



# Firmware Upgrade Instructions

## for GV-AS / EV Controllers

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### Applied to

GV-AS / EV Controllers

### Summary

The firmware upgrade method varies depending on the controller models and firmware versions.

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**IMPORTANT:** Users must use GV-IP Device Utility V8.8.0 or later when upgrading controller firmware via GV-IP Device Utility.

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## 1. For GV-AS 21 / 41 / 81 series Controller

### 1.1 Firmware V2.00 ~ V2.21

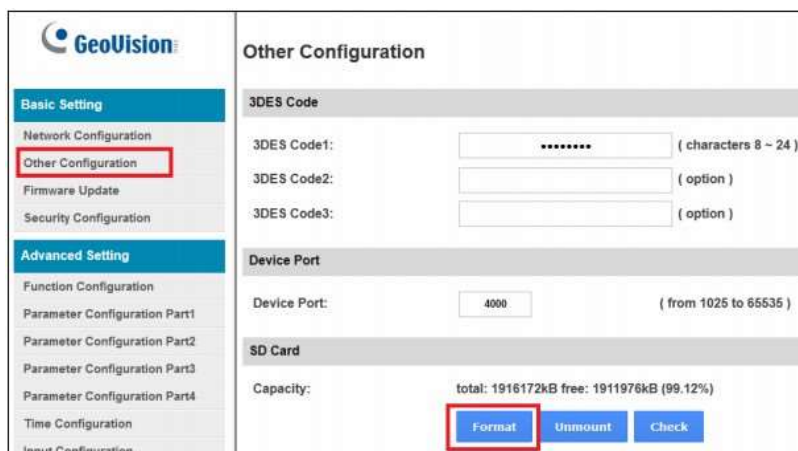
For **GV-AS21 / 41 / 81** series Controller of firmware **V2.00 ~ V2.21**, follow the steps below to upgrade it to the latest firmware.

1. First, allow the GV-AS21 / 41 / 81 series Controller of firmware V2.00 ~ V2.21 to establish a stable network connection with **GV-ASManager V5.3.0** for access log synchronization.
  - A. Once properly synchronized, any new card swipe events shall be displayed on the **Access Monitor** window of your GV-ASManager V5.3.0.
2. Back up the data from the SD Card of the GV-AS21 / 41 / 81 series Controller:
  - A. First, disconnect the controller from its power source.
  - B. Remove the SD card from the controller and insert it into a PC.
  - C. Back up all of the files within the SD card into the PC, and then reinsert the SD card back into the controller.
  - D. Reconnect the controller to its power source.
3. Download the latest firmware of GV-AS21 / 41 / 81 series from our website:
  - For **GV-AS210 / 2110 / 2120**, click [here](#).
  - For **GV-AS410 / 4110 / 4111**, click [here](#).
  - For **GV-AS810 / 8110 / 8111**, click [here](#).
4. Unzip and install the firmware into the controller using its Web interface or GV-IP Device Utility.

GV-AS Controller	Firmware Version	Upgrade To...	Upgrade Method
210 / 2110 / 2120	V2.00 ~ V2.21	V2.31 or later	Through GV-IP Device Utility
410 / 4110 / 4111			or
810 / 8110 / 8111			Through GV-Web Browser



5. After the controller is upgraded, reformat the SD card of the controller via its Web interface, as illustrated below.



The screenshot shows the GeoVision web interface. On the left is a navigation menu with 'Basic Setting' and 'Advanced Setting' sections. 'Other Configuration' is selected under 'Basic Setting'. The main content area is titled 'Other Configuration' and contains three sections: '3DES Code' with three input fields, 'Device Port' with a dropdown menu, and 'SD Card' with capacity information and three buttons: 'Format', 'Unmount', and 'Check'. The 'Format' button is highlighted with a red rectangle.

6. Once the SD card is reformatted, your controller has been upgraded successfully.

## 1.2 Firmware V1.22 ~ V1.41

For **GV-AS21 / 41 / 81** series Controller of firmware **V1.22 ~ V1.41**, follow the steps below to upgrade it to the latest firmware.

