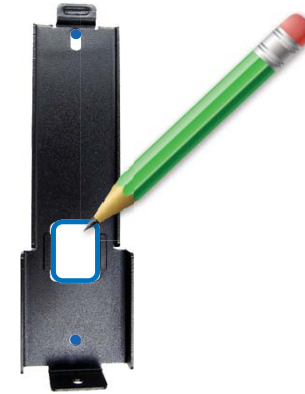


No.	Function
1	LED Indicator
2	Lens
3	Microphone
4	Speaker
5	Beeper
6	Network status LED
7	Ready status LED
8	Load Default
9	Ethernet
10	Power Cable
11	+12V
12	GND
13	Wiegand D1
14	Wiegand D0
15	RS485-
16	RS485+

3 Hardware Installation

Follow the steps below to install the camera reader.

1. Place the mounting plate on the wall with the oval-shaped hole toward the top.



2. Mark the location of the 2 holes and the rectangle as labeled above.
3. Drill the rectangle to create a space for running the cables and wires.
4. At the 2 dots, drill a hole slightly smaller than the plastic screw anchors provided.
5. Insert the 2 plastic screw anchors in the drilled holes.
6. Place the mounting plate on the wall and secure with the 2 standard screws provided.



4 Connecting to GV-AS Controllers

- Place camera reader on the mounting plate and thread the cables through the rectangular hole.



- Secure the security screw on the bottom.

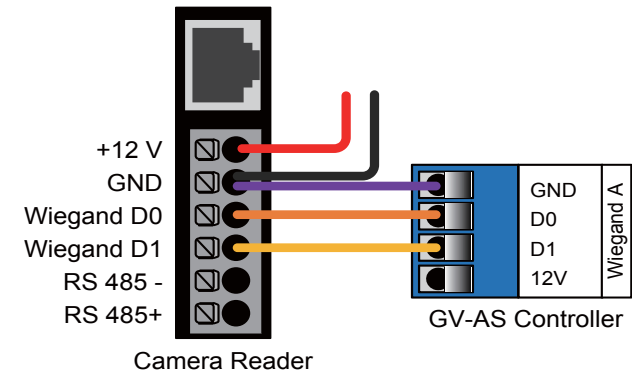


There are three ways to connect a camera reader to GV-AS Controllers: **Wiegand**, **RS-485** and **network**. Below we use GV-AS400 Controller as an example.

Wiegand

1. Wire GV-CR420 to GV-AS Controller

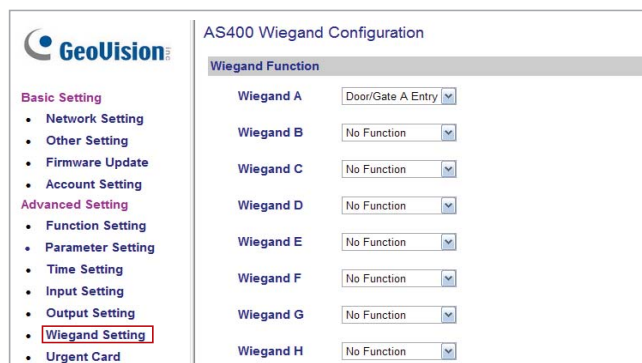
- Connect a wire to the Wiegand pins of the GV-CR420 and the other end to the Wiegand pins on the controller.
- Connect a wire to the GND pin of the camera reader in addition to the existing black GND wire for power cable, and connect the other end to the GND pin on the controller.



Note: Each camera reader must be connected to a power adapter instead of using the power from GV-AS Controller.

2. Define the door associated with GV-CR420 on the GV-AS Controller

- Access the Web interface of the GV-AS Controller.
- In the left menu, click **Wiegand Setting**.



