

Setting up the Sharp distance sensor with the Firefly

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 black (ground), other red (+5V) and last one white (sensor out).



The black one has to go to a "special" place, that is, the SubD-9 connector; use one of the screws holding the connector to secure it. The red and white will go to a normal "sensor", red to +5V, white to "In".

However, to avoid having it working all the time (and having a heavy IR light around the scope) we strongly recommend wiring the +5V thru one of the relays. You'll need an additional wire from "sensor +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 its position until the reading is maximized, then move the scope to be sure the reading drops when the scope is not in place.