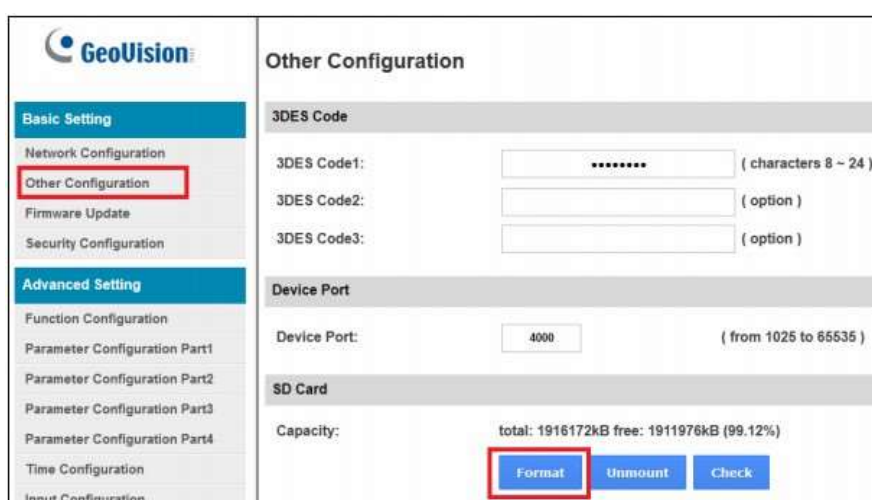
1. First, allow the GV-AS21 / 41 / 81 series Controller of firmware V1.22 ~ V1.41 to establish a stable network connection with **GV-ASManager V4.4.3** for access log synchronization.
  - A. Once properly synchronized, any new card swipe events shall be displayed on the **Access Monitor** window of your GV-ASManager V4.4.3.
2. Back up the data from the SD Card of the GV-AS21 / 41 / 81 series Controller:
  - A. First, disconnect the controller from its power source.
  - B. Remove the SD card from the controller and insert it into a PC.
  - C. Back up all of the files within the SD card into the PC, and then reinsert the SD card back into the controller.
  - D. Reconnect the controller to its power source.
3. Download the latest firmware of GV-AS21 / 41 / 81 series from our website:
  - For **GV-AS210 / 2110 / 2120**, click [here](#).
  - For **GV-AS410 / 4110 / 4111**, click [here](#).
  - For **GV-AS810 / 8110 / 8111**, click [here](#).



- Unzip and install the firmware into the controller using its Web interface.

GV-AS Controller	Firmware Version	Upgrade To...	Upgrade Method
210 / 2110 / 2120	V1.22 ~ V1.41	V2.31 or later	Through GV-Web Browser
410 / 4110 / 4111			
810 / 8110 / 8111			

- After the controller is upgraded, reformat the SD card of the controller via its Web interface, as illustrated below.



The screenshot shows the GeoVision web interface. On the left is a navigation menu with 'Basic Setting' and 'Advanced Setting' sections. 'Other Configuration' is selected under 'Basic Setting'. The main content area is titled 'Other Configuration'. It contains sections for '3DES Code' (with three input fields), 'Device Port' (with a dropdown set to 4000), and 'SD Card'. The 'SD Card' section shows 'Capacity: total: 1916172kB free: 1911976kB (99.12%)'. Below this, there are three buttons: 'Format' (highlighted with a red box), 'Unmount', and 'Check'.

- Once the SD card is reformatted, your controller has been upgraded successfully. It can now be used to manage access control by **GV-ASManager V5.3.0 or later**.
  - To download and upgrade your GV-ASManager to V5.3.0 or later, click [here](#).

### 1.3 Firmware V1.00 ~ V1.21

For **GV-AS21 / 41 / 81** series Controller of firmware **V1.00 ~ V1.21**, follow the steps below to upgrade it to the latest firmware.

- For GV-AS21 / 41 / 81 series Controller of firmware V1.00 ~ V1.21, you must upgrade it to **V1.22** before you can upgrade it to later versions.