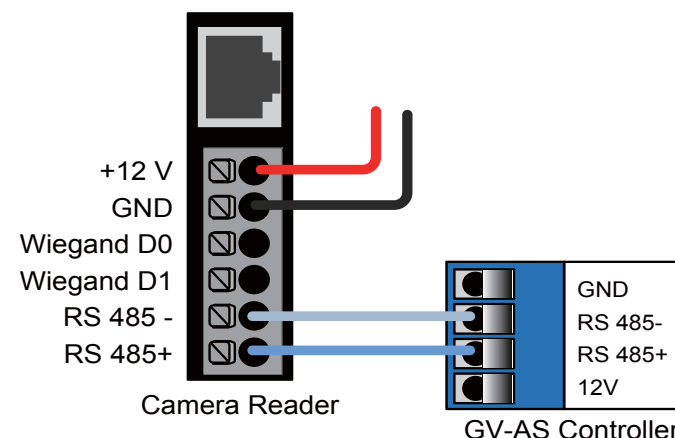
- Use the drop-down list to select the associated door.
- Click **Submit** to apply the settings.

For details, refer to *Connecting a Wiegand Reader* or *Connecting Card Readers* section and the *Web-Based Configurations* section in the *GV-AS Controller User's Manual*.

RS-485

1. Wire GV-CR420 to GV-AS Controller

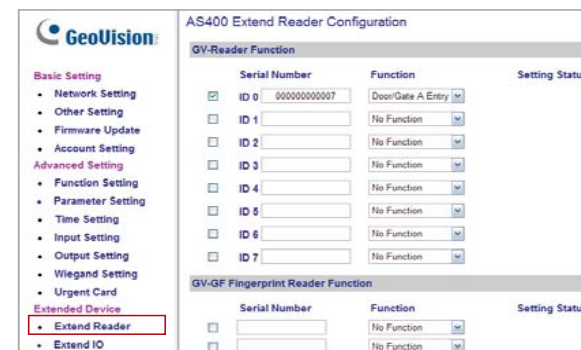
Connect the RS-485 pins of the GV-CR420 to the RS-485 interface on the controller.



Note: Each camera reader must be connected to a power adapter instead of using the power from GV-AS Controller.

2. Define the door associated with GV-CR420 on the GV-AS Controller

- Access the Web interface of the GV-AS Controller.
- In the left menu, click **Extended Reader**.



- c. Select an ID, type the barcode of the camera reader, and use the drop-down list to select the associated door.
- d. Click **Submit** and the Setting Status should turn green.

For details, refer to *Connecting a Wigand Reader* or *Connecting Card Readers* section and the *Web-Based Configurations* section in the *GV-AS Controller User's Manual*.

Network

Each GV-CR420 can only be connected to one AS Controller at a time.

1. Enable network connection to AS Controller on GV-CR420

- a. Access the Web interface of the GV-CR420. Refer to section 6 in the Quick Start Guide for details.
- b. In the left menu, click **Video Settings** and select **Streaming 1**.
- c. Under Face Detection Setting, select **Enable network connection to AS Controller** and use the drop-down list to select the controller.

Face Detection Setting

Show a box around each detected face

Show face detection area

Sensitivity

Enable card and face mode

Enable network connection to AS Controller

AS Controller IP address

- d. Type the IP address of the GV-AS Controller.
- e. Click **Apply**.

2. Define the door associated with GV-CR420 on the GV-AS Controller

- a. Access the Web interface of the GV-AS Controller.
- b. In the left menu, click **Extended Reader**.

AS210 Extended Reader Configuration

GV-Reader:CR420/GF1021/GF1022 Firmware

Serial Number	Function	Connection Status
<input type="checkbox"/> ID 0 0013C0000000	Door/Gate A Entry	■
<input type="checkbox"/> ID 1	No Function	
<input type="checkbox"/> ID 2	No Function	
<input type="checkbox"/> ID 3	No Function	
<input type="checkbox"/> ID 4	No Function	
<input type="checkbox"/> ID 5	No Function	
<input type="checkbox"/> ID 6	No Function	
<input type="checkbox"/> ID 7	No Function	

If the GV-Reader is connected to GV-AS Controller through Ethernet, do not select the checkbox below.

GF1001/GF1002/GF1011/GF1012 Firmware

Serial Number	Function	Connection Status
<input type="checkbox"/>	No Function	
<input type="checkbox"/>	No Function	
<input type="checkbox"/>	No Function	
<input type="checkbox"/>	No Function	
<input type="checkbox"/>	No Function	

If GF1001/GF1002/GF1011/GF1012 is connected to GV-AS Controller through Wiegand interface or Ethernet, do not select the checkbox below.

