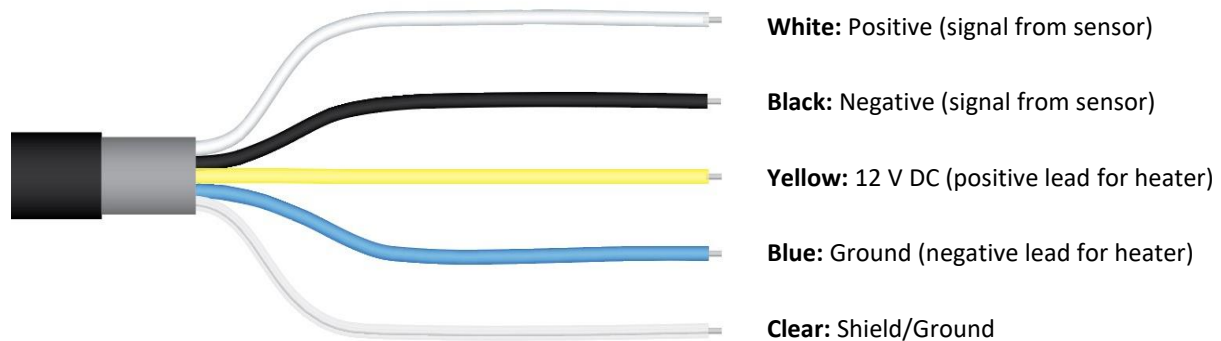


## OPERATION AND MEASUREMENT

Connect the sensor to a measurement device (meter, datalogger, controller) capable of measuring and displaying or recording a millivolt (mV) signal (an input measurement range of approximately 80 mV is required to cover the entire range of total shortwave radiation from the sun). In order to maximize measurement resolution and signal-to-noise ratio, the input range of the measurement device should closely match the output range of the pyranometer. **DO NOT connect the thermopile (white and black wires) to a power source. The detector is self-powered and applying voltage will damage it.**

**VERY IMPORTANT:** Apogee changed the wiring colors of all our bare-lead sensors in March 2018 in conjunction with the release of inline cable connectors on some sensors. To ensure proper connection to your data device, please note your serial number or if your sensor has a stainless-steel connector 30 cm from the sensor head then use the appropriate wiring configuration listed below. With the switch to connectors, we also changed to using cables that only have 4 or 7 internal wires. To make our various sensors easier to connect to your device, we clip off any unused wire colors at the end of the cable depending on the sensor. If you cut the cable or modify the original pigtail, you may find wires inside that are not used with your particular sensor. In this case, please disregard the extra wires and follow the color-coded wiring guide provided.

**Wiring for SP-510 with Serial Numbers range 1270 and above, and SP-610 with Serial Numbers 1094 and above (or that have cable connectors)**



**Wiring for SP-510 with Serial Numbers range 0-1269 and SP-610 with Serial Numbers range 0-1093**