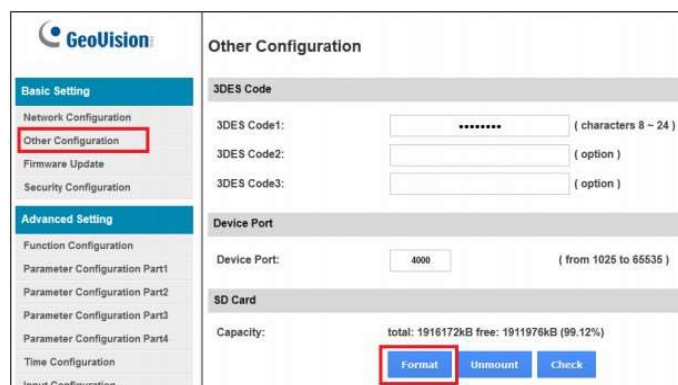
GV-AS Controller	Firmware Version	Upgrade To...	Upgrade Method
210 / 2110 / 2120	V1.00 – V1.21	<b>V1.22</b>	Through GV-Web Browser
410 / 4110 / 4111		(contact our Support team for the download link)	
810 / 8110 / 8111			



2. After upgrading to **Firmware V1.22**, allow the GV-AS21 / 41 / 81 series Controller to establish a stable network connection with **GV-ASManager V4.4.3** for access log synchronization.
  - A. Once properly synchronized, any new card swipe events shall be displayed on the **Access Monitor** window of your GV-ASManager.
3. Back up the data from the SD Card of the GV-AS21 / 41 / 81 series Controller:
  - A. First, disconnect the controller from its power source.
  - B. Remove the SD card from the controller and insert it into a PC.
  - C. Back up all of the files of the SD card into the PC, and then reinsert the SD card back into the controller.
  - D. Reconnect the controller to its power source.
4. Download the latest firmware of GV-AS21 / 41 / 81 series from our website:
  - For **GV-AS210 / 2110 / 2120**, click [here](#).
  - For **GV-AS410 / 4110 / 4111**, click [here](#).
  - For **GV-AS810 / 8110 / 8111**, click [here](#).
5. Unzip and install the firmware into the controller using its Web interface.

GV-AS Controller	Firmware Version	Upgrade To...	Upgrade Method
210 / 2110 / 2120	V1.22	V2.31 or later	Through GV-Web Browser
410 / 4110 / 4111			
810 / 8110 / 8111			

6. After the controller is upgraded, reformat the SD card of the controller via its Web interface, as illustrated below.



The screenshot shows the 'Other Configuration' page in the GV-ASManager web interface. On the left sidebar, 'Other Configuration' is selected under 'Basic Setting'. The main content area shows fields for '3DES Code' (Code1, Code2, Code3) and 'Device Port'. Below these is the 'SD Card' section, which displays the capacity: 'total: 1916172kB free: 1911976kB (99.12%)'. At the bottom of this section, there are three buttons: 'Format' (highlighted with a red box), 'Unmount', and 'Check'.

7. Once the SD card is reformatted, your controller has been upgraded successfully. It can now be used to manage access control by **GV-ASManager V5.3.0 or later**.
  - A. To download and upgrade your GV-ASManager to V5.3.0 or later, click [here](#).



## 2. For GV-EV48 Controller

### 2.1 Firmware V1.43 ~V2.30

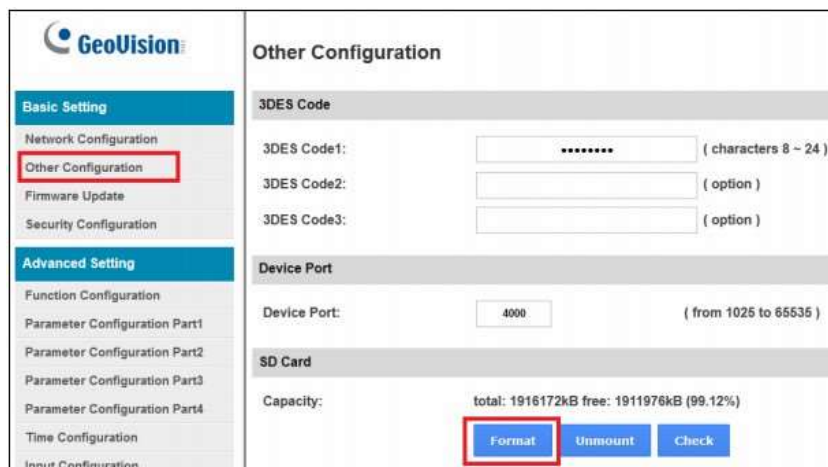
For GV-EV48 Controller of firmware **V1.43 ~ V2.30**, follow the steps below to upgrade it to the latest firmware.

