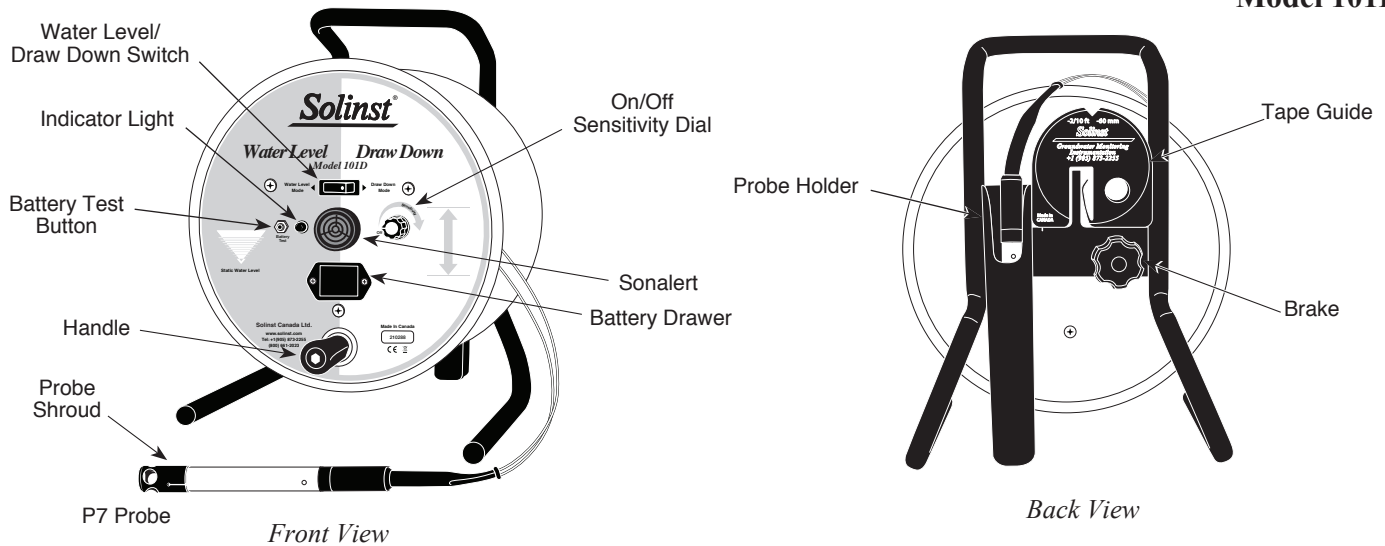


Solinst® Water Level DrawDown Meter Operating Instructions

Model 101D



Water Level Mode: light and buzzer activate when probe is submersed.
Draw Down Mode: light and buzzer activate when probe is in air.

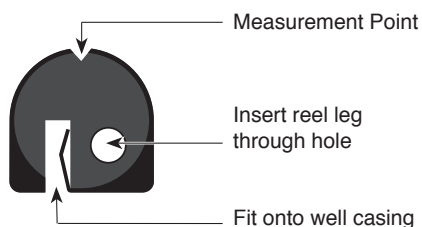
Equipment Check

1. Ensure the meter is in Water Level mode. Turn the sensitivity dial **fully clockwise**.

Notes: 1. Clockwise rotation of the sensitivity dial turns the meter on and increases sensitivity.
 2. Always set switch to highest sensitivity position, then decrease if necessary.
 3. The probe shroud should only be removed for cleaning.

2. Depress the battery test button to test the battery and main circuitry (does not test the tape or probe). Light and buzzer will activate.
3. Submerge the probe in tap water. This completes the circuit and activates the buzzer and light.
4. Switch to Draw Down mode. The buzzer and light will turn off when the probe is submersed.
5. Remove the probe from water to activate the buzzer and light. Depress battery test button and light and buzzer will turn off.

The Tape Guide



1. Fit the small end of the Tape Guide onto the edge of well casing 2" (50 mm) diameter or larger.
2. For small reels only, insert the leg into the hole in the Tape Guide and rest the reel on the side of the well casing.
3. To store the Tape Guide, simply clip it onto the support bracket located on the back of the reel.

