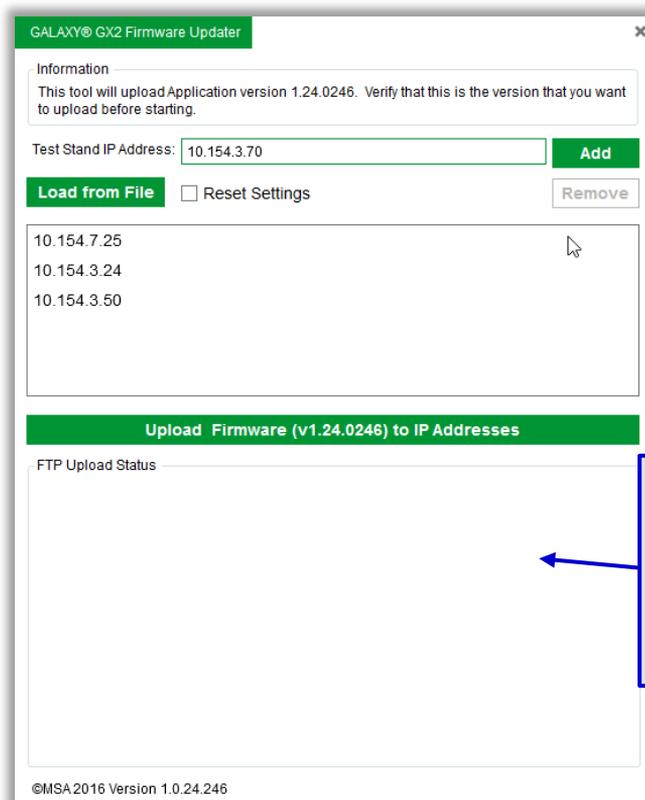


Method 1 - Rapid Upgrade - using the GALAXY Firmware FTP Updater application

 Requires networked GX2s that can be connected to, from the computer running this updater application.

The firmware can be uploaded to the test stands (to all simultaneously, in batches, or individually) using the GALAXY GX2 Firmware FTP Update Tool. This is the recommended method when the GX2 banks are networked.

- 1) Download: https://softwareupdates.msasafety.com/SoftwareUpdates/Releases/GX2Firmware/GALAXY_GX2_Firmware_Updater_v1.24.0246.exe
- 2) Launch the **GALAXY GX2 Firmware Updater_v1.24.0246.exe**
- 3) Enter the static IP address of each GX2 unit, then click "ADD" [to list] after each, to build the list
 - If you have a comma separated list of IP addresses, the "Load From File" button can be used
- 4) Click on "Upload Firmware (v1.24.0246) to IP Addresses" to start updating.



This "FTP Upload Status" box will show the progress of the update for each unit in the list.

When all updates are complete, it will prompt you to reboot all units.

- 5) When they are completed: Power cycle all GX2 units.

Method 2 - Manual Upgrade - a GX2 with a Digital Secure USB Key



- ▶ ONLY the MSA **Digital Secure USB Key** (Part Number **10123937**) can upgrade GX2 Firmware. No other USB stick will work.
- ▶ Requires the separation of all GX2 units if they are banked together.

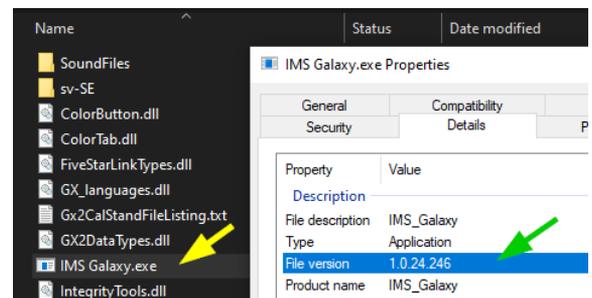


A. Prepare the Digital Secure USB Key:

KEY CONCEPT: The new firmware package must be placed at the **root directory of the MSA Digital Secure USB Key** in a folder called **"GX2"**, In this example: "E:\GX2":

- 1) Using the **Windows File Explorer**, navigate to the **Digital Secure USB Key's** directory **ROOT**.
- 2) If a "GX2" folder **already exists** on the USB Key's root directory, **delete it**.
- 3) Download: <https://softwareupdates.msasafety.com/SoftwareUpdates/Releases/GX2Firmware/GX2.zip>
- 4) Un-zip the "GX2" folder to a known file folder location
- 5) Right-Click the "GX2" folder and choose **"Copy"**
- 6) Navigate back to the **root directory** of the USB key
- 7) Right-Click in the empty space and **"Paste"**
- 8) Confirm the successful creation of the new firmware folder at "E:\GX2\" (where "E:" is the drive letter of the Digital Secure USB Key while its plugged into your computer):

- Open the folder, and
- **Right-click** the "IMS Galaxy.exe" file,
- Select **"Properties"** and
- on the **Details tab**, file version is **v1.24.0246**



- 9) Your Digital Secure USB Key is now ready to use for Firmware updating as described in **"B. Applying the Firmware to a GX2"**, process, below.

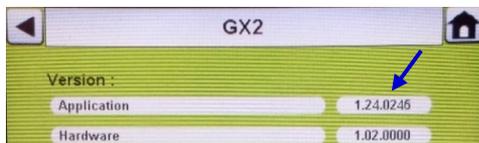
Method 2 (Continued) - Manual Upgrade - a GX2 with the MSA Digital Secure Key

B. Applying the Firmware to a GX2

- 1) **Power off all GX2 units** in the bank(s).
- 2) If there are **multiple GX2 test stands banked** together, **units will need to be separated** to permit access to each GX2 unit's USB port.
- 3) **Insert the Digital Secure USB Key** in the test stand's USB port.
- 4) **Power on** the test stand.
- 5) The Firmware will automatically boot-load onto the test stand. Loading will take about 1 minute.
- 6) When the test stand loads to the main screen
- 7) Remove the Digital Secure Key
- 8) Power cycle the GX2 by Un-Plugging it for 1 second, then plugging it back in.
- 9) Once the home screen loads, Press the MSA logo:



- 10) Verify the "Application" version is v1.24.0246



- 11) **Repeat the procedure** for each GX2.



Remove power from all test stands before re-attaching into a bank. Power up the test stands when all connections are completed.

Restoring the Digital Secure USB Key to normal operation state:

IMPORTANT: After Firmware updates are completed: **Delete the "GX2" Folder** from the (White) Digital Secure USB Key's root directory.

Otherwise the GX2 will boot-load the Firmware each time it is inserted resulting in delayed boot times, or possibly downgrading future Firmware versions..