1. First, allow the GV-EV48 Controller of firmware V1.43 ~ V2.30 to establish a stable network connection with **GV-ASManager V5.3.0** for access log synchronization.
  - A. Once properly synchronized, any new card swipe events shall be displayed on the Access Monitor window of your GV-ASManager V5.3.0.
2. Back up the data from the SD Card of the GV-EV48 Controller:
  - A. First, disconnect the controller from its power source.
  - B. Remove the SD card from the controller and insert it into a PC.
  - C. Back up all of the files within the SD card into the PC, and then reinsert the SD card back into the controller.
  - D. Reconnect the controller to its power source
3. Download the latest firmware of GV-EV48 Controller from our [website](#).
4. Unzip and install the firmware into the controller using its Web interface or GV-IP Device Utility.

GV-Controller	Firmware Version	Upgrade To...	Upgrade Method
EV48	V1.43 ~ V2.30	V2.31 or later	Through GV-IP Device Utility or Through GV-Web Browser



- After the controller is upgraded, reformat the SD card of the controller via its Web interface, as illustrated below.



The screenshot shows the GeoVision Web interface. On the left is a navigation menu with 'Basic Setting' and 'Advanced Setting' sections. 'Other Configuration' is selected under 'Basic Setting'. The main content area is titled 'Other Configuration' and contains three sections: '3DES Code' with three input fields, 'Device Port' with a dropdown set to '4000', and 'SD Card'. The 'SD Card' section shows 'Capacity: total: 1916172kB free: 1911976kB (99.12%)' and three buttons: 'Format', 'Unmount', and 'Check'. The 'Format' button is highlighted with a red box.

- Once the SD card is reformatted, your controller has been upgraded successfully.

## 2.2 Firmware V1.10 ~ V1.41

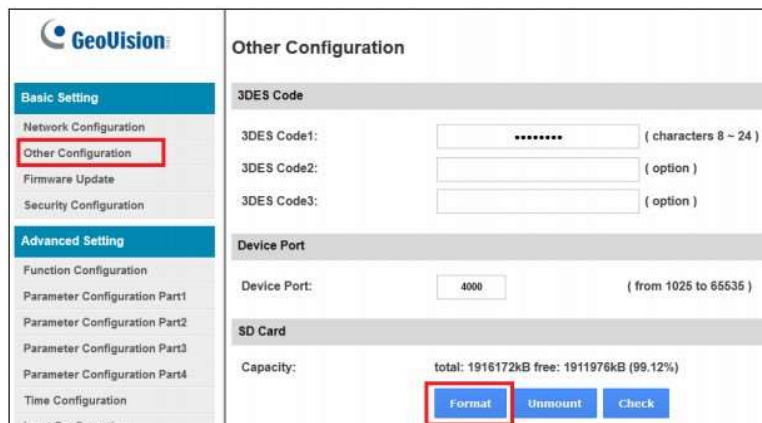
For GV-EV48 Controller of firmware **V1.10 ~ V1.41**, follow the steps below to upgrade it to the latest firmware.

- First, allow the GV-EV48 Controller of firmware **V1.10 ~ V1.41** to establish a stable network connection with **GV-ASManager V4.4.3** for access log synchronization.
  - Once properly synchronized, any new card swipe events shall be displayed on the **Access Monitor** window of your GV-ASManager V4.4.3.
- Back up the data from the SD Card of the GV-EV48 Controller:
  - First, disconnect the controller from its power source.
  - Remove the SD card from the controller and insert it into a PC.
  - Back up all of the files within the SD card into the PC, and then reinsert the SD card back into the controller.
  - Reconnect the controller to its power source.
- Download the latest firmware of GV-EV48 Controller from our [website](#).
- Unzip and install the firmware into the controller using its Web interface.

