

Date: 17/04/2020

NEWBEE_{DRONE}

Hummingbird F4 ESC Flashing Guide for BLHeli_S and JESC 48kHz

WARNING, PLEASE READ BEFORE PROCEED

If you are not comfortable with flashing your ESC's please do not do it. In case of flashing the wrong firmware, it may lead to non-reversible results such as **magic smoke**.

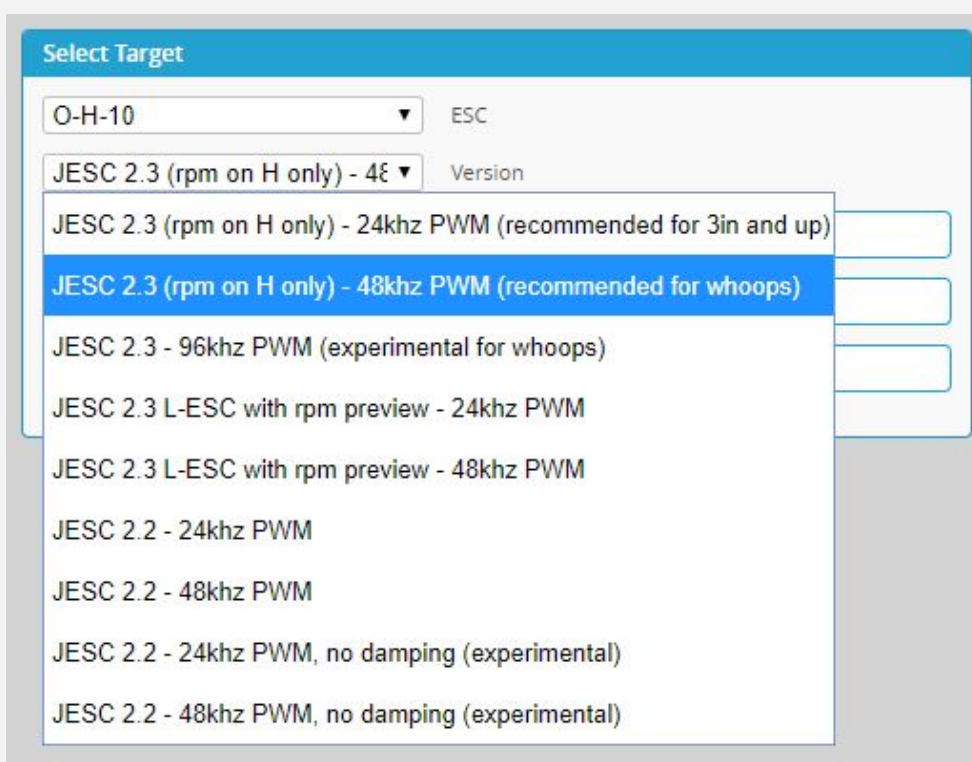
ESC LAYOUT O-H-10

Prerequisites

1. [Hummingbird F4 Flight Controller](#)
2. [Fully charged 1S battery](#)
3. USB A-Male to Micro-B cable
4. PC

FLASHING JESC 48kHz

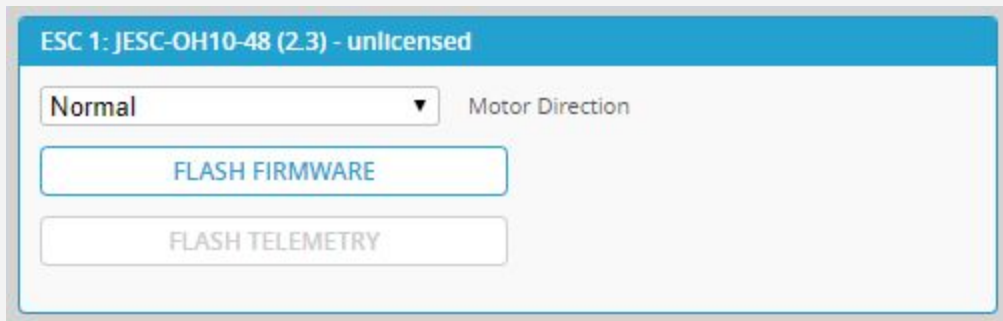
1. Download the Jesc configurator from [here](#).
2. **Plug in the battery** to the flight controller and connect it to PC with an USB cable.
3. Open the configurator and click the Read Setup button.
4. Click the Flash All button and choose 48kHz firmware. You **MUST** use the “**O-H-10**” layout. Otherwise you can **burn** the ESC's!



