

Carlson CR2 Instrument Setup

Description This topic describes an instrument setup over a marked ground point using the laser plummet.

Important features:

- It is always recommended to shield the instrument from direct sunlight and avoid uneven temperatures around the instrument.
- The laser plummet described in this topic is built into the vertical axis of the instrument. It projects a red spot onto the ground, making it appreciably easier to centre the instrument.
- The laser plummet cannot be used in conjunction with a tribrach equipped with an optical plummet.

Setup step-by-step

Shield the instrument from direct sunlight and avoid uneven temperatures around the instrument.

1. Extend the tripod legs to allow for a comfortable working posture. Position the tripod over the marked ground point, centering it as well as possible.
2. Fasten the tribrach and instrument onto the tripod.
3. Turn on the instrument by pressing **PROG** for 2 s. Press **SHIFT (F12)** to access **STATUS Level & Laser Plummet**, activating the laser plummet.
4. Move the tripod legs (1) and use the tribrach footscrews (6) to centre the plummet (4) over the ground point.
5. Adjust the tripod legs to level the circular level (7).
6. By using the electronic level turn the tribrach footscrews (6) to precisely level the instrument.
7. Centre the instrument precisely over the ground point (4) by shifting the tribrach on the tripod plate (2).
8. Repeat steps 6. and 7. until the required accuracy is achieved.

Setup step-by-step

