Firmware Upgrade Instructions

for GV-AS / EV Controllers

Article ID: GV4-18-07-12-a
Release Date: 7/12/2018
Revision Date: 10/16/2026

Applied to

GV-AS / EV Controllers

Summary

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

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1. For GV-AS 21 / 41 / 81 Series Controller

1.1 Firmware V4.00

Read carefully before proceeding with the upgrade.

1. **System Compatibility:** Firmware V4.00 for GV-AS21 / 41 / 81 series controllers requires GV-ASManager V6.4.0.
2. **Required Upgrade Sequence:** Upgrading to Firmware V4.00 without updating the GV-ASManager to V6.4.0 will cause the system to fail to log access events.
3. **Card Capacity Reduction:** Upgrading to Firmware V4.00 / Software V6.4.0 reduces total card capacity from 100,000 to 40,000. Verify that your system has 40,000 or fewer active card IDs before upgrading; **any card ID beyond 40,000 limit will be removed.**

1.2 Firmware V2.00 ~ V2.21

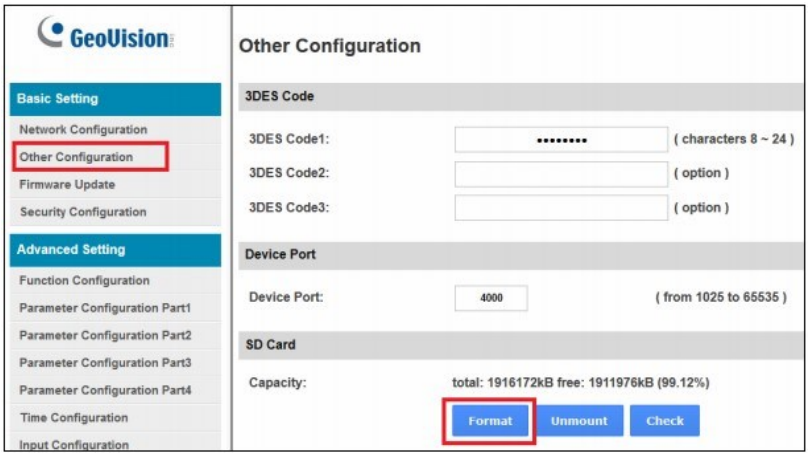
For **GV-AS21 / 41 / 81** series Controller of firmware **V2.00 ~ V2.21**, follow the steps below to upgrade it to the latest firmware.

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. 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 or Through GV-Web Browser
410 / 4110 / 4111			
810 / 8110 / 8111			

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



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

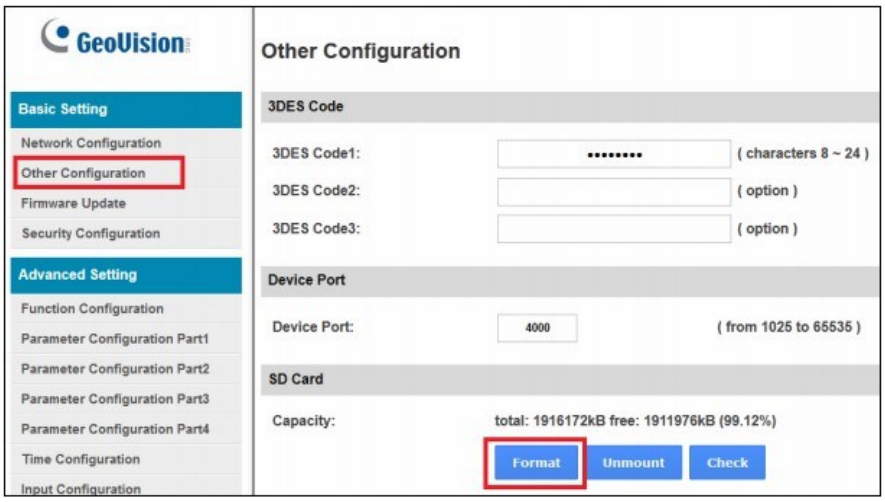
1.3 Firmware V1.22 ~ V1.41

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. 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.

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			

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



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.

1.4 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.

1. 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	**V1.22** (contact our Support team for the download link)	Through GV-Web Browser
410 / 4110 / 4111			
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. Disconnect the controller from its power source.

