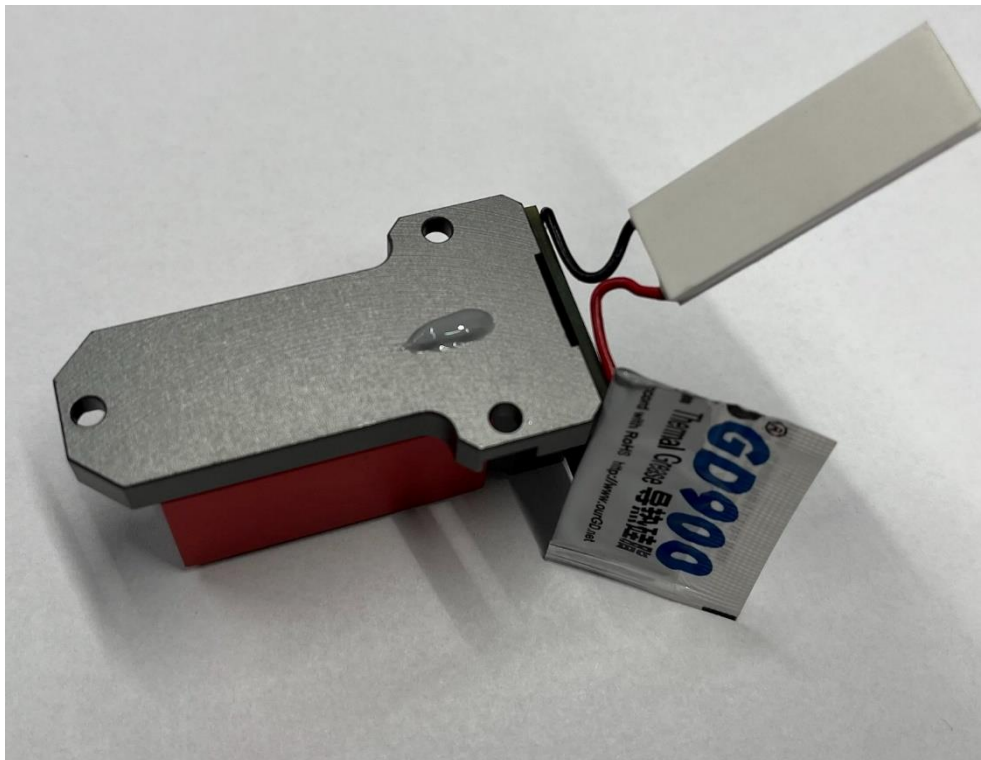# Sparrow Module Mounting Guide

This document will explain the process of mounting a Sparrow module to a heatsink or base plate regardless if it is being used with or without a TEC. Follow the steps that are needed for your specific module.
Every Sparrow module, comes with suitable thermal grease. However, you can use your own thermal grease if you choose to.

Make sure to work in a clean environment to reduce the risk of contaminating the grease with dirt or dust. Clean all surfaces before applying paste thoroughly.

First start by applying 1/2 of the included thermal grease package or a barleycorn sized amount on the underside of the module. If your module was ordered with a TEC, fold the TEC back like shown in the picture below.
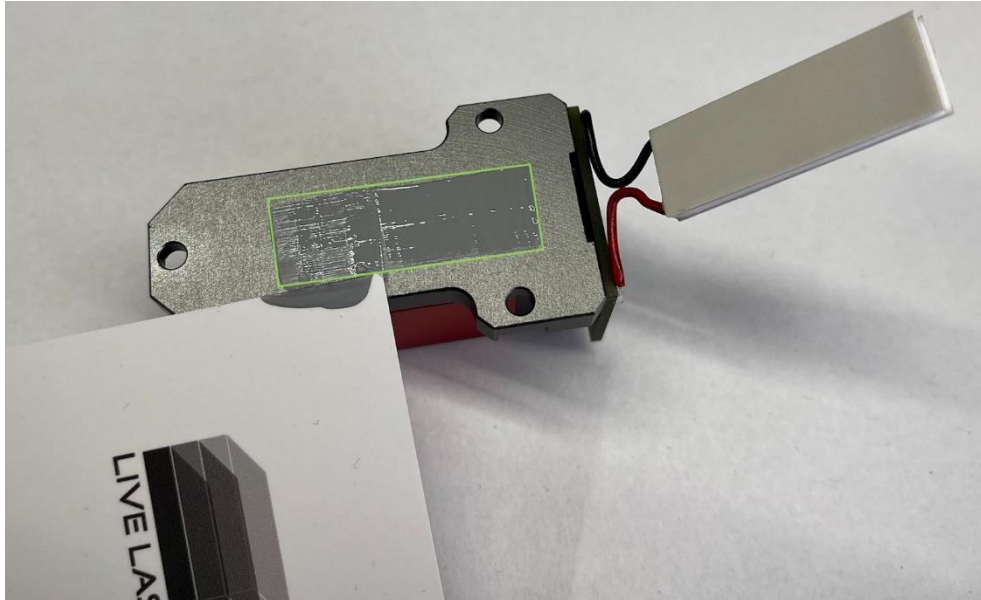
Spread the thermal paste in the marked area with the help of an old credit card or a folded piece of paper.
The spread does not need to be perfectly even, the mounting pressure will spread the paste further.

If your Sparrow module does not include a TEC, use the included M3 screws to bolt the module to your heatsink. Start turning the screws but before the tightening, press the module onto the heatsink while applying a twisting motion. The motion helps to spread the paste evenly while squeezing out excess paste. Tighten the screws fully.

Sparrow modules without TEC are now mounted properly.

