Setting up the Sharp distance sensor with the Dragonfly

1) Wiring

We supply the sensor with longer cables for your convenience. Please note the color near the tip of each cable: one should be green (and/or) blue (ground), other red (and/or) brown (+5V) and last one white (sensor out).

The ground one (green/blue) one has to go to one of the 4 ground plugs (placed at the right of the "sensor IN - 8''); The red and white will go to a normal "sensor" - for convenience, it is suggested to use the sensor 8; so, red to sensor 8 +5V, white to sensor 8 In, blue to ground.



However, depending in your setup (sensor

placement, mainly) you may want to avoid having it working all the time. In this case, wiring the +5V through one of the relays is the solution. You'll need an additional wire from "sensor 8 + 5V" to a "power input In", and then the sensor red-tipped wire will go to the matching "power output NO".

Don't forget to close the relay before reading the sensor!

2) Sensor placement

There are many options of placing the sensor, depending on your setup. Most important to know is it will work better if the beam of IR light is aimed at a bright white surface (such as the scope OTA, maybe with a bit of photo paper attached if the distance is big enough, or to a counterweight...). Place it, adjust it position until the reading is maximized, then move the scope to be sure the reading drops when the scope is not in place.