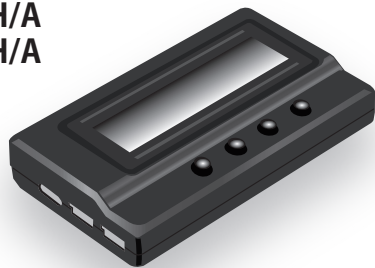


Motor controller Setting tool

For Futaba
MC-980H/A
MC-9130H/A
MC-9200H/A

Program box MCP-2 Instruction manual



Features and functions

Thank you for purchasing an MCP-2 ESC Programmer.

The MCP-2 is a dedicated programmer for the brushless motor ESC given in “Corresponding ESC” above. Quick and accurate setting matched to the characteristics of the model is possible and the brushless motor can be operated at peak performance.

- ◆ **Set the corresponding ESC.** Programmable items are displayed on the LCD screen.
- ◆ **It acts as a USB adapter, linking the ESC to your PC to update the ESC firmware, and setting programmable items with the Futaba ESC USB link software on your PC.**
- ◆ **It acts as a Lipo battery checker and measures the voltage of the entire battery pack and each cell.**

NOTE: Always read this manual before using the MCP-2.

Before using the MCP-2

* Improper handling of the LiPo battery is extremely dangerous. Use the battery in accordance with the instruction manual supplied with it.

Usage precautions

⚠ WARNING

❗ When setting and operating the ESC be sure that no part of your body touches all the parts which rotate.

The motor may rotate unexpectedly due to erroneous connection and operation of the ESC and is extremely dangerous.

❗ **Before flight, always check ESC operation.**

If the ESC is not set properly control will be lost and is extremely dangerous.

⚠ CAUTION

⊘ Do not open the case or disassemble this product.

The interior will be damaged. In addition, repair will become impossible.

This product is only for use with the “Corresponding ESC” shown above. It cannot be used with other products.

Corresponding ESC

Futaba MC-980H/A
Futaba MC-9130H/A
Futaba MC-9200H/A

[Specification]

	MCP-2
Function	ESC setting / PC Link / Battery checker
Size	90 x 51 x 17 mm
Weight	65 g
Power supply	DC 4.5 V ~ 12.6 V

Functions of each button and port

ESC :

Use Program Wire to connect this port to the ESC programming port.

Program Wire

BATT :

MCP-2 power input port. Not used with BEC type ESC (MC-980H/A, MC-9130H/A, MC-9200H/A).

USB port :

Connect the MCP-2 to your PC and supply the operating voltage to the MCP-2 (if the USB port is connected, the power BATT port does not need to be connected).

Battery Check :

Connect to the battery's balanced charging connector.

* Pay attention to the polarity of the connector.

* The BATTERY CHECK port has a pin spacing of 2.54 mm. Connect a compatible connector.

ITEM :

- Switches the setting items in order.
- Exits the setting mode of the setting item.
- Enter the settings of the setting items.
- Press and hold to change items one after another.

VALUE + :

- The parameter value of the setting item is cyclically switched in the positive direction.
- Press and hold to change items one after another.

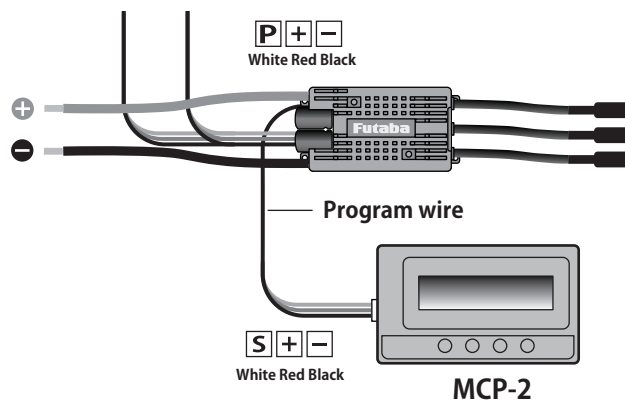
VALUE - :

- The parameter value of the setting item is cyclically switched in the negative direction.
- Press and hold to change items one after another.

OK (R/P) :

- Saves the current mode value and sends it to ESC.
- Enter the value of the setting item.

ESC setting



* The figure is an example of MC-980H/A.
For the ESC connection port, refer to the respective ESC instruction manual.

Connect the ESC to the battery and turn it on

Program box shows the in initial screen, press any button on the Program box to communicate with the ESC, the screen show, after several seconds, LCD shows the current profile name, and then the 1st programmable item is displayed. Press "ITEM" and "VALUE" buttons to select the options, press "OK" button to save the settings.