If your module includes a TEC, press it onto the paste while applying a rotating motion. The motion helps to spread the paste evenly while squeezing out excess amounts.
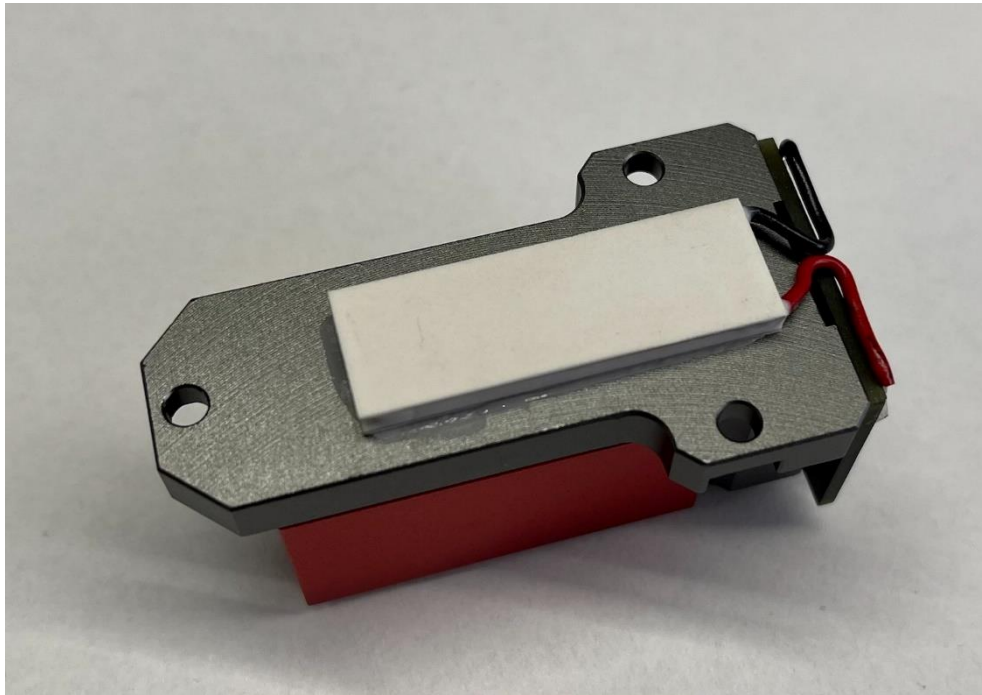Make sure the TEC is located right, use the next picture as a reference.
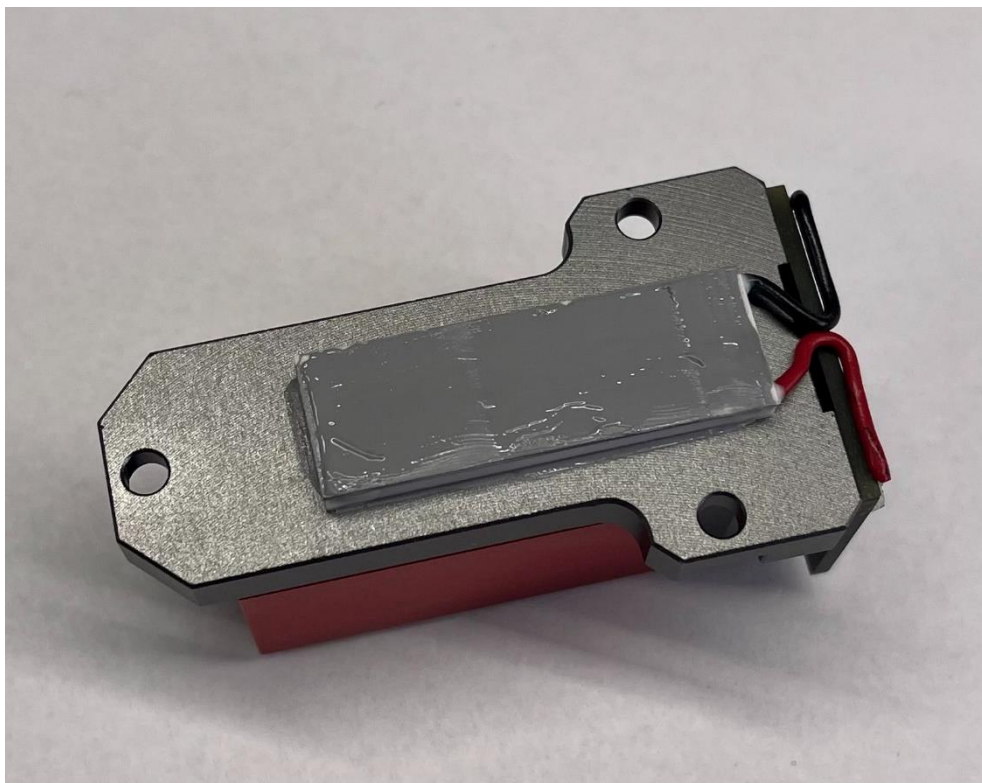
The next step includes spreading the remaining half of the thermal paste on the surface of the TEC. Use the same barleycorn sized amount and spread it like explained before.

Use the included thermal insulation washers and metal washers to mount the module.

Start by pressing the module onto your clean mounting surface with a twisting motion. Make sure the TEC does not move out of position.

Start tightening the included mounting screws (pictured below) while making sure the collar of the insulating washer is pressed into the mounting hole of the module.

Apply even pressure with all three screws. Do not tighten just one screw at a time, use all three screws to apply even pressure. Do not overtighten the screws, slightly more than finger tight is enough.

If you use your own heatsink, use the hole pattern provided in the official technical drawings PDF. You can find this PDF at the respective Sparrow product page.

If you need any more assistance or you have any questions, feel free to contact us via e-mail: info@live-lasersystems.at