

HyperDrive Mk1 Installation Guide

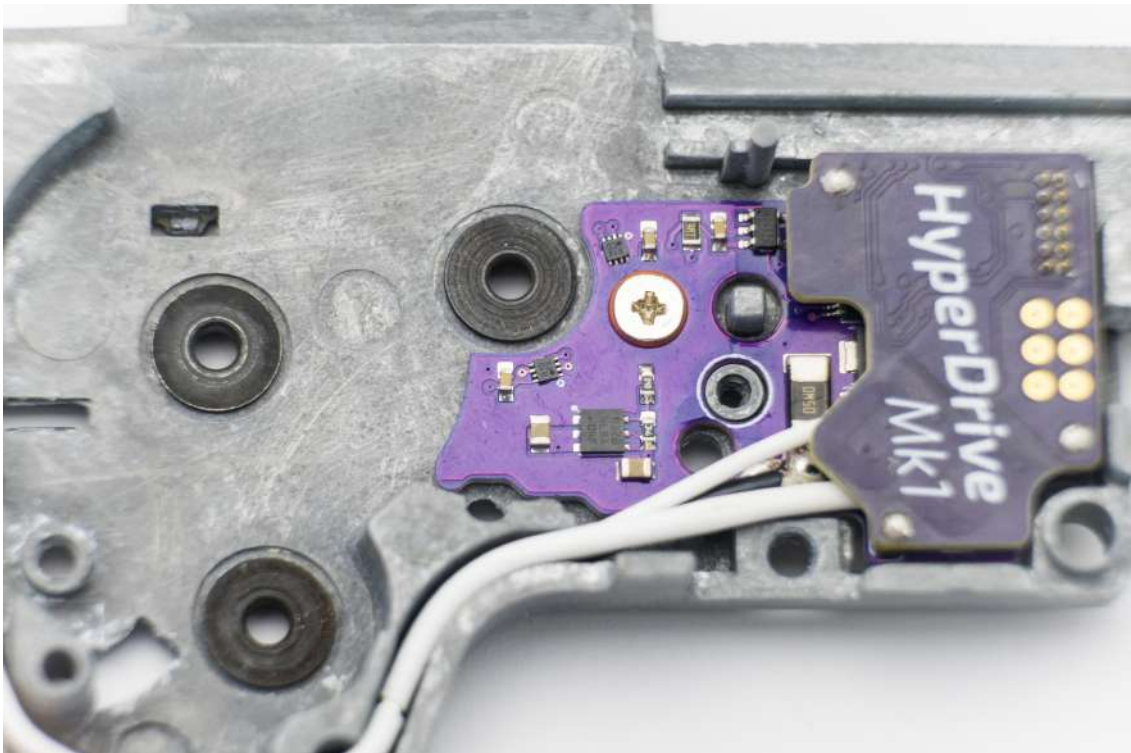
Installation should be performed by someone with a firm knowledge of V2 gearbox internals. Failure to follow the steps below may cause irreversible damage to your HyperDrive.

- **Est. Install Time: 15-30 minutes**
 - **Tools Required: Phillips screwdriver**
 - **Accessories Included: 2x M2 screws, 2x orings, 2x sector magnets**
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1. With the adhesive backing on, fit your HyperDrive into the lower gearbox shell as a dry run. If it doesn't lay flush, use a dremel to grind down any casting imperfections. CNC gearboxes are ideal, as the surface is already perfectly smooth. **If you are planning to use a 4S LiPo battery regularly, it is essential that the lower pcb has good heat transfer.**
2. Thoroughly degrease lower gearbox shell with rubbing alcohol or a degreaser and let dry.
3. Remove adhesive backing from the underside of the HyperDrive and affix it to the gearbox shell. Make sure the rounded area to the left is centered around the sector bushing/bearing. If you mess up and need to realign it, warm the shell with a heatgun and the adhesive should come off without tearing.
4. If the lower screw hole (see below) is raised, use the red o-ring and a screw to hold it in place. If this section is flat, use 2 o-rings instead. Tighten the screw until the oring underneath begins to flatten as shown.