- c. Select an ID, type the barcode / MAC Address of the camera reader according to the firmware version of GV-CR420 and the controller, and use the drop-down list to select the associated door. For details on firmware version and corresponding methods of network connection, see the note below.
- d. Click **Submit** and the Setting Status should turn green.

Note:

1. Network connection between GV-CR420 firmware V1.0.1 and GV-AS210 / 810 firmware V1.1.0 can only be established using **MAC address**. Network connection between GV-CR420 firmware V1.0 and GV-AS210 / 810 firmware V1.0 can only be established using **barcode**.
2. Network connection between GV-CR420 and GV-AS400 or GV-AS100 / 110 / 120 through ASBox / ASNet is only supported using barcode.

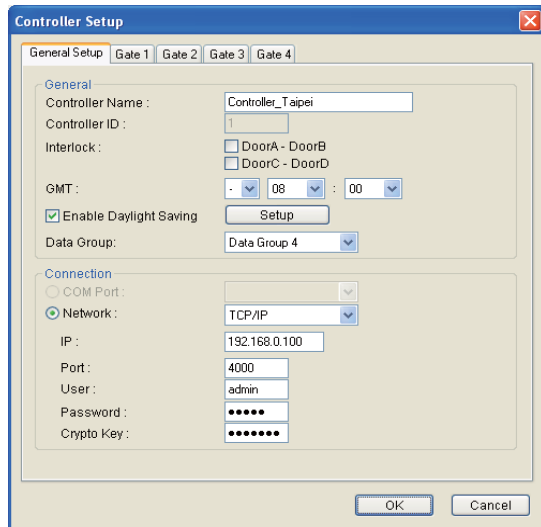
For details, refer to *Connecting a Wigand Reader* or *Connecting Card Readers* section and the *Web-Based Configurations* section in the *GV-AS Controller User's Manual*.

5 Setting Up GV-ASManager

This section covers how to add GV-AS Controller to GV-ASManager, set up an access control schedule, and receive live view from GV-CR420 on GV-ASManager.


Adding GV-AS Controller

1. On the menu bar of GV-ASManager, click **Setup** and select **Device**.
2. Click the **Add** icon on the top left corner.
3. Enter **ID** and **Name** of the Controller, select the **Type** of the Controller and click **OK**.



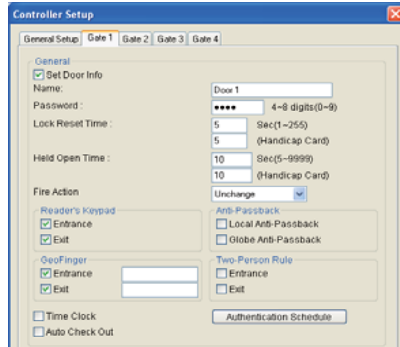
4. In Connection section, select the communication mode between the GV-AS Controller and GV-ASManager.
 - For RS-485 connection, select **COM Port** that is used for connection.
 - For network connection, select **Network** and select **TCP/IP** or **LocalDDNS**. Type the IP address, device name (if LocalDDNS is selected), port number, login user, login password and Crypto key (3DES code) of the GV-AS Controller.

Note: The default values of GV-AS Controller are: IP address **192.168.0.100**; username **admin**; password **admin**; Crypto key (3DES code) **12345678**.

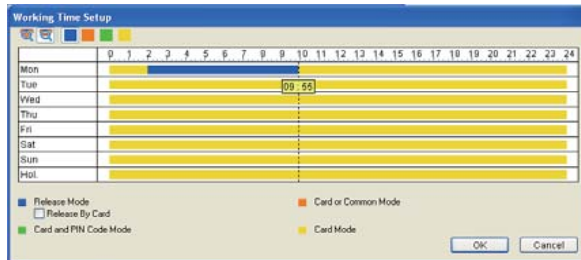
5. Click **OK**. The icon  should appear on the Device View window to indicate the connection is established.

Setting Up Access Control Schedule

1. Click the **Door/Gate** tab in the Controller Setup dialog box.



2. In the General section, enable **Set Door Info**. The default password is **admin**.
3. To apply different access modes according to a schedule, click **Authentication Schedule**.