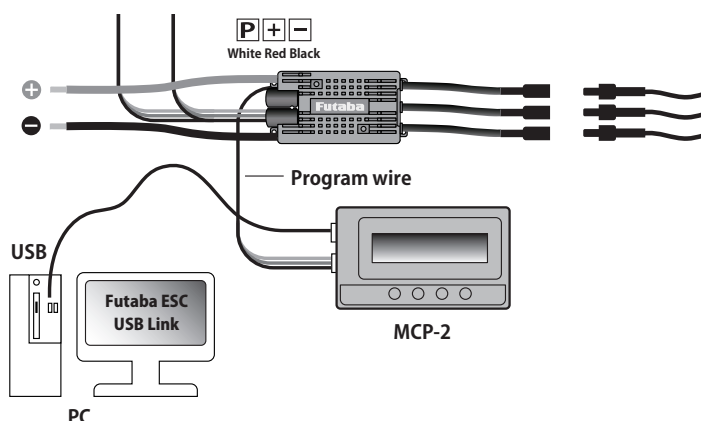
a) Reset the ESC by the program box

When the connection between ESC and program box is successfully established, press "ITEM" button for several time still the "Load Default Settings" is displayed, press "OK" button, then all programmable items in the current profile are reset to factory-preset options.

b) Change Profiles of ESC

If there are multiple sets of Profiles within ESC users can set the parameters in each mode first for different applications, such as "Modify" contest. When move to different areas or use different motors, only need to switch to corresponding mode. It is fast and convenient. The switching method is: When ESC and LCD setting box is online status, long press "OK (R/P)" button. When LCD displays the current mode name, press "VALUE" button, it will switch to the next mode at this time, press again to switch to next mode, repeat it. If you need to modify the parameters of the selected mode, press "ITEM" button to display and modify the parameters of the current mode.

ESC and PC connection

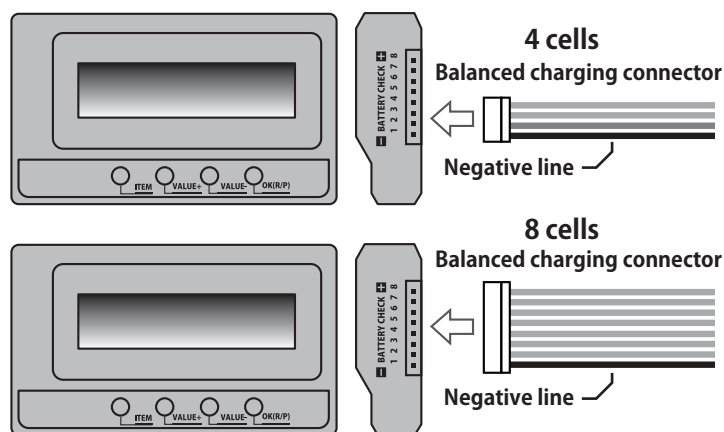


Connect the ESC, Program box and PC according to the picture.

Run the USB Link Software.

And then connect ESC to battery and turn it on, the USB Link Software will try to communicate with the ESC. After the connection is established, user can easily set the ESC or update its firmware on the PC.

Battery Check



Acts as a Lipo battery voltmeter.

Measurable battery : 2-8S Lipo/Li-Fe

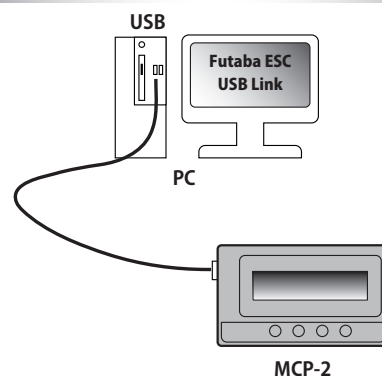
Precision: $\pm 0.1V$

Plug the balance charge connector of the battery pack into the "BATTERY CHECK" port (Please make sure that the negative pole points to the "-" symbol on the program box), and then LCD shows the firmware, the voltage of the whole battery and each cell.



When checking the voltage, please supply the Program box only from the balance charge connector. Don't supply Program box from Batt or USB port.

MCP-2 update



Sometimes the firmware of Program box should be updated because the functions of ESC are improved continuously.

Connect the Program box with PC through USB port, run Hobbywing USB Link Software, select "Device" "Multifunction LCD Program Box", at the "Firmware Upgrade" module, choose the new firmware you want to use, and then click "Upgrade" button.

For more detail information, please refer to Futaba Website:

<https://futabausa.com/>