B. Remove the SD card from the controller and insert it into a PC.

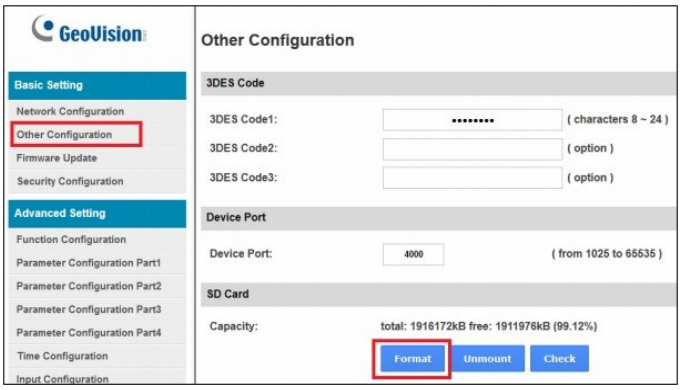
C. Back up all of the files of the SD card into the PC, and then reinsert the SD card back into the controller.

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.



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

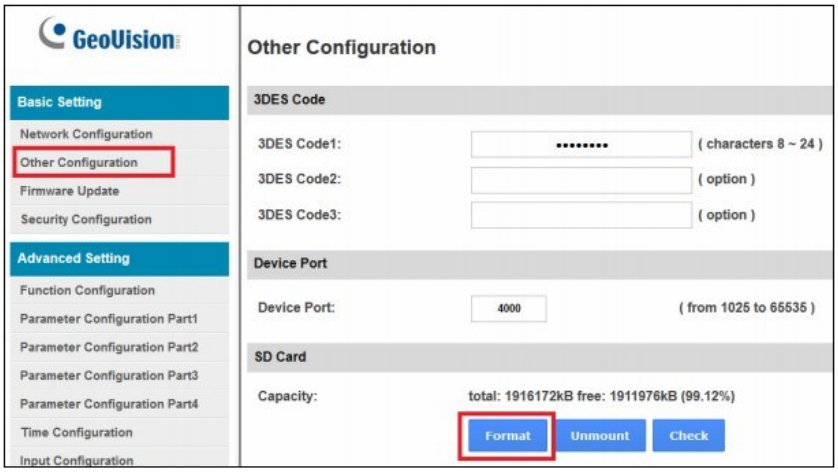
2.1 Firmware V1.43 ~V2.30

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. 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

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



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

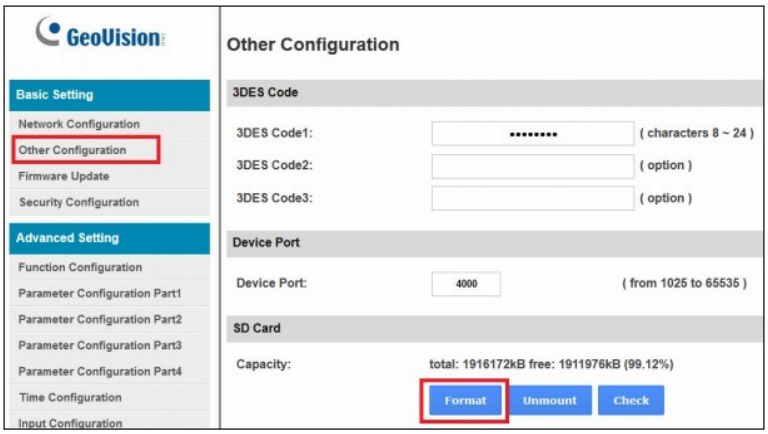
2.2 Firmware V1.10 ~ V1.41

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

1. 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.
   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-EV48 Controller:
   A. 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.

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.



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	**V1.10** (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. 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.

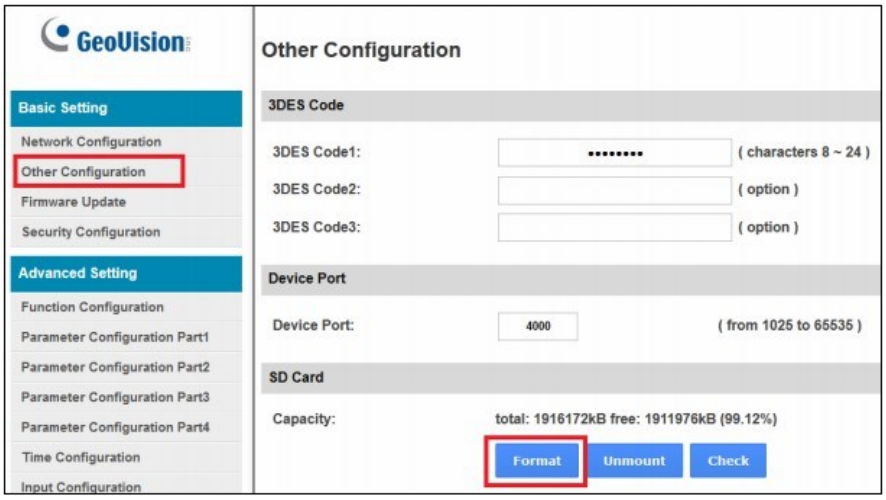
D. Reconnect the controller to its power source.