4. Select an access mode on the toolbar and drag the mouse over the timelines.
 - **Card Mode:** Access card required to be granted access. (default mode)
 - **Release Mode:** Keep the door in an unlock status with the reader.
 - **Release by Card:** The door will unlock only after a card is presented and will remain unlocked during the time specified for Release Mode.

- **Card and PIN Code Mode:** For GV-CR420, a card needs to be presented and a face needs to be detected before access is granted.
- **Card or Common Mode:** For GV-CR420, this mode is the same as the Card Mode.

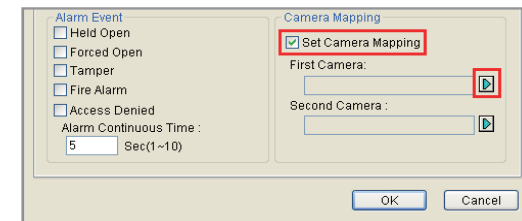
5. Click **OK**.

Receiving Live View from Camera Reader

Note: To receive live view and take snapshots of the camera reader on the GV-ASManager, you must connect the camera reader to the network first.

Follow the steps below:

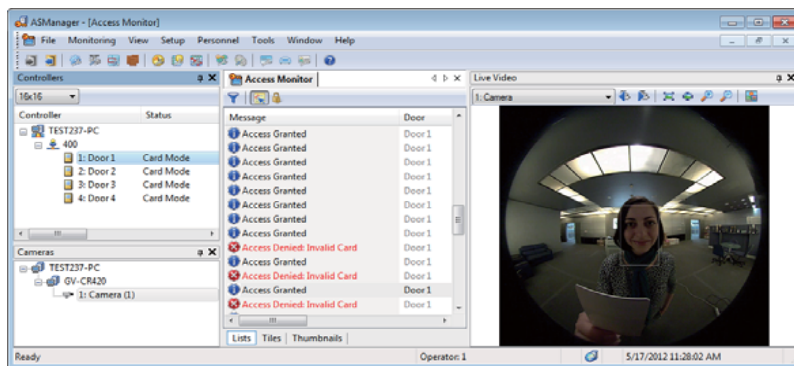
1. Click the **Door/Gate** tab in the Controller Setup dialog box.
2. In the Camera Mapping section, select **Set Camera Mapping** and click the first **Arrow** button.



3. To connect the camera reader to the GV-ASManager, use one of these ways:
 - Click **Add**, select the type of the IP device, and enter its IP address and login information.
 - Click **Search** to detect all GeoVision IP devices on the same LAN. After adding the camera reader, you must click the **Modify** button to enter its login ID and password.

4. Expand the Host folder listed in the DVR List, select a camera reader and click **OK**.
5. To map a second camera reader to the door, click the second **Arrow** button and repeat the steps above
6. Click **OK** and return to the main screen.

You can watch live view from the Camera Reader and monitor the access activities of the door at the same time. When a compatible but not enrolled card is swiped, you can right-click the “Access Denied: Invalid Card” message and select **New/Edit Card** to enroll the card. For details on enrolling cards, refer to the *Setting Cards* section in the *GV-ASManager User’s Manual*.



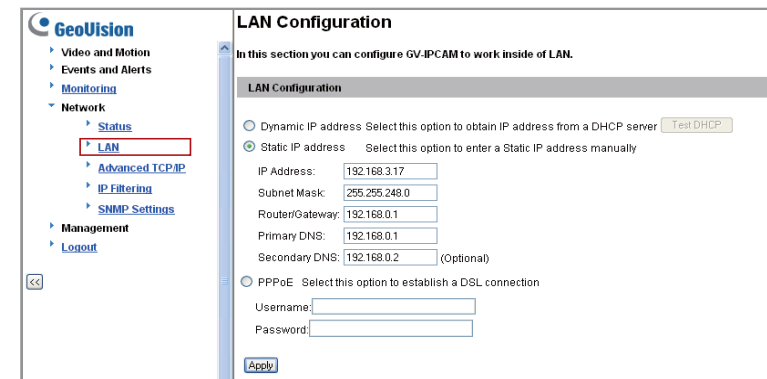
Once installed, your GV-Camera Reader is accessible on a network. Make sure your PC has good network connection, and meet this system requirement:

- Microsoft Internet Explorer 7.x or later

Note: Additional settings are required for Microsoft Internet Explorer 8.0 or later. Please refer to *Settings for Internet Explorer 8, Appendix A, GV- Camera Reader User Manual*.