GV-Controller	Firmware Version	Upgrade To...	Upgrade Method
EV48	V1.10 ~ V1.41	V2.31 or later	Through GV-Web Browser



5. After the controller is upgraded, reformat the SD card of the controller via its Web interface, as illustrated below.



The screenshot shows the GeoVision Web interface. On the left is a navigation menu with 'Basic Setting' and 'Advanced Setting' sections. 'Other Configuration' is selected under 'Basic Setting'. The main area is titled 'Other Configuration' and contains three sections: '3DES Code' with three input fields, 'Device Port' with a dropdown set to '4000', and 'SD Card'. The 'SD Card' section shows 'Capacity: total: 1916172kB free: 1911976kB (99.12%)' and three buttons: 'Format' (highlighted with a red box), 'Unmount', and 'Check'.

6. Once the SD card is reformatted, your controller has been upgraded successfully. It can now be used to manage access control by **GV-ASManager V5.3.0 or later**.
  - A. To download and upgrade your GV-ASManager to V5.3.0 or later, click [here](#).

## 2.3 Firmware V1.00

For **GV-EV48** Controller firmware **V1.00**, follow the steps below to upgrade it to the latest firmware.

1. For GV-EV48 Controller of firmware V1.00, you must upgrade it to **V1.10** before you can upgrade it to later versions.

GV-Controller	Firmware Version	Upgrade To...	Upgrade Method
EV48	V1.00	<b>V1.10</b> (contact our Support team for the download link)	Through GV-Web Browser

2. After upgrading to **Firmware V1.10**, allow the GV-EV48 Controller to establish a stable network connection with **GV-ASManager V4.4.3** for access log synchronization.
  - A. Once properly synchronized, any new card swipe events shall be displayed on the **Access Monitor** window of your GV-ASManager.
3. Back up the data from the SD Card of the GV-EV48 Controller:
  - A. First, disconnect the controller from its power source.
  - B. Remove the SD card from the controller and insert it into a PC.

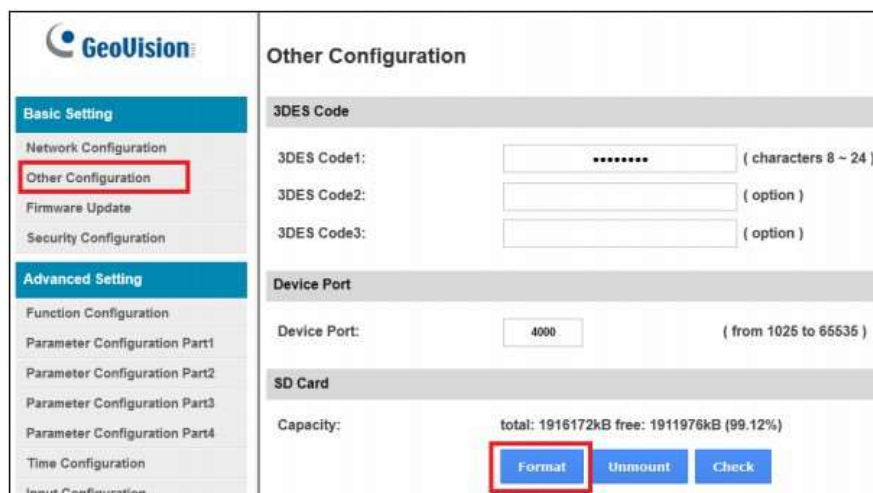




- C. Back up all of the files of the SD card into the PC, and then reinsert the SD card back into the controller.
- D. Reconnect the controller to its power source.
4. Download the latest firmware of GV-EV48 Controller from our [website](#).
5. Unzip and install the firmware into the controller using its Web interface.

