***IMPORTANT NOTICE***

EzOSD current sensor issue - 28th november 2011

Dear valued customer,

It has come to our attention that a crucial step in production of our EzOSD current sensors has been omitted on a limited number of current sensors produced recently.

More specifically pins of the EzBUS and TX PWR connectors that needed clipping prior to the foam backed metallic foil sticker being put on have not been clipped. This results in the chance of these pins being piercing through the foam backing of the sticker and being pressed against the metallic foil of the sticker, causing for a short and potentially a defect on the current sensor.

In order to remedy this issue we've drafted this document to assist you in diagnosing whether you are affected by this issue and if so offer you a number of possible solutions to get your current sensor back in working order again. Note that if your sensor is affected you need to make this modification in order to continue using it.

Is my current sensor affected?

In order to diagnose whether your current sensor is affected by this issue a simple test needs to be performed. Pick up your current sensor between your thumb and index finger and press down firmly with your thumb on the area where the EzBUS and TX PWR connectors exit, especially on the line where the sticker changes from red to silver. If you can see a row of pins sticking through the sticker underneath the shrinkwrap then you are affected by this issue. To illustrate things Figure 1 shows a current sensor which is not affected by this issue (left) and a current sensor which is affected by this issue (right) with pins visible through the sticker.

Figure 1. Affected current sensor on the right, pins visible through the sticker.
How do I remedy this issue?

In order to make sure your sensor works without fault it is essential to at least remove part of the shrinkwrap to be able to peel away the sticker covering the pins and trim that so that its metallic foil can no longer short out those pins, this is illustrated in Figure 2. Just cut the sides of the shrinkwrap, fold it up and back over towards the battery/ESC connectors and peel off the metallic foil, this can now be trimmed with a small pair of scissors.

Once you've done that you can fold the shrinkwrap back and cover it back up with a piece of cellotape, or remove the metallic foil and shrinkwrap completely and apply some new shrinkwrap. This is illustrated in Figure 3.

Figure 2. Peeling away and trimming the metallic foil on the sticker.

Figure 3. Applying cellotape, or new shrinkwrap.
My current sensor is defective, what do I do?

If you have verified your current sensor is affected by this issue and it is no longer working even after you have performed the above mentioned modification one possibility is a ground trace has burned out on the current sensor. This can be fixed with a piece of wire as illustrated in Figure 4. Start with removing the sticker completely, including the foam backing. this works best after heating the sticker with a hairdryer, the glue will soften and the sticker will come off without much, if any, residue. If residue is left clean with an old (but clean) soft toothbrush and some white spirit or thinner and let dry, be careful not to bump off any of the SMD components.

Solder a piece of wire between pin 2 (GND) on the EzBUS connecter and the center tab of the two battery/ESC connectors, this will create a new connection bridging the trace that has burned out. After this modification put some new shrinkwrap on the current sensor as otherwise the fragile electronic components will not be protected and the battery and ESC terminals will lay bare.

Fig 4. Wire modification of the current sensor.

I have no idea what to do, can I send my current sensor in?

Of course we realize that not everybody is able, or willing, to make the necessary modification(s) to their current sensor. Therefore you are welcome to send your current sensor in for repairs to the retailer you bought it from and they’ll either replace or modify your sensor at no cost to you. The retailer will also have new stickers and shrinkwrap available for anyone who can perform this modification themselves but who would like to restore the current sensor back to its original state, these will be supplied to you at no charge as well.
On behalf of Team ImmersionRC we would like to apologize for this inconvenience, as we realize this issue is a quality control issue during manufacturing that should've been avoided and for which we'd like to take responsibility. We hope you'll be willing to work with us in order to restore your EzOSD back to working order so you can enjoy this wonderful hobby once more.

Enjoy your FPV flying.

Team ImmersionRC.