

Heat sink Type 1

Thank you for purchasing this product. This heat sink is made from copper to draw heat way from the FETs inside the speed controller. The use of copper is far more superior over aluminum-based heat sinks. The design of the pin fins allow for increased surface area for the best surface to air of heat transfer to maximize the potential of the speed controller. Either a black or nickel zinc coating treatment has been applied to the heat-sink to protect it from the environmental elements. Lower temperatures in the FETs increase the efficiency and help you to maximize the full potential of your speed controller.

Attention on Safety

The following should be read beforehand to prevent damage and danger to the person(s) while using this product.


- The following display and explain the level of harm and/or trouble that may be caused when the usage is incorrect or the instructions are disregarded.

Danger The following column displays the content of danger that can cause serious injury, death, and etc.

Warning This display shows the content where the possibility of owing the death or the serious injury is assumed, and a disadvantageous accident can occur at high frequency.

Attention This display shows the content to which a possibility and/or a disadvantageous accident may occur causing injury.

Danger


 This heat sink is made of copper and is conductive. Do not apply current or voltage to the heat sink.

Warning

Do not touch the heat sink after using the esc. The heat sink will be very hot and you may get burned.

If an object or the esc has shorted out against this heat sink, please discontinue the use of the esc and send your esc in for repairs.

Attention

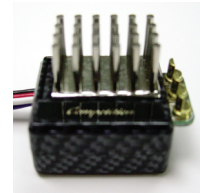
 If the pins become damaged on the heat sink, we recommend replacing the heat sink. Do not place shotki diodes or power capacitors on or next to the heat sink. This will limit the effectiveness and could short out the system against the heat sink.

Please read the instructions before proceeding to install the heat sink. You should familiarize yourself with the procedure before proceeding.

Installation of the heat sink

(This is an example of how to install the heat sink for the VFS-1.)

1. First make sure that you have disconnected the battery to the VFS.
2. If you have installed the power capacitor on top of the VFS, you will need to remove it and consider installing it somewhere else.
3. On the bottom of the VFS, there are four screws that will need to be removed.
4. The bottom case should now be easily removed by pulling the case apart.
5. Next you will need to remove the upper case of the VFS. You may need to heat up the upper case with a hair dryer, particularly the area that says "VFS-1". ***Use caution when heating this up. Do not burn yourself with the hair dryer or melt the case.**
6. With the upper case removed, you may have some adhesive material left on top of the VFS. Isopropyl alcohol (isopropanol) applied with a lint-free wipe or swab should be adequate for removing this material and any dust or fingerprints. ***Do not use "denatured alcohol or glass cleaners which may contain oily components".** Allow the surface to dry for several minutes.
7. Remove the aluminum plate that says "VFS-1" on the upper case. Replace the upper and lower case of the VFS and install the screws. See the image below.
8. Remove the backing on the heat sink to expose the heat transfer tape.
9. Align the heat sink so that the edge of the aluminum plate lines up with the edge of the heat sink and press down on the heat sink.
10. Installation is now done. Make sure that you re-install the power capacitor and that there are no wires touching the heat sink or anything else that can possibly short out against the heat sink.



Visit us on the web at www.kopropro.com.
If you have any questions about this product, please contact us.
The specification of the product and the content of this manual may be changed at anytime without notice. Please acknowledge this beforehand.

KO PROPO USA, Inc.
16012 S. Western Ave. # 300
Gardena, CA. 90247
Tel: (310) 532-9355 Fax: (310) 532-9354