GV-Controller	Firmware Version	Upgrade To...	Upgrade Method
EV48	V1.10	V2.31 or later	Through GV-Web Browser

6. After the controller is upgraded, reformat the SD card of the controller via its Web interface, as illustrated below.



The screenshot shows the GeoVision Web interface. On the left is a navigation menu with 'Basic Setting' and 'Advanced Setting' sections. 'Other Configuration' is selected under 'Basic Setting'. The main content area is titled 'Other Configuration' and contains three sections: '3DES Code' with three input fields, 'Device Port' with a dropdown menu set to '4000', and 'SD Card'. The 'SD Card' section shows the capacity as 'total: 1916172kB free: 1911976kB (99.12%)' and has three buttons: 'Format', 'Unmount', and 'Check'. The 'Format' button is highlighted with a red box.

7. Once the SD card is reformatted, your controller has been upgraded successfully. It can now be used to manage access control by **GV-ASManager V5.3.0 or later**.
  - A. To download and upgrade your GV-ASManager to V5.3.0 or later, click [here](#).

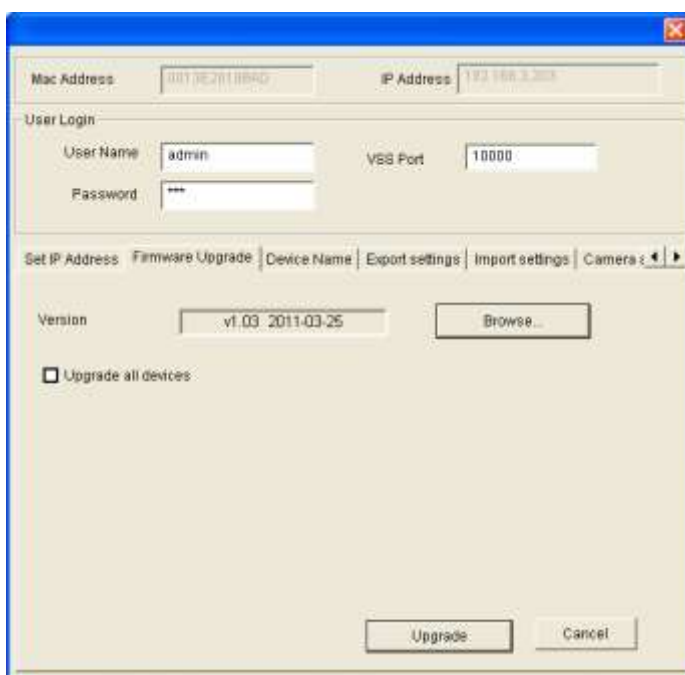


### 3. How to Upgrade

According to the abovementioned procedures and tables, there are two methods to upgrade your Controller's firmware version: from the Web browser and GV-IP Device Utility. Use the appropriate upgrade method for your current firmware version and follow the instructions in that section below.

#### 3.1 From GV-IP Device Utility

1. Install **GV-IP Device Utility** from the [link](#).
2. Locate your GV-Controller from the list.
3. Double click that controller. When the dialog box appears, click the **Firmware Upgrade** tab.



4. Click the **Browse** button to locate the firmware file saved at your local computer.



### 3.2 From the Web Browser

1. Go to the Web interface of your GV-Controller.
2. In the left menu, click **Firmware Update**. This page appears.

The screenshot shows the 'Firmware Update' web page. At the top, there is a red banner with white text that reads: 'Firmware Update. After pressing the Update button, please wait while the update request is being processed. After update is completed, the device will reboot automatically. You can re-login afterwards.' Below the banner, there is a 'Select Firmware:' label followed by a text input field and a 'Browse...' button. Underneath this is an orange 'Upload' button. At the bottom, there is an 'Update State:' label with a progress bar, and an 'Update Process:' label with a progress bar showing 0% and a series of 15 empty square boxes for a progress indicator.

3. Click the **Browse...** button to upload the firmware file.
4. Click the **Upload** button. When the Update Process reaches 100%, a dialog box appears and asks you to reboot the system.



5. Click **OK**. After finishing the Reboot operation, your firmware upgrade is complete.