Routine Care

1. After use, the tape should be carefully rewound onto the reel, the probe wiped dry and placed into the probe holder.
2. The probe, tape and reel can be wiped clean with phosphate free (non-abrasive) detergent and warm water. Do not submerge the reel.
3. Use of a Carrying Bag adds to the service life of the meter.
4. Use of the Tape Guide adds to the life of the tape.

Probe Care and Cleaning

1. Pull the shroud straight off the probe (this may take some force as it is a friction fit). Clean the shroud with a cloth.
2. Remove any dirt or water from around the central sensor pin.
3. If the central sensor pin is corroded or coated, use emery cloth to polish it.
4. After cleaning, replace the shroud by pushing straight onto the probe until it fully seats.

Battery Replacement

- Battery type - alkaline, 9 volt.
1. The battery is housed in a convenient battery drawer located in the faceplate of the Water Level Drawdown Meter.
 2. To replace the battery, simply press the drawer in, lift then pull.
 3. The battery drawer will slide out enough to pull it out.
 4. Note the polarity (positive (+) terminal should be towards the small notch in the end of the drawer) and place new battery in the drawer and slide it back into the faceplate.

Replacement Parts

The following parts can be provided should they become lost or damaged.

1. Probes and probe shrouds
2. Tape with Tape Seal Plug, Tape Seal Plug on shorter lengths of tape (3 ft or 1 m) and splice kit
3. Lights, switches, etc.
4. Reels

Water Level and Drawdown Measurements

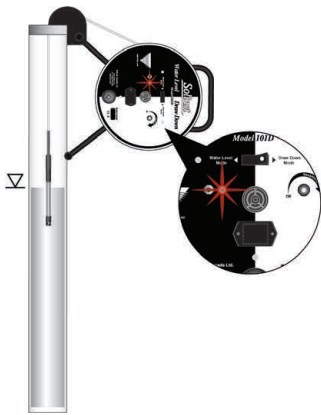
- The P7 Probe zero measurement point is located near the tip of the probe.
- For ease of operation the Tape Guide can be used to support the reel. Feed the tape into and out of the well using the groove in the top of the Tape Guide.
- When using the Tape Guide, the measuring point is offset from the top of casing. To adjust your measurements to the top of the casing, simply subtract the amount indicated on the front of the Tape Guide (i.e. 6 cm or 2/10 ft).

Water Level Measurement

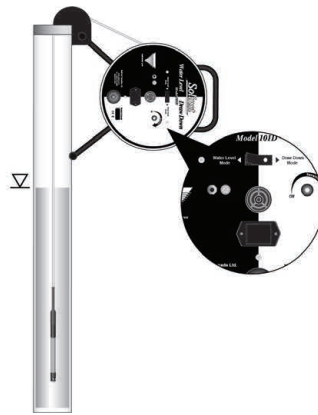
1. Ensure the meter is in Water Level mode.
2. Lower the probe. The light and buzzer activate when the black Delrin tip is submerged and the zero point is reached. To ensure accuracy, lower and raise the probe a few times and then record the depth measurement from the tape at the top of the well.

Drawdown Measurement

1. With the meter in Water Level mode, lower the probe to the desired drawdown depth.
2. Once you have submersed the probe at the desired depth, switch to Draw Down mode. The light and buzzer will shut off.
3. While conducting your pumping/sampling application, the light and buzzer will activate if the probe exits the water.



Water Level Mode



Draw Down Mode

Troubleshooting

SYMPTOM	CAUSE	REMEDY
In Water Level mode: no sound when probe immersed in water.	Dead battery.	Replace with 9V Alkaline.
	Water Conductivity is very low.	Increase sensitivity switch setting (turn clockwise) or call Solinst for assistance.
	Disconnected wires on circuit board.	Check all connections inside hub of reel for loose/disconnected wires – solder or reconnect.
	Broken wire in tape.	Locