RetroSign – Extension Pole

RetroSign can be fitted with an extension pole to allow for measuring tall road signs.

**Preparation**
Attach the adaptor plate to the instrument according to the extension pole documentation. Fasten the instrument to the extension pole and adjust the tilt head. Connect the Extension kit cable to the appropriate connector on the rear end of the instrument. Mount the support plate if needed.

**Precaution**
If the instrument is equipped with the bluetooth option, make sure it is turned off, if not the Kit will not be able to communicate with the instrument.

**Operation**
Turn the RetroSign on.
Hoist the instrument to the measurement target, observing the correct orientation.
Press the $R_A$ button on the extension kit.
The display first shows:

---

The instrument takes a measurement and the result is displayed e.g.

230

The value shown is the same as one of the results shown on the RetroSign. For GR1 it will be the value from the primary observation angle (0.2° or 0.33°) and for GR3 it will normally be the value from the the primary observation angle but it depends on the selection made in the RetroSign. For details see the menu items section.
To take new measurements just press $R_A$ again.
If no measurements are made, the Extension kit will keep the RetroSign on for approximately 4 minutes, where after the Extension kit automatically shuts down. The RetroSign will then shut down according to the time-out for the instrument.
If an error occurs during a measurement the Extension kit will show:

Err

**Operation with the RFID option**
Turn the instrument on, enable the RFID option, see menu item section, and turn the instrument off again.
Mount the RFID reader on the front and connect the cable to the front connector.
Turn the instrument on again and observe that the display shows “RFID Found”
Press the $R_A$ button on the extension kit.
The display first shows:
Then changes to 998 indicating that the reader is ready

Press the RA button again, the display once again shows

Hoist the instrument to the sign so that the RFID reader comes into close proximity of the RFID tag mounted on the sign. When the reader gets close enough to the tag to read it, the display changes to 999, indicating that the tag has been read.

Place the instrument on the sign and press RA again

The instrument performs the R’ measurement and displays the result on the extension kit.

If the tag is read while the display shows 998 then pressing RA will go directly to the measuring sequence displaying the result and completely skip the 999 display.

**Doing multipoint measurements reading the RFID tag only once.**

Enabling the mean calculation option has the consequence that the RFID tag only will be read when doing the first measurement in a multipoint series, this means that pressing RA again after having done the first measurement simply executes the next measurement.
The RFID code is logged together with the measurement results.

**Important**

The Extention Kit MK-2 has no build in battery; it is powered entirely from the instrument.
The Kit MK-2 can not be used together with the older RetroSign series of instruments

The GR1/GR3 instrument firmware should be version 3.21 or greater.

**Battery**

The battery in the display module can be exchanged by carefully unscrewing the bottom plate and removing the battery container. Insert the new battery. **Very important!** Notice that the red wire of the battery container must be connected to the + terminal. Assemble the Extension kit in reverse order.
Depending on use, the battery should be changed at least once a year.

When not in use the Extension kit still uses a small amount of power, so dismount the internal battery if storing for longer periods of time.

When the battery voltage is low, the display will show »LO BAT« or nothing at all. The battery type is: DL123A, 3V, 1.300 mAh. (or similar).