

# iOptron HAE B&C Mount Firmware Upgrade

The firmware of an iOptron Strain Wave gear (SWG) mount is customer upgradable. The upgrading process is only supported by Windows. Please check iOptron's website, [www.iOptron.com](http://www.iOptron.com), under product page for the most up to date firmware.

**Please note:**

The HAE B&C mount has a built-in main board. It also has an **optional** 8411 OLED handset. Either firmware can be updated via the USB-C port on the mount base or handset, respectively.

To upgrade the firmware, you need some or all of the following software/hardware, depends on the upgrading you are performing:

- iOptron Upgrade Utility Program for the mount, currently V3.25
- Mount main board firmware;
- 8411 handset firmware, if you have one;
- PL2303 VCP (Virtual COM Port) driver if this is the first time connecting the mount to a computer.

## Step 1. Download files

Go to a related mount page. Download PL2303 VCP driver, iOptron Upgrade Utility and firmware. Save them on your computer desktop or a designated folder.

## Step 2. Install PL2303 VCP driver

If this is the first time you connect the mount to a computer, please run PL2303 VCP installer. If you've done firmware upgrade before or run the mount via iOptron Commander, you may skip this step.

## Step 3. Find the COM port number

Plug USB-C plug of a USB cable into the USB port on the mount base as shown below. Plug the USB A plug into any available USB port of the computer.








Click on Windows Device Manager to find the assigned COM port for the USB connection. Here the port # is COM5.

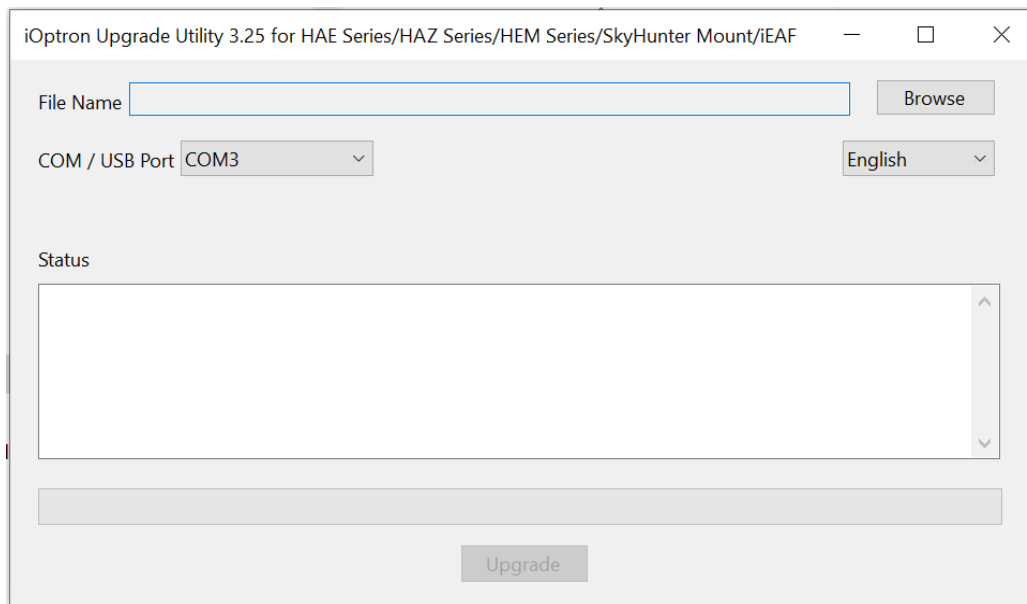


#### Step 4 Upgrade main board firmware

(1) Locate downloaded software and click on ***iOptronUpgradeUtility325.exe***.

Name	Date modified
 8411HC_HAEbc_V240510.bin	6/28/2024 8:46 AM
 HAEbc_FirmwareVersionHistory.pdf	6/28/2024 9:00 AM
 HAEbc_FW240510.bin	5/17/2024 9:48 AM
 HAESerBC_FirmwareUpgradeInstruction.pdf	6/28/2024 11:58 AM
 iOptronUpgradeUtility325.exe	4/22/2024 12:36 PM

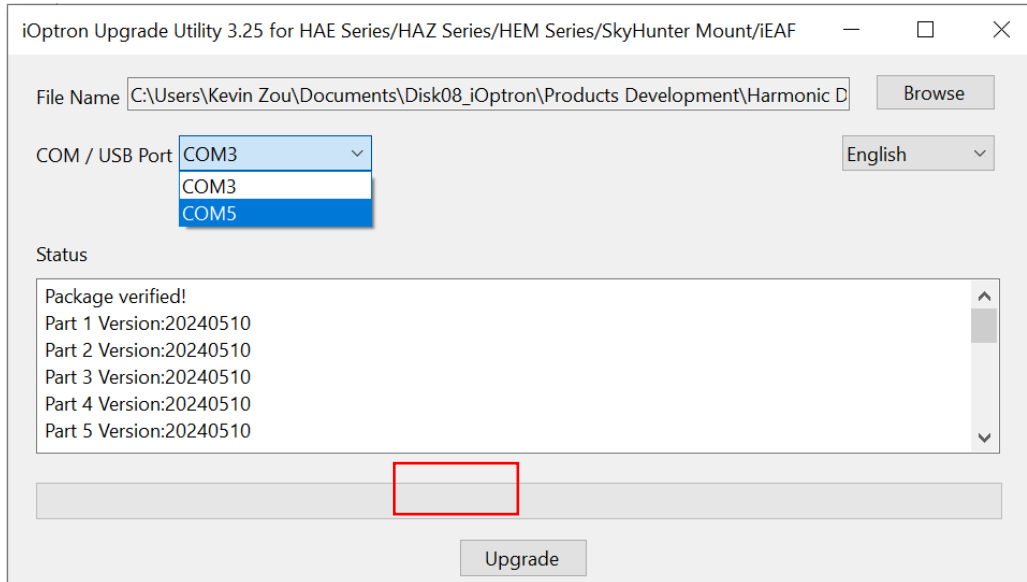
This will bring up the upgrade window:



