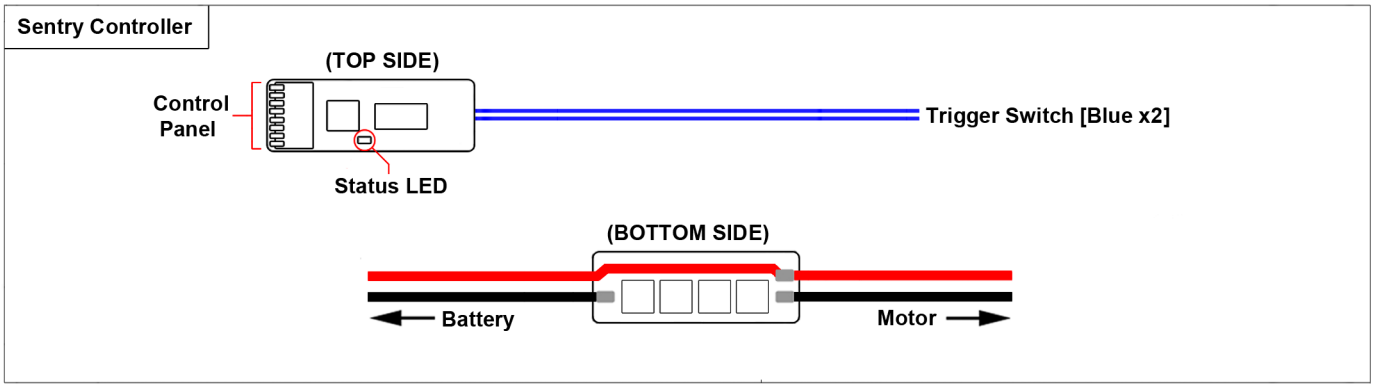
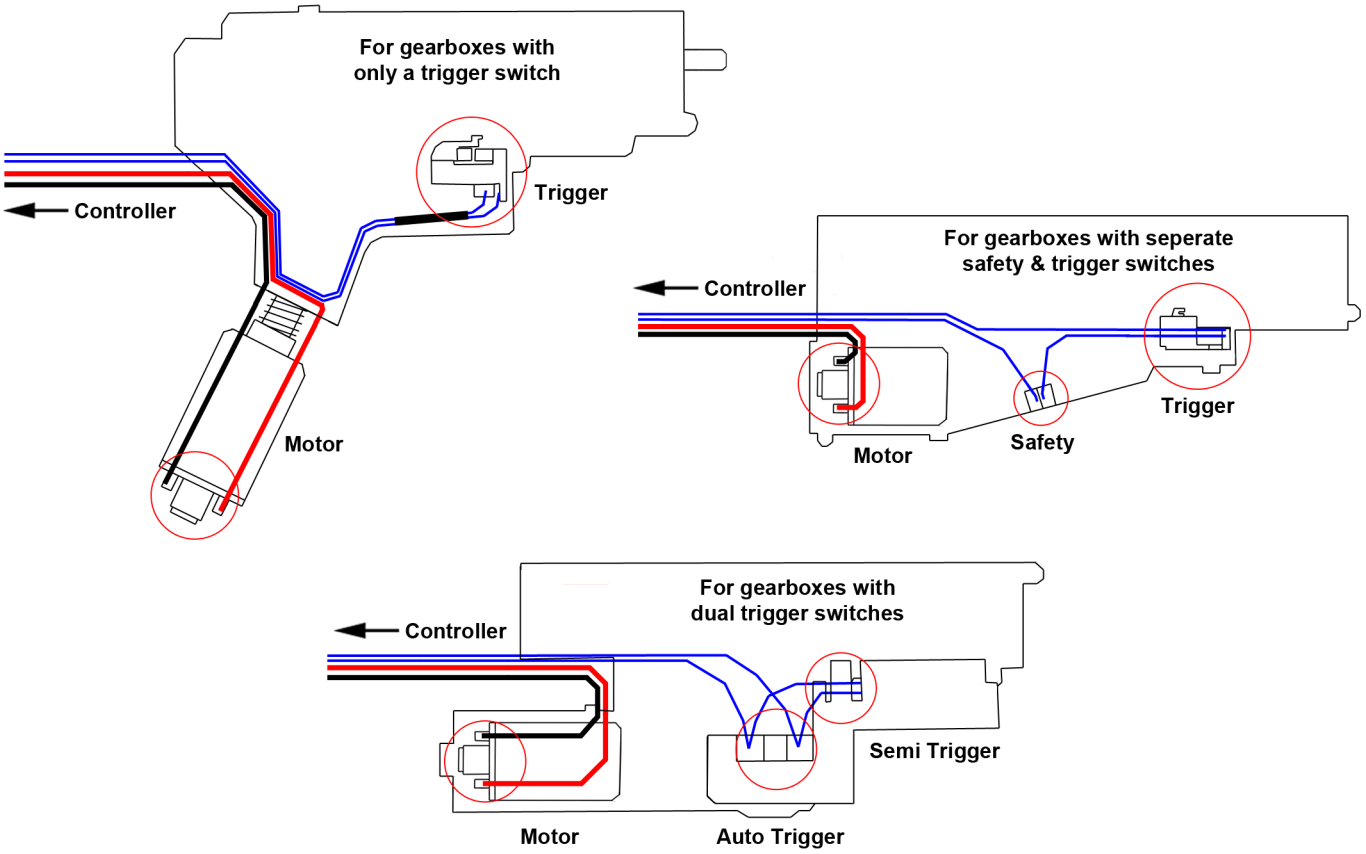
Installation Manual



