Copy files to root directory of microSD card (filesystem FAT32), insert into On-board computer (contacts on top) and run the update process.



Do not downgrade firmware that was installed from the factory! You may get a brick

Each device has its own firmware and is updated separately from different menus. The order in which the firmware is updated does not matter.
1. Description of the On-Board Computer update menu.
2. Description of the Controller update menu.
3. Description of the Microlight controller menu.

Display	Controller	Release notes

v0.60B Fixed throttle drop. Small menu fixes. LEVCAN updated. Button setup simplified, by default all set to CAN mode. Added exFAT support (but display still can be updated only from FAT32). Added charge screen. Added fast statistics type selection. Added wider event window. Mph stats fixed.	v0.7.18 Experimental logger added. Fixed many charger glitches, however still have few. Added soft start to charger and more safe phase detect. Completely reworked field weakening, now should not have any hard braking after release. Added minimum speed reference for speed PID. Added RC PWM control on P1 port (throttle/brake). Added more logger parameters. Few important FOC control fixes, DC current should be calculated better under field weakening. Fixed one weird ultra-rare bug in square mode. LEVCAN operates on queues now, log time 2x faster when display updated. Decreased DCi Ki default from 500 to 200. Slightly decreased FW start point. Added full debug info export. Added logger mode selection and tuned logger start. Removed first line from log for easy datazap upload. Throttle / brake curves added (8 point configuration) with presets. PAS extra scale added for additional modes. Soft acceleration for cruise added, more shutdown triggers. Cruise logic updated - phase current limited by selected mode, not throttle position. Minimum cruise speed - limits cruise activation. Cruise increment/decrement - control cruise speed with buttons (port = CR+/CR-) Cruise restore - recovery last saved cruise speed with button, activated only above min cruise speed. (port = CRr) Power limit added to modes and battery configuration. 0 = power limit disabled. Small menu fixes. CAN inputs increased to 16. Parameters export / import fixes. 12V shutdown fix.	31 August 2020 Use configuration export before update, reset defaults after update and import configuration.

v0.59B		18 March 2020 HOTFIX for display speed sensor
v0.58B Fixed 0V throttle issue. Fixed charge statistics reset. Added kmh/mph switch. Added more parameters to info. lines on main screen. Added hotkey mode for compatibility with controller speed functions. Fixed contrast setting. Added driving range, calculated from WH usage. A lot of tiny fixes.	v0.7.12 Torque PAS fixes Fixed configuration import for advanced modes Added configuration selector from 1 to 9 Import will show first line of configuration, you can put a comment here Fixed N mode Fixed motor wiggle at charger mode Added more debug information	11 March 2020
	v0.7.9	21 Nov 2019 HOTFIX, fixed NaN error for analog inputs.

v0.57B CAN buttons setup Inverted inputs setup Statistics reworked Added filters for analog inputs	v0.7.8 Big menu update Control logic completely reworked for future compatibility with BMS New default values for PIDs DC-DC low voltage difference charge fixed Inverted brake input added Specific setup for 3 positional speed switch added (can work now as 1-2-3) Button/switch select for usual speed select input Save CRC calculation fixed New speed mode - neutral Speed increment and decrement added Added t-sensor NTC 10k B:3380 Reboot command added Fixed field weakening over 126% Fixed VBUS measuring, now it is at PWM frequency, significantly improved overvoltage protection Added median VBUS filter Added averaging of N-X ADC samples filter for throttle and brake Fixed brake glitches Current measuring fixes for better measuring on 6F board When enable button configured controller will not turn-on anymore when power applied Autodetect improved, more informative, short-circuit detect added and timeout fixed Added lock-at-turn-on, will lock throttle untill password on-screen is entered Voltage on phases detect added, will lock controls UVLO added Added “Advanced modes” menu with more specific options per mode Personal throttle protection lock for CAN source or local Motor temperature limit for charger (DC-DC)	20 Nov 2019 Export configuration (or make screenshots), after controller update do “Erase data storage” and reboot. Configuration will not be imported fully, some values will need to enter manually.

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