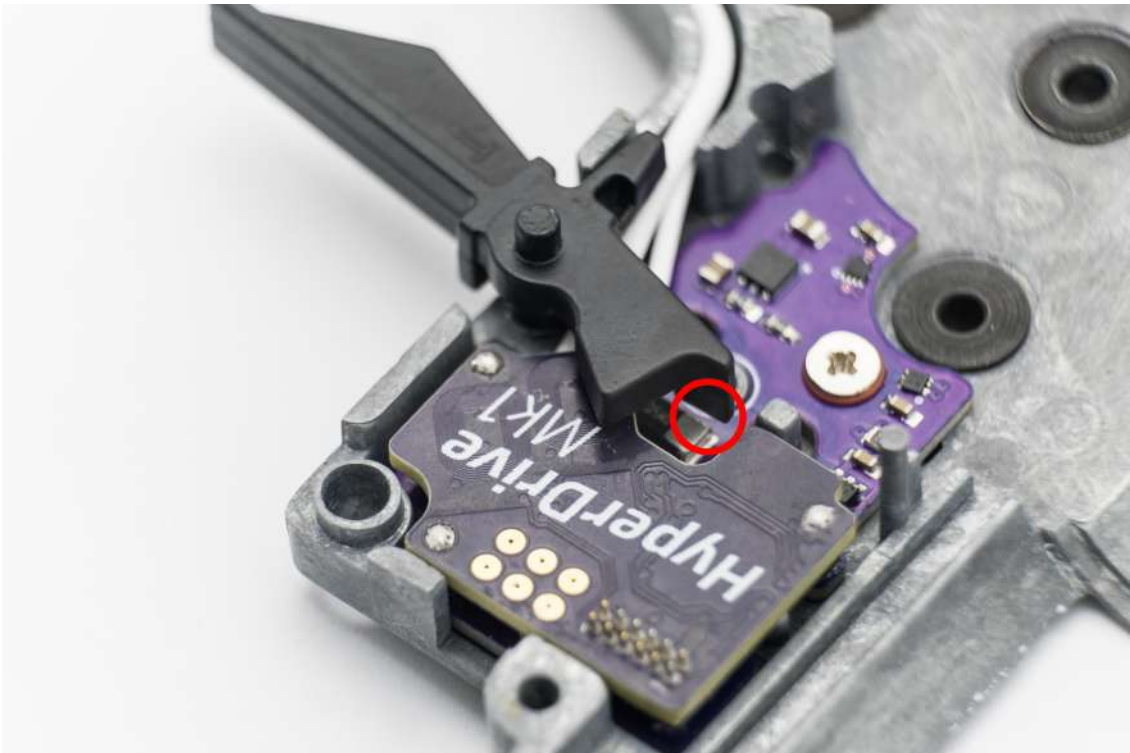
5. Route the wiring harness through the gearbox as shown below. In most cases, it is best to route the black wire on bottom -> thin white wire -> thick white wire on top.



6. Place the u-shaped magnet around the sector cam with the red side facing the sector gear. These magnets can be brittle, so handle with care.