The camera reader has a default IP address of 192.168.0.10, but when it connects to LAN with a DHCP server, a dynamic IP address will be assigned instead of 192.168.0.10. If no DHCP server exists, the default IP address will be applied and you can follow the steps below to assign a static IP address.

1. Open your web browser, and type the default IP address: **http://192.168.0.10**. The computer must be under the same network as the camera reader.
2. In both Login and Password fields, type the default value **admin**. Click **Apply**.
3. In the left menu, select **Network** and then **LAN** to begin the network settings.



7 The Web Interface

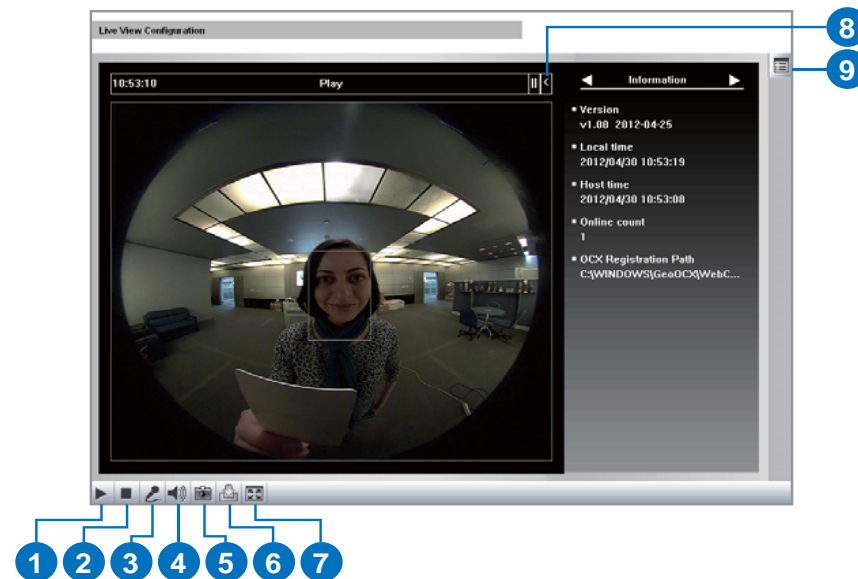
4. Select **Static IP address**. Type IP Address, Subnet Mask, Router/Gateway and Primary DNS.
5. Click **Apply**.
6. To allow updating of images in Microsoft Internet Explorer, you must set your browser to allow ActiveX Controls and perform a one-time installation of GeoVision's ActiveX component onto your computer.

IMPORTANT:

- If **Dynamic IP Address** or **PPPoE** is enabled, you need to know which IP address the camera reader will get from the DHCP server or ISP to log in. If the camera reader is installed in a LAN, use the GV-IP Device Utility to look up its current dynamic IP address. See *Checking the Dynamic IP Address*, Chapter 3, *GV-Camera Reader User's Manual*.

If the camera reader uses a public dynamic IP address via PPPoE, use the Dynamic DNS service to obtain a domain name linked to the camera reader's changing IP address first. For dynamic DNS server settings, see *Advanced TCP/IP*, Chapter 5, *GV-Camera Reader User's Manual*.

- If **Dynamic IP Address** or **PPPoE** is enabled and you cannot access the camera reader, you may have to reset it to factory default settings and perform the network settings again. Refer to section 9 in the Quick Start Guide to see how to restore to factory default settings.



No.	Name	Function
1	Play	Plays live video.
2	Stop	Stops playing video.
3	Microphone	Talks to the surveillance area from the local computer.
4	Speaker	Listens to the audio around the camera.
5	Snapshot	Takes a snapshot of live video.
6	File Save	Records live video to the local computer.
7	Full Screen	Switches to full screen view. Right-click the image to have these options: Snapshot, Resolution, PIP, PAP, GPS and Google Maps .
8	Show System Menu	Brings up these functions: Alarm Notify, Video and Audio Configuration, Remote Config, Show Camera Name and Image Enhance .
9	Control Panel	Shows camera information, video settings, audio data rate, images captured upon motion and GPS location of the camera reader. Also allows you to adjust image quality and install programs from the hard drive.