Trigger Wiring Installation

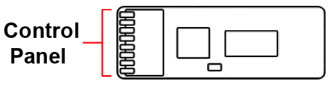


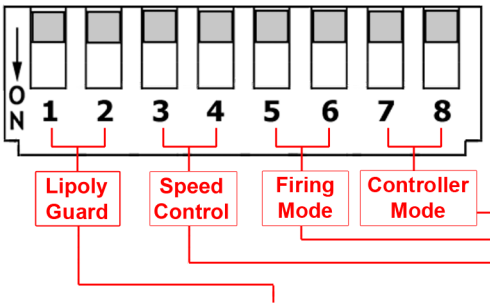
INSTALLATION:

1) Attach the large red and black wires on the motor side of the controller directly to the motor. Add connectors where needed.
2) Take the trigger wires (blue pair) and solder them to the trigger assembly as shown in the above diagrams.

End of Installation!

Control Panel





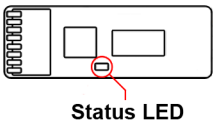
Some features of the controller can be adjusted using the control panel (DIP switches) on the controller, with each pair of switches operating in binary configuration. The chart below lists all available combinations.

	Switches 1 - 2	Switches 3 - 4	Switches 5 - 6	Switches 7 - 8
OFF - OFF	Ni-Cd / Ni-Mh	RoF at maximum	Safe - semi - auto	
OFF - ON	2-cell LiPo protection	Reduce RoF to 85%	Safe - burst - auto	
ON - OFF	3-cell LiPo protection	Reduce RoF to 70%	"	
ON - ON	4-cell LiPo protection	Reduce RoF to 55%	"	

INFO:

- Lipoly guard prevents lipoly batteries from falling below 3.2V per cell, eliminating the risk of over-discharge damage.
- The Sentry controller uses a "timer-based" burst, which requires calibration. Whenever burst fire is enabled OR when the battery is replaced (while burst is enabled), the first 3 shots MUST be in semi. If done correctly, the 4th semi shot will be a burst.

Status Indicator LED



During battery connection	GREEN - Controller is fully powered and standing by. YELLOW - Trigger short detected. Poses a safety hazard and must be fixed before operation.
During trigger press	YELLOW (flashing) - Overtemperature (>85°C/185°F) error. Firing can be resumed after cooling down to 50°C. RED (flashing) - Low voltage (<2.5V) or lipoly protection cutoff. Remains in effect until battery is replaced.

Troubleshooting

CAUTION!! AVOID DOING THE FOLLOWING:

- Connecting the battery in reverse polarity.
- Connecting the battery to the motor side of the controller.
- Allowing a short between the current and signal wirings/joints. The gearbox and gears ARE conductive and can cause shorts too!

If you are encountering unexpected behavior, check the following:

- The battery, motor, and all connectors are properly connected.
- The DIP switches on the control panel are FULLY up/down.
- No broken solder joints on the switches/sensors or connectors (gently tug the wires to check).
- Make sure none of the signal wires are shorting with the gearbox (unpredictable behavior).
- If the LED does not light up during battery connection, the controller is damaged. Contact AWS to arrange a replacement.