

Firmware Upgrade History for CEM40 and GEM45

V20190221 CEM40 Hand controller firmware initial release
V20190220 CEM40 Mount firmware package initial release

V20190422 GEM45 Mount firmware package initial release
V20190429 Firmware upgrade for HC

New:

- Added GEM45 mount
- Addressed GPS rollover bug

V20191018 Mount firmware upgrade

Improvement:

- Tracking performance improvement under heavy payload for EC mount

Bug fixed:

- Meridian flip limit setting for GEM45

V20200113 Firmware upgrade for HC

Bug fixed:

- Fixed bug that customizing comet causes hand controller frozen.

V20210105 Firmware upgrade for HC

V20210105 Mount firmware upgrade

Major Changes:

- Now the control system has been moved to a new system. It uses the same command set as in CEM120/70 (Command Set V3.x)
- **Now the mount needs iOptron Commander 6.4.0.0 and above for computer controller.**

New Features:

- Added Maximum Slew Rate and other iOptron Commander related functions

Bug fixed:

- Fixed GPS/iStarFi hot swap issue
- Other small improvement

V20210106 Mount firmware upgrade (main)

Improvement:

- Minor performance improvement

V20210420 Mount firmware upgrade

Major Changes:

- Firmware upgrade to cover new RA and DEC microprocessor
- Upgrade Utility 2.20 is needed.

FW210605 **Firmware package upgrade for mount and 8410 hand controller**
Main: V210605, RA: 210420, DEC: 210420, 8401HC: V210605

FW210420 **Firmware upgrade for 8407+ hand controller**
Matching 8407+ HC firmware: V210420

Changes:

- New 8410HC was introduced which does not have a 4P4C RS232 port. 8410 HC firmware will be included in the FW package and upgraded via mount connection
- iOptron Upgrade Utility V2.22 is needed

FW220301 **Firmware package upgrade for mount and 8410 hand controller**

Main: V210605, RA: 210420, DEC: 210420, 8410HC: V220301

Bug fixed:

- 8410 hand controller now slew the mount in both axes at the same time.

FW230305 **Firmware package upgrade for mount and 8410 hand controller**

Main: V230305, RA: 210420, DEC: 210420, 8410HC: V220301

Bug fixed:

- Minor bug related to GPS display.