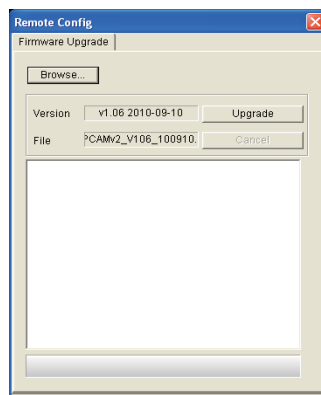
8 Upgrading System Firmware

GeoVision periodically releases updated firmware on the website. Follow the steps below to load the new firmware into the camera reader.

IMPORTANT:

- While the firmware is being updated, the power supply and network connection must not be interrupted.
- Before upgrading firmware, stop connection to GV-System, Center V2, VSM and RTSP.

1. In the Live View window, click the **Show System Menu** button  on the right and select **Remote Config**.



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

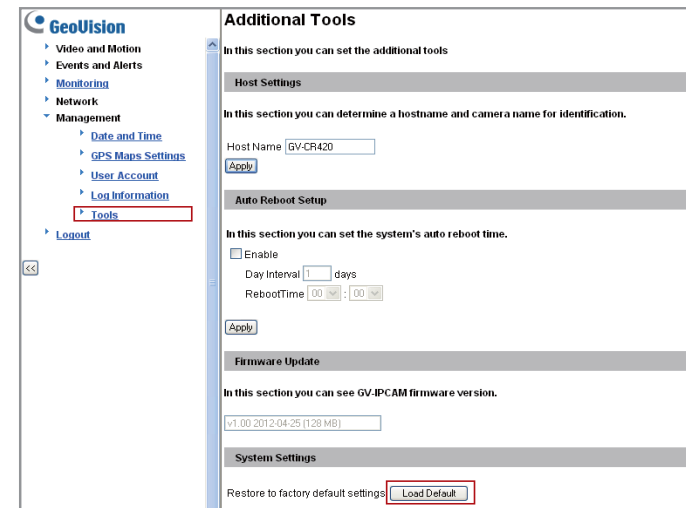
WARNING: The interruption of power supply during updating causes not only update failures but also damages to your camera. In this case, please contact your sales representative and send your device back to GeoVision for repair.

9 Restoring to Factory Default Settings

You can restore the camera reader to factory default settings using the Web interface or directly on the camera reader.

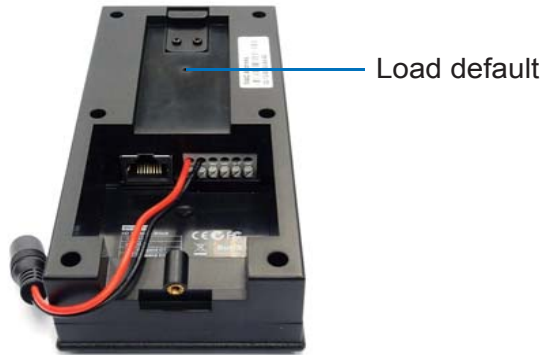
Using the Web Interface

1. In the left menu, select **Management** and select **Tools**.
2. Under the **System Settings** section, click the **Load Default** button.

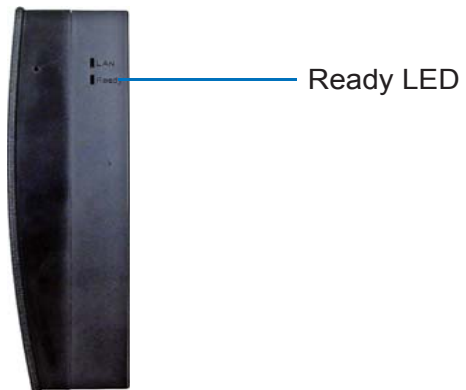


Directly on the Camera Reader:

1. Unplug the power cable.
2. Use a pointy object such as the tip of a pen to hold down the **Load default** button while plugging the power cable.



3. Wait until the ready LED blinks twice to release the **Load default** button. The process takes about 35 seconds.



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