How to Install a Firmware Update

Installing the latest firmware update on your GHv4 is quick and straightforward. You have two options:

Using the Golden Harvest Commander:

- Open the Golden Harvest Commander web app.
- Click on the "Check Firmware" button to download and install the update. New parameters of the general.txt and new UI sounds will be automatically added.

Manual Installation:

- Download the .bin firmware file and the new UI sounds, if available.
- Copy the files to your SD card.
- Add the new parameters to the general.txt, if available.
- Insert the SD card into your GHv4 and reboot the board.

Update Progress Indication:

During the update, the onboard status LED and any connected accent LEDs will pulse, gradually speeding up as the process nears completion.

Firmware Changelog GHv4

v0.9.9-23

Release Date: 10.06.2025

New Features:

- QuickConnect - Easily toggle wireless features with the power button:
    - Hold power button for 5 seconds to toggle Bluetooth.
    - Hold power button for 7.5 seconds to toggle WiFi.
    - Hold power button for 10 seconds to reboot and turn off both Bluetooth and WiFi.
    - Audio cues confirm each action.
    - Alternatively, Bluetooth and WiFi can still be controlled via the Saber Editor.
- WiFi and Bluetooth are no longer disabled when pressing the power button. They remain active after deep sleep and battery reinsertion.
- New "Disable WiFi" option available in the Saber Editor.
- Automatic deep sleep when WiFi or Bluetooth are enabled but not in use, based on the usual timeout.
- Upon WiFi connection, the board now announces its IP address via audio.
- IP address announcement can be interrupted by pressing the power button.
- New sounds indicate when the board is waiting for Bluetooth pairing and when pairing is successful. They can be optionally disabled by setting the new parameter ble_pairing_sounds in the general.txt file to 0.
- If sound files are missing, the board plays a dedicated "sound file missing" audio cue.
- New button_reverse parameter in general.txt allows swapping power and auxiliary button behavior.

- Preliminary support for the upcoming Blade Canvas feature is included—full functionality and optimized styles will follow in the next update.

Bug Fixes:

- Fixed an issue where ignition and retraction speeds set in the Saber Editor applied globally instead of only to the selected sound font.
- Fixed an issue where twist ignition and rectraction might not work under certain conditions. Note: independent of that, it is recommended to increase the value of the twist_protection parameter to at least 3000 both in the general.txt file and in the override-general.txt file.
- Fixed an issue where deleting the override-general.txt in the Golden Harvest Commander didn't work.
- Fixed inverted controls for orientation=1.

To make full use of the new features, be sure to also add the new UI sounds included in the download package.

You can download the firmware update and the updated UI sound package here:
https://drive.google.com/file/d/1l3PLzXBuckcOVHYfpcKs-maft1ojZ7zM/view?usp=sharing

v0.9.7-6

Release Date: 18.02.2025

New Features:

- Boot sound can now be interrupted by pressing the power button.
- Sound font name is displayed in the ForceSync app (*also requires a future ForceSync app update; the current version, which was released on 12/04/2024, does not yet support this feature*).
- Neopixel blade briefly flashes white after resetting the board by holding the power button for 10 sec.
- Significantly enhanced responsiveness when remotely controlling your saber via Bluetooth and WiFi.

Bug Fixes:

- Fixes accent profile selection on the fly.
- Resolves lockup, drag, and melt issues in the Golden Harvest Commander.
- Fixes playlist behavior for music tracks—music now progresses to the next track instead of looping.
- Correctly loads modified color profiles in the Saber Editor.
- Restoring modified color profiles in the Saber Editor now works properly.
- Fixes accent LED behavior after rebooting.
- Stopping background music in a two-button setup no longer triggers the sound menu accidentally.
- Resolves flickering of Neopixel blades and accent LEDs which could occur in specific situations.

You can download the firmware update here:
https://drive.google.com/file/d/1MtXO7BrzB-vNRLpIMqbUPOWDxLJFUGMU/view?usp=sharing

v0.7.4-12

Release Date: 04.01.2025

Bug Fixes:

- Resolve in-hilt LED issues.
- Fix potential flickering of LED4.
- Enable accent LEDs 8–10 to correctly indicate firmware update progress and Wi-Fi/Bluetooth connection.
- Prevent false charging sound triggers when Wi-Fi/Bluetooth is enabled with legacy charging detection.

You can download the firmware update here:
https://drive.google.com/file/d/10t0UEL7DViT3n_xFCFzu9Fng_F8mgRt4/view?usp=sharing

v0.7.4-1

Release Date: 11.12.2024

New Features:

- Low Battery Protection:
    - When the battery voltage is less than 2.65V, the firmware automatically enters deep sleep upon powering the board to minimize current drain. At this low voltage, playing a voltage-critical warning is not feasible because doing so would trigger the battery's built-in protection, cutting off the battery from the load and shutting down the board.
    - If you attempt to wake up the board by pressing the power button while the voltage is still below 2.65V, the onboard status LED and any connected accent LEDs will blink once before the board re-enters deep sleep. Once the battery voltage exceeds 2.65V, pressing the power button will wake up the board as expected.

Bug Fixes:

- The firmware will automatically use default parameter values if the settings.txt file is missing, ensuring the user interface sounds work even in this scenario.
- Sound fonts using non-GHv4 naming schemes are supported again. Nevertheless, for best performance and compatibility, we strongly recommend using the GHv4 naming scheme for all sound fonts. This ensures optimal functionality and minimizes potential issues.
- Installing UI sound packages via the web app works now.
- Avoid potential firmware crash when entering deep sleep.
- Automatically limit the Bluetooth name of the GHv4, which is set in the general.txt, to 9 characters.
- Save the Bluetooth and WiFi name of the GHv4 that is set in the ForceSync app.
- Fix low voltage warning.
- Fix accent LEDs 8 - 10.
- Audio Distortion Fix:
    - Resolved an issue where audio distortion sometimes occurred after disabling Bluetooth or WiFi by pressing the power button following remote control. The audio now functions correctly under these conditions.

You can download the firmware update here:

https://drive.google.com/file/d/1BlJyvXjtTO7mbSAKKZslOPaEBYWrA8OH/view?usp=sharing

v0.7.3-86

Release Date: 19.11.2024

- Initial public release of the GHv4.