

## How to upgrade Solar tracker controller (USB version)

Driving electronic (firmware) in the solar tracker is **upgradable**. It means that we constantly improve the program, which is running in your product. Check on our web site <http://www.solar-motors.com/> for the latest version, tab »support« or direct path: <http://www.solar-motors.com/gb/support-d24.shtml>. If newer version exists, download and save zip file to your local disk. Unzip the file to a known location.

Normally you can update the firmware with the Helios analytics program. (Link to download helios analytics program: <http://www.solar-motors.com/files/Helios/Helios%20analytics.zip> )

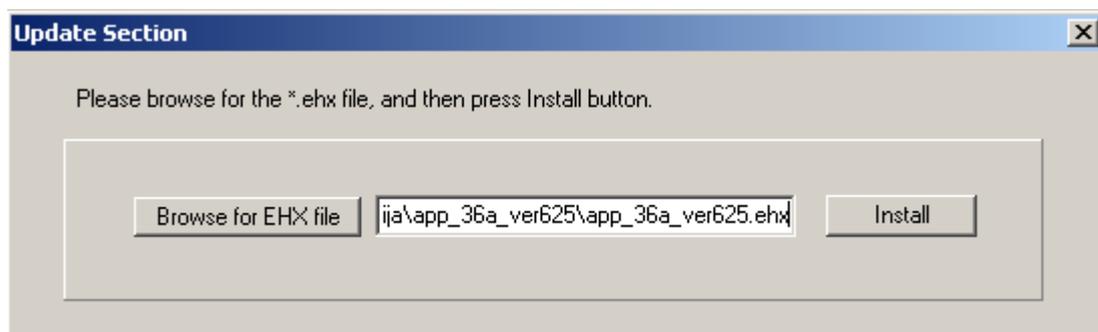
Update is available only through USB, update through RS485 is not possible

COM port number must be from COM2 to COM9. Other ports are not recognized. If your system picked another number for positioner, search on internet "how to change COM port number".

Update it by following steps below:

### Update

To carry out the operation you have to switch off power of solar tracker controller. USB cable has its own supply for upgrading. In Helios analytics program select menu Update, browse for latest downloaded upgradable file (suntracer.ehx) and press Install. Wait until transferring reaches 100%. Then close DOS prompt window and open COM in Helios analytics program again to continue. If update is successful, new number of FW version will be shown. After upgrade procedure make sure to replace all "-nan" fields with "0" (Zero), if you don't know the appropriate value. "-nan" fields can cause the system to malfunction.



```
C:\WINDOWS\system32\cmd.exe - update.
update v1.0 - Copyright (C) 2003
COM3 opened.
Transferring.. 32% done.
```

```
C:\WINDOWS\system32\cmd.exe
update v1.0 - Copyright (C) 2003
COM3 opened.
Transferring.. 100% done.
Target updated successfully.
```

**Note:** Described feature is available only for versions "B1" and higher. Lower versions need to be updated manually. See upgrading manuals below. Manual update is possible on new versions, too.

### Manuals for old boot loader releases:

1. **PC side:** you must have the following files:
  - "app\_36\_ver5.41.ehx or suntracer.ehx" (see note 1),
  - "app\_36\_ver5.41.bat" (see note 1) and
  - "update.exe".

Save them all in same folder, i.e. c:\your\_folder\

**2. Solar tracker controller side:**

Disconnect all power supplies from your controller of solar tracker. Push and hold "W" button (button to run motor OUT) and connect your solar tracker controller to your PC (on USB port) with USB cable, which was included by solar tracker (orange LED must light). Then release the button and orange LED will be flashing (time limited to 1 minute).

- 3. PC side:** While LED is still flashing, click on "app\_36c\_ver5.41.bat" file. You will be asked for used COM port (you can see it in device manager), write it and press enter. Transfer will begin, LED will turn off.
- 4.** At 100% upgrade is finished.

Do you have problems with upgrading?

Refer to [http://www.solar-motors.com/files/Helios/Problems\\_with\\_upgrading\\_-\\_solutions.pdf](http://www.solar-motors.com/files/Helios/Problems_with_upgrading_-_solutions.pdf)

**Note 1:** name.ehx or name.bat could be different. Described is just an example.

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