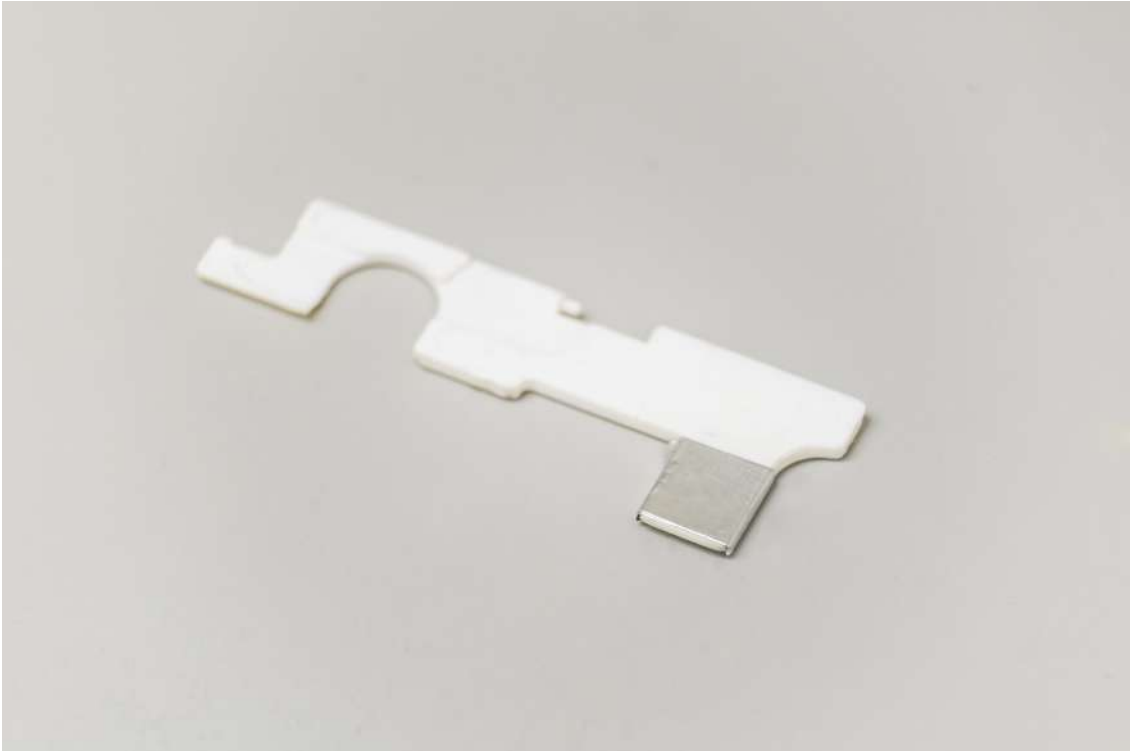


7. Install the trigger with trigger spring (only metal triggers will work, CNC triggers work best). **IMPORTANT:** Only 'regular' triggers with the full triangular section (shown below) will work. Also make sure the lower tip of the trigger doesn't touch collide with any components lower PCB (see below). If it does, you will need to sand/grind this part of the trigger down.

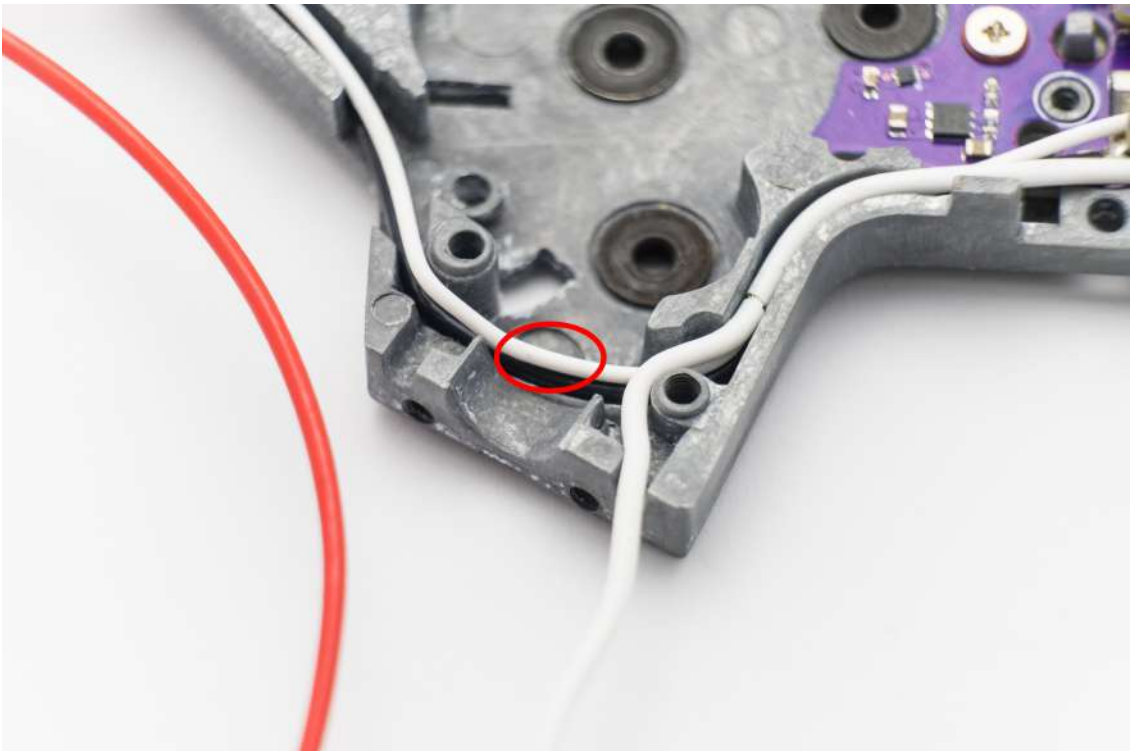


8. For very sensitive triggers (short travel), you will need to shim the trigger. Add just enough shims until the trigger stops wiggling side-to-side, but is still able to rotate freely.

9. The selector sensor detects metal, so a standard selector plate with metal contact works best. If your selector plate doesn't have metal contact, add 2 layers of aluminum ducting tape to the tab. Note that in this case, selector positioning may be less accurate. The exact position of the selector plate and sensor isn't important as with optical sensors - calibration will compensate for any differences.



10. Continue with the mechanical assembly of the gearbox. Make sure that the sector gear doesn't contact the components on the lower PCB.
11. Before closing the gearbox for the final time, double check the motor pinion gear won't touch the wire harness.



12. When connecting the motor, the red wire goes to the positive terminal, and white wire goes to negative.

You're all set! Before connecting a battery, refer to the HyperDrive Mk1 User Manual to calibrate and customize your settings.