5. Once you choose the right firmware (**O-H-10 Layout**), hit the Flash button, it will start the flashing process. If you are using different layout (like O-H-x), please check this checkbox:

☒ Ignore inappropriate MCU and Layout? (Flashing inappropriate firmware may damage your ESC, do so at your own risk)

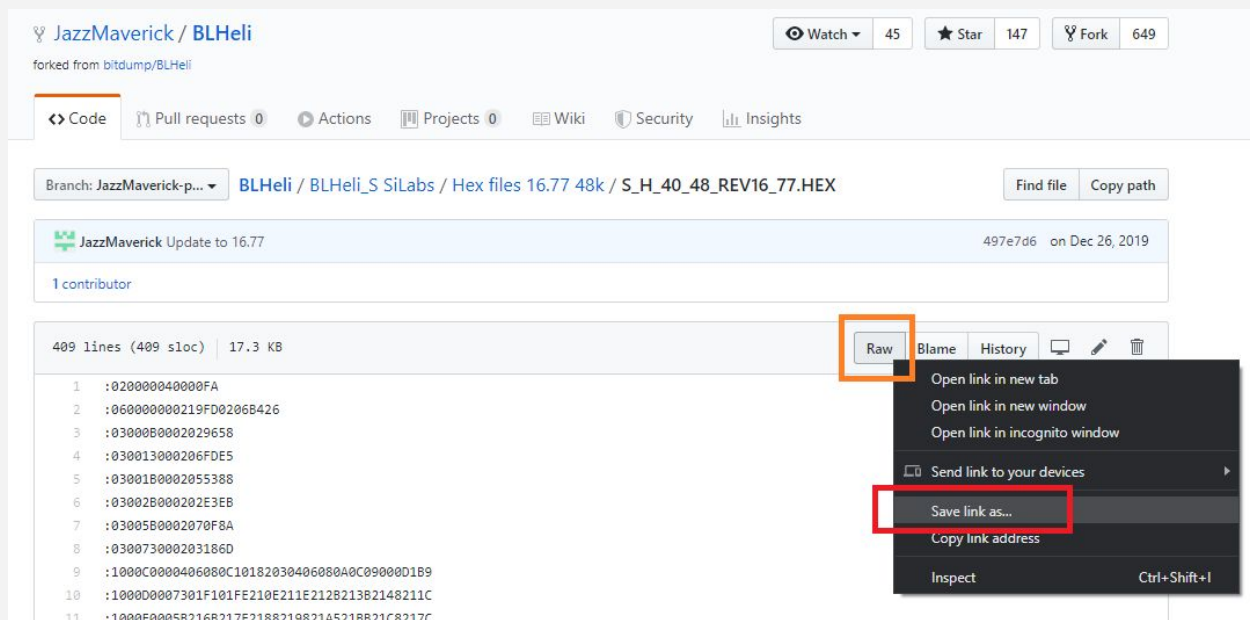
- After finishing the process, check the firmware version to verify the operation.



NOTE: RPM Filtering needs Bi-directional telemetry. For that please check out [JESC's website](#) for licensing.