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.



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**.

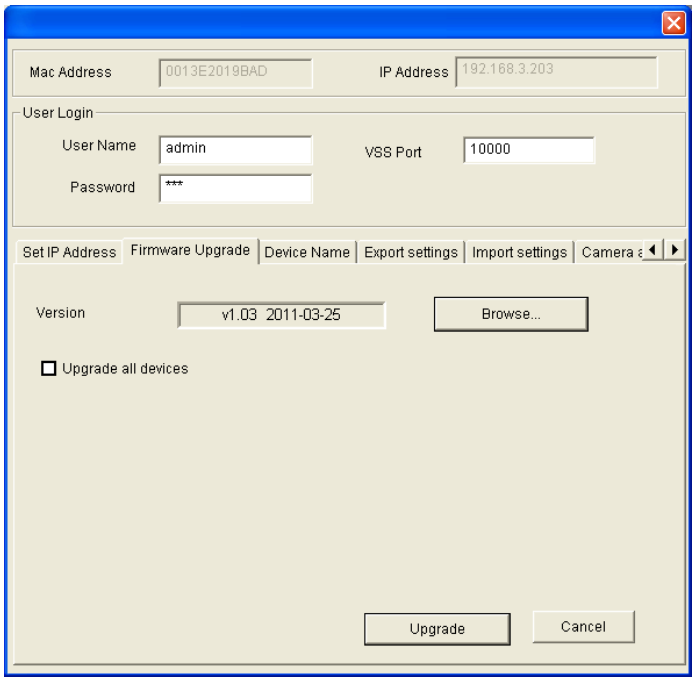
A. To download and upgrade your GV-ASManager to V5.3.0 or later, click here.

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

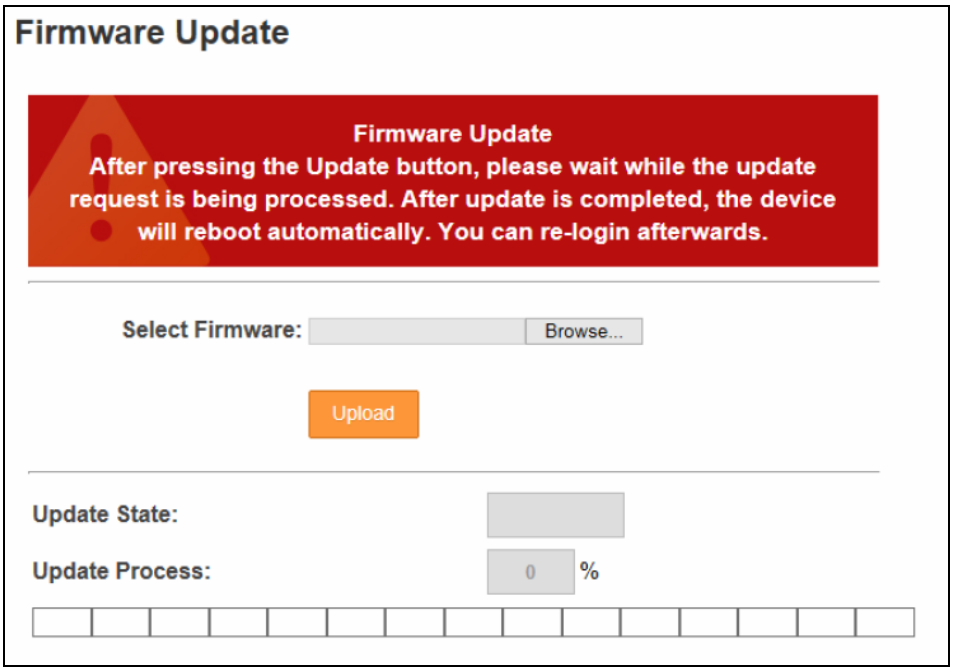
1. Install **GV-IP Device Utility** from our website.
2. Locate your GV-Controller from the list.
3. Double click that controller. When the dialog box appears, click the **Firmware Upgrade** tab.



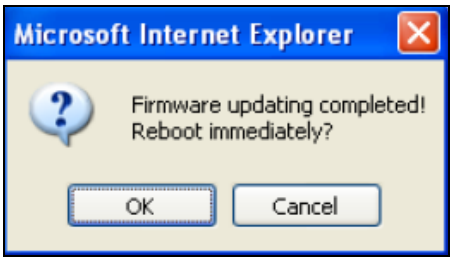
4. Click the **Browse** button to locate the firmware file saved at your local computer.

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.



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.