HiCOPTER

The HiCOPTER product line of speed controllers are designed for controlling and regulating brushless motors that are typically used for powering multicopters. Each speed controller is pre-set from the factory with settings optimized for use with multi rotor aircraft stabilization systems. HiCOPTER controllers accept a control signal with a frequency of up to 500Hz. This allows them to accurately respond to any RPM change required by the control/stabilization unit of the multicopter.

The motor control signal is galvanically (optically) separated from the flight battery in all HiCOPTER speed controllers. HiCOPTER speed controllers do not require or allow any programming changes. The propeller brakes are already switched off, the cut-off voltage is pre-set to the lowest possible level (depending on type) and the motor timing is set automatically by the speed controller. If you need to change the direction of rotation, simply swap any two of the motor wires.
Install the HiCOPTER speed controller in accordance with the manual instructions for your specific multicopter type.

Basic parameters of HiCOPTER speed controllers

Type	Current [A]	Input voltage [V]	Dimensions [mm]	Weight* [g]
HiCOPTER 30A opto	30	5-25,2	65x26x9	35
HiCOPTER 40A opto	40	5-25,2	65x26x9	38
HiCOPTER 70A opto	70	5-25,2	70x26x11	45
HiCOPTER 90A opto	90	12-42	65x55x17	100

* weight with the cables

General Principles:

- please read these instructions carefully
- use only new connectors of good quality, which must be soldered properly to the controller cables (look out for and remove any remaining flux on the plugs)
- flight battery wires can be extended to a maximum overall length of 20 cm
- pay attention to the distance between all cables and the receiver antenna – the two should be kept as far apart as possible
- only connect the flight batteries to the flight system shortly before the flight and then disconnect them immediately after landing
- when the model is not in use, always disconnect all batteries from the flight system
- to prevent the possibility of reverse polarity connections to the controller or batteries use different types of connectors for each type of connection
- do not connect the controller to current supplies other than appropriate battery pack (verify that your batteries are the correct input voltage and can handle the current load)
- to prevent possible injuries by moving mechanical parts of the model (motor, gear box etc.) always keep in mind that the motor may start unintentionally
- check the controller and receiver circuitry each time before switching the system on
- install the controllers in the model so that they receive air flow for cooling

Warranty:

We grant a warranty of 24 months from the date of purchase under the premise that the item has been operated in accordance with these instructions within the specified voltage and currents and that the controller does not show signs of mechanical damage. The warranty is void if the polarity of the controller has been reversed or if the controller came in contact with different chemicals or water.

A controller can also be damaged due to following reasons: Use of unsuitable connectors, low quality soldering joints (plugs), overly long cables between battery – controller – motor, a demagnetizated motor, phase interruption (broken or damaged wire) between motor and controller during operation.

Warranty service and any post warranty service is provided by the distributor or manufacturer.