(2) Click on **Browse** in iOptron Upgrade Utility window. Select the mount firmware package, such as HAEbc\_FW240510.bin, and click **Open**;

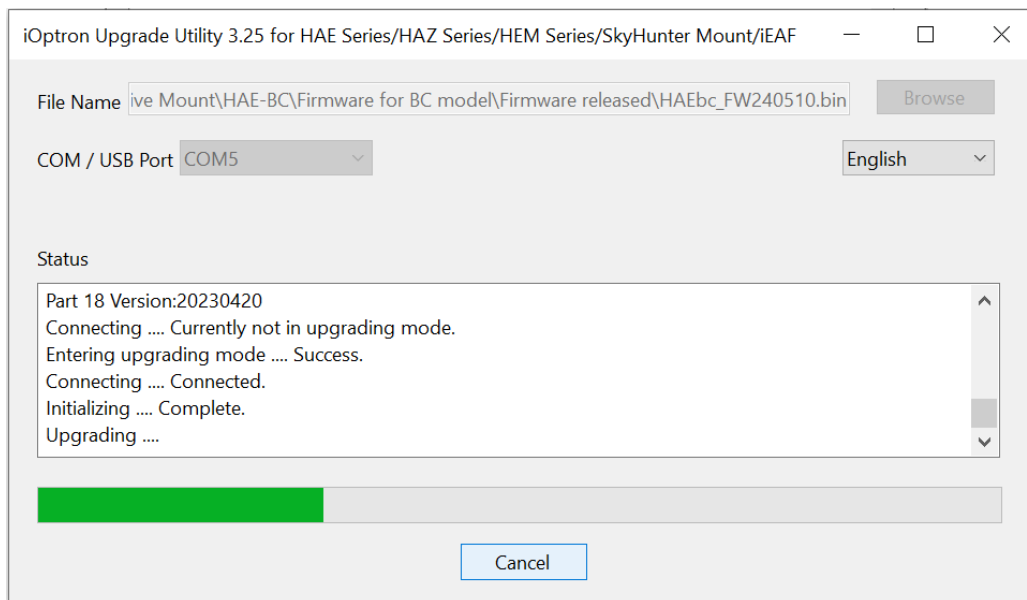


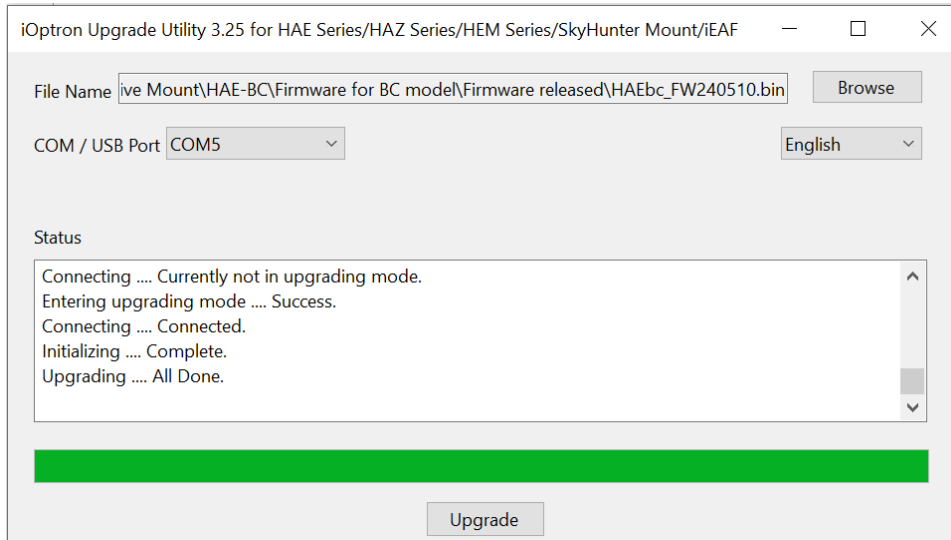
The **Package** and **Version** will be verified and displayed. Select the COM5 from **COM/USB Port** pull down menu.



(3) Click on **Upgrade** button to start firmware upgrade.

The Upgrade Utility will try to set the mount to upgrading mode and complete the firmware upgrade one by one.





- (4) Power cycle the mount. Check your firmware version after firmware upgrade is finished by press **MENU→Firmware Information**.
- (5) Exit the **Upgrade Utility** program.

### Step 5 Upgrade optional 8411 handset firmware

- (1) Plug the USB-C cable to bottom of the handset;
- (2) Power on the mount and check the COM port #. It should be differ from the main board;
- (3) Run **Upgrade Utility** again and select the correct COM port
- (4) Perform firmware upgrade

### Common errors during firmware upgrade:

- (1) COM port cannot be opened:
  - Bad USB cable
  - Wrong COM port is selected.
  - A mount is not connected.
  - Cable is not plugged in firmly.
  - PL2303 VCP driver is not installed.
- (2) Connection failed:
  - Mount power is not turned on;
  - Cable is not plugged in firmly;
  - Malfunctioned control board;
  - Wrong firmware selected.
- (3) Upgrade stopped in the middle or failed:
  - Cable is not plugged in firmly;
  - Cable is moved during process;

Contact [support@ioptron.com](mailto:support@ioptron.com) for technical support.