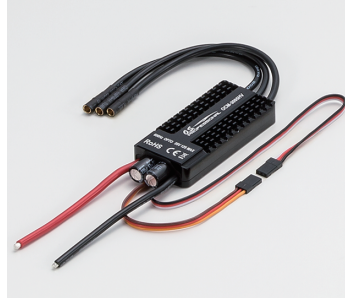


OCM-3035/OCM-3055HV OCM-3075HV/OCM-3095HV



OCM-30 series are specially programmed for multi-rotor applications. OCM-30 series can accept signals up to 400Hz refresh rate from multi-rotor controllers.

● **Applicable motors : O.S. OMM Series**

● Before operating ESC

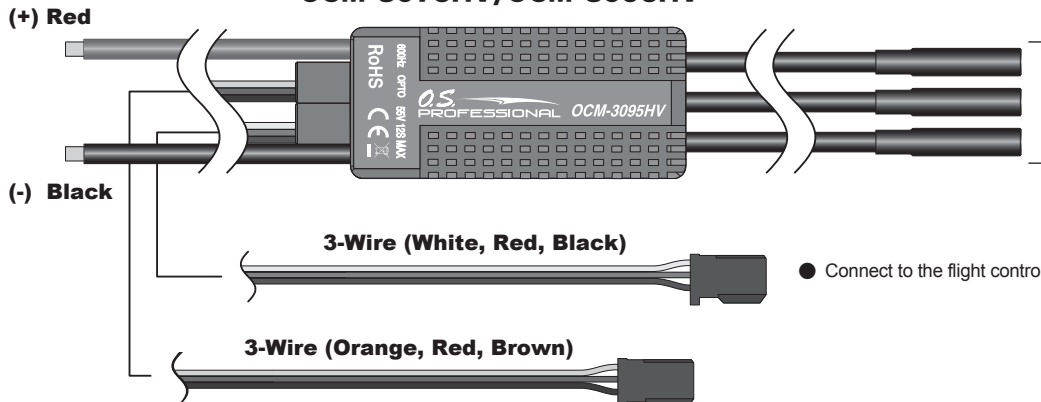
- ※ **Misuse or abuse of LiPo batteries is very dangerous. Be sure to follow the instruction manual supplied with the batteries.**
- ※ **Batteries can be used:**
For OCM-3035 Li-po 2~8 cells (7.4~34.8V)
For OCM-3055HV-3095HV
Li-po 3~12 cells (11.1~52.2V)
- ※ **OCM-3035/3055HV/3075HV/3095HV are not equipped with BEC output. Use separate batteries or other power source for a flight controller and receivers.**

CONNECTION

Connect as shown below.

● **Battery, or power distributor**

**OCM-3035/OCM-3055HV
OCM-3075HV/OCM-3095HV**



● Connect to the brushless motor.

● Connect to the flight controller.

IMPORTANT: It is of vital importance, before attempting to operate your ESC to read through this instruction manual.

■ Notes on installation ⚠ WARNINGS

! **Never use the ESC beyond the working conditions listed in the specifications listing.**

⊘ **Do not mistake the polarity of the batteries.**

※ Reverse connection may cause fire and ESC will be damaged or be burnt instantly.

⊘ **Never short out any place of the ESC, batteries, motor, receiver and connectors.**

※ Short circuit may cause fire and ESC will be damaged or be burnt instantly.

※ Be sure to install the ESC so that the soldering connection of the input/output wires may not touch conductive part.

! **Be sure to install the receiver and receiver antenna away from the place where high current flows such as ESC, motor wires, battery wires, power batteries.**

※ Malfunction of the receiver due to noise will cause to lose model control which is very dangerous.

! **Be sure to insert connectors all the way securely.**

※ Disconnection due to vibration may cause to lose model control which is very dangerous.

! **Be sure to install the ESC so that oil, grease and water may not come in contact with the ESC.**

! **Be sure to install the ESC at the place where there is plenty of air flow for cooling.**

⊘ **Do not wrap the ESC with aluminum foil, etc.**

※ Wrapping may spoil cooling effect and the ESC may not develop its original performance.

! **Be sure to install the motor securely and fix all the wires.**

⚠ NOTE

⊘ **Do not disassemble. Do not open the ESC case.**

※ Opening of the case may cause damage inside components and render it irreparable.

■ Notes on operation ⚠ WARNINGS

! **Never touch or allow any part of the body to come into contact with any rotating part while operating.**

※ Sudden rotating may cause serious injury.

※ Be careful with some receivers the motor may rotate for a moment when the power puts on.

⊘ **Do not fly when rainy.**

※ Entry of water drops into the ESC may cause malfunction and out of model control which is very dangerous. Also, it will cause failure. If malfunction is detected due to entry of water drops, send the ESC to the manufacturer or its distributor in each country for inspection and repair.

! **Be sure to follow the procedures mentioned below as to ON and OFF of the power switch.**

• **ON:** Hold the throttle stick at stop position. Switch on **the transmitter then receiver** power.

• **OFF:** Hold the throttle stick at stop position. Switch off **the receiver then transmitter** power.

※ With reverse procedure propeller may rotate suddenly, which is very dangerous.

! **Be sure to remove the batteries when not in use.**

※ Accidental switching on may cause sudden rotating of propeller or cause fire, which is very dangerous.

! **Be sure to check the ESC and all the movements of model controls before attempting flight.**

※ Incorrect settings or using of unsuitable model may cause to lose model control which is very dangerous.

