

Rainwise Rain Gauge Installation

Materials:

2 Cinder Blocks with predrilled holes and wire mesh attached
Wire Mesh
Concrete Screws
GPS
Screwdriver (Phillips)
Rainwise data transfer cord
USB Serial Converter (with USB software installed on computer)
Tablet PC

Rainwise RainLog battery replacement:

1. Loosen screws attaching rain gauge cover to rain gauge base and twist cover to remove. Remove blue cap and remove RainLog connector.
2. The lithium battery is located inside the RainLog. The RainLog takes a Lithium CR2477N battery that can be ordered directly from Rainwise.
3. After replacing battery, close cover and turn RainLog upside down. The red LED light will glow for 8 seconds, switch off, and then start blinking faintly once every 8 seconds indicating that the logger is on.

RainLog Configuration:

1. Before field installation the RainLog has to be configured to the appropriate settings.
2. Install RL-Loader 2.2 software onto computer and attach the RainLog to the computer using the RS-232 cable and the USB-to-Serial adapter cable.
3. Under the "Logger" menu tab, Connect to the RainLog using the "Auto Detect" button.
4. From the "Settings" menu select the unit of measurement "0.254mm/tip."
5. Under the "Logger" menu, select "Set Clock" to select a date and time. Under this same menu, set the Logger ID with the "Set ID" button and clear any unwanted data with the "Clear Ram" button.
6. Once the RainLog is properly configured, replace the connector and the RainLog in the tube separately and unconnected in the tube replace the blue cap.
7. If traveling to the field with the gauge, use a piece of lab tape to secure the bucket and prevent it from tipping during transport.
8. Replace the Logger cover and tighten screws.

Rain gauge field installation:

1. Loosen screws securing top of collector to its base.
2. Attach the collector to cinder block with cement screws. Cinder block should be predrilled with holes to attach the collector. Wire mesh should be attached to prevent animals from nesting in the cinder blocks.
3. Remove the blue cap from the tube and attach the RainLog to the connector.
4. Remove any tape holding the bucket.
5. Stack the Rain gauge and attached cinder block onto a second cinder block and level the gauge using the bubble as a guide.
6. Reattach the collector top and tighten the screws.

Rain data retrieval:

1. Remove collector top and RainLog from tube.
2. Connect to computer using data transfer cord and serial cable.
3. Run RL-Loader software and select "Autodetect" from the "Logger" menu.
4. Click the Download button from the "Logger" menu.
5. Select "Save As" and name the file using the yyyy.mm.dd_loggerID form (example: 2009.11.12_anas1).
6. At this time data can also be exported to an excel format using the Excel icon.
7. Make notes in field note book concerning any times that the bucket is tipped not relating to precip. False readings should be noted and corrected in data files.