FLASHING BLHELI_S JazzMaverick's 48kHz

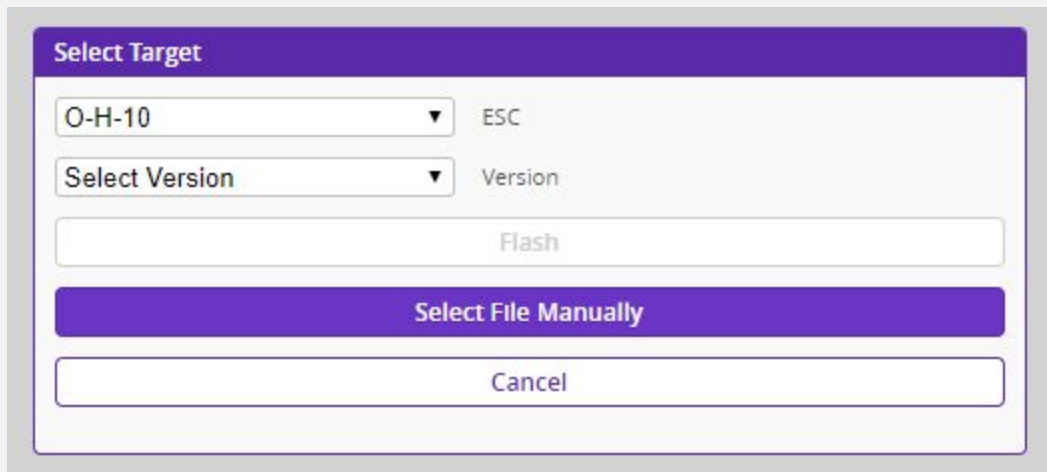
- Download and install the BLHeli Configurator from [here](#)
- Download Corresponding hex file (**O_H_10_48_REV16_77.HEX**) from JazzMaveric's Github page [here](#). You can right click the "Raw" button and select "Save link as..." to download the file.



3. Connect the flight controller to PC with an USB cable
4. Press Read Setup
5. Press "Flash All" button at the bottom. If you are using different layout (like O-H-5), please check this checkbox:

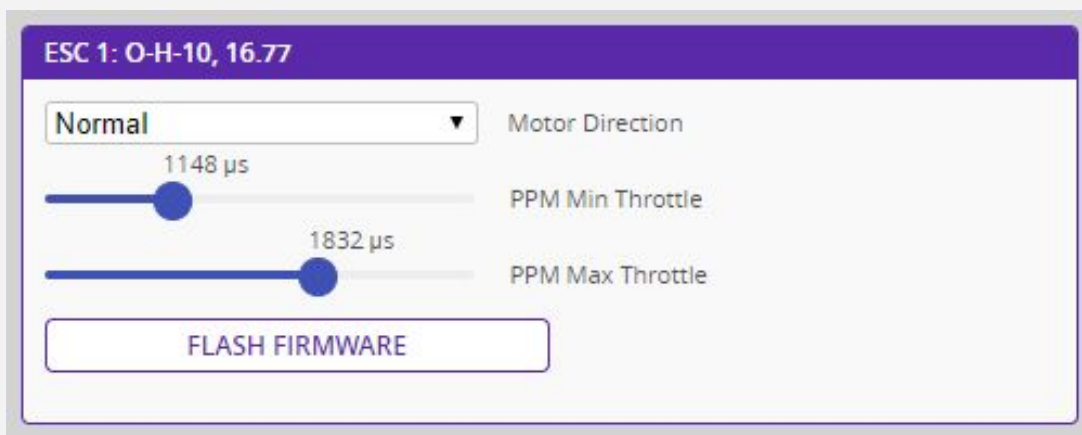
☒ Ignore inappropriate MCU and Layout? (Flashing inappropriate firmware may damage your ESC, do so at your own risk)

6. Press "Select File Manually"



The 'Select Target' dialog box has a purple header. It contains two dropdown menus: 'O-H-10' and 'Select Version'. To the right of the first dropdown is the text 'ESC', and to the right of the second is 'Version'. Below these is a 'Flash' button. A prominent purple button labeled 'Select File Manually' is in the center. At the bottom is a 'Cancel' button.

7. Choose the right firmware (O_H_10_48_REV16_77.HEX) and click "Open"
8. Verify the firmware. Done!



The 'ESC 1: O-H-10, 16.77' configuration window has a purple header. It features a 'Motor Direction' dropdown set to 'Normal'. Below are two sliders: 'PPM Min Throttle' at 1148 μ s and 'PPM Max Throttle' at 1832 μ s. A 'FLASH FIRMWARE' button is at the bottom.