

Gyr Falcon S8000 / S4000 Pro Firmware Update Guide (Linux)

Preparation

Install dependencies

Following packages are required and must be installed before performing the update.

- Python 3
- python-pip
- python-venv

For example in Ubuntu, run:

```
sudo apt update
sudo apt install python3 python3-pip python3-venv
```

Create workspace for update

This creates a virtual Python environment and downloads required modules. Open a terminal and run:

```
mkdir gyr Falcon_update
cd gyr Falcon_update
python3 -m venv .
. bin/activate
python3 -m pip install ymodem
```

You can use the same environment for future firmware updates.

Perform the update

1. Download and unpack the firmware archive.
2. Open a terminal and activate the update workspace you created earlier (e.g. gyr Falcon_update):

```
. gyr Falcon_update/bin/activate
```

Adjust the path as necessary.

3. Plug in the power supply to the charger, then connect the charger via USB to your computer.
4. A new serial device should appear, most likely /dev/ttyUSB0. Use this device in all further commands. It might be necessary to give your user additional permissions:

```
sudo chmod 666 /dev/ttyUSB0
```

5. Set up the serial connection:

```
stty -F /dev/ttyUSB0 115200 cs8 -cstopb -parenb
```

6. Reboot the charger into the bootloader by executing:

```
echo '*fwupdrst' > /dev/ttyUSB0
```

7. Now you are ready to upload the firmware. Adjust the path as required:

```
ymodem send -p /dev/ttyUSB0 /path/to/GYRFALCON_S8000_Firmware.bin
```

8. After a successful update, the charger will reboot automatically. It is now safe to close the terminal and unplug the USB cable.