⚠ NOTE

⊘ **Do not touch the motor nor ESC right after flight.**

※ Touching them may cause burn.

INSTALLATION OF THE ESC

Install the ESC in the model using Velcro tape or double sided tape so that it may not be affected by vibration or shock. Make sure the ESC receives plenty of air flow for cooling via cooling hole. If it is impossible to get sufficient air flow for ESC, please check the temperature rising of the ESC by yourself for secure operation against the malfunction caused by the over-heating.

Notes on Operation

- ※ **When the signal from the transmitter is not received for approx. 3 seconds, motor stops. When the signal from the receiver is input, motor starts running with the throttle at stop position or brake position.**
- ※ **Do not connect to the batteries with wrong polarity, or the ESC will be destroyed immediately.**
- ※ **If the ESC is connected to the batteries with the throttle high, short beeps start sounding after approx. 10 seconds. In this case, pull down the throttle to the stop position, or disconnect the batteries from the ESC.**

NORMAL SETTING

- The OCM series do not require any special setting procedure. Please follow the instruction which comes with the flight stabilizer, gyro.
- Pull down the throttle fully and connect the ESC to the batteries.
- "Start sound" mentioned below will sound. If not, adjust the ATV/AFR value.
- First beep sound indicates the number of the Li-po battery's cell. There will be beep sound two times followed by the first beep sound. After beeping, the ESC is ready to start operation.
- If you need to check the operation of the ESC separately with receiver's throttle channel, please set "Reverse" for throttle channel in case of using Futaba transmitter.

⚠ WARNINGS

- ❗ **Be sure to connect the ESC to batteries just before the flight and disconnect it right after landing.**
- ❗ **When the ESC is connected to batteries, handle the model with utmost attention.**
- ❗ **Rotating propeller is very dangerous. Always make sure you are safe and away from the rotating propeller.**
- ❗ **Model equipped with a strong motor is very dangerous.**
- ❗ **A strong motor system is very dangerous.**
- ❗ **Large current may heat leads and batteries.**
- ❗ **Be sure to connect leads with utmost care.**
- ❗ **Poor connection may cause fire and burn.**

※ Fly the model only at permitted airfield. Never fly it over nor near the onlookers. While this ESC is equipped with a safety alarm program, as owner you alone are responsible for safety operation of your motor, ESC and batteries, so act with discretion and care at all times.

[OCM-3035 SPECIFICATIONS]

Voltage Range	7.4V~34.8V
Maximum Current	35A (180s) (20°C)*
Rated input Current	15A (20°C)*
Internal BEC	None
Advance Timing	Auto
Outside dimension	26mm(W) x 65mm(L) x 13.5mm(H)
Weight	50g ±5g
Power Leads	14 AWG (Heat-resistant 200°C)
Motor Leads	15 AWG (Heat-resistant 200°C)
Motor Connects	φ3.5/14 ㊦connector

[OCM-3055HV SPECIFICATIONS]

Voltage Range	11.1V~52.2V
Maximum Current	55A (180s) (20°C)*
Rated input Current	30A (20°C)*
Internal BEC	None
Advance Timing	Auto
Outside dimension	35 mm(W) x 85 mm(L) x 15.5mm(H)
Weight	115g±10g
Power Leads	13 AWG (Heat-resistant 200°C)
Motor Leads	14 AWG (Heat-resistant 200°C)
Motor Connects	φ3.5/14 ㊦connector

[OCM-3075HV SPECIFICATIONS]

Voltage Range	11.1V~52.2V
Maximum Current	75A (180s) (20°C)*
Rated input Current	40A (20°C)*
Internal BEC	None
Advance Timing	Auto
Outside dimension	37mm(W) x 102mm(L) x 15.5mm(H)
Weight	140g±10g
Power Leads	12 AWG (Heat-resistant 200°C)
Motor Leads	13 AWG (Heat-resistant 200°C)
Motor Connects	φ4.0/17 ㊦connector

[OCM-3095HV SPECIFICATIONS]

Voltage Range	11.1V~52.2V
Maximum Current	95A (180s) (20°C)*
Rated input Current	50A (20°C)*
Internal BEC	None
Advance Timing	Auto
Outside dimension	37mm(W) x 102mm(L) x 15.5mm(H)
Weight	140g±10g
Power Leads	12 AWG (Heat-resistant 200°C)
Motor Leads	13 AWG (Heat-resistant 200°C)
Motor Connects	φ4.0/17 ㊦connector

*: During ESC operation, in order to maintain a maximum current and rated current, the entire heat sink, the cooling air (wind of propeller etc.), wind speed (5 m/s or higher) is required.

If the environmental temperature is 20 °C.

The maximum performance limit of ESC greatly changes depending on environmental factors such as air temperature and humidity.

- Specifications, design, and contents of the instruction manual of the motor are subject to change without prior notice for improvement.

Please contact e-info@os-engines.co.jp or professional@os-engines.co.jp for questions and inquiries.

- Pay careful attention to the advices with the following headings.

⚠ DANGER

This covers the possibility which might involve death and serious injury.

⚠ WARNINGS

These cover the possibilities which might involve death and serious injury and also may cause damage or injury.

⚠ NOTES

These cover the many other possibilities, generally less obvious source of danger, but which, under certain circumstances, may also cause danger or injury.

Graphic symbols: ⚡ ; Prohibited items ❗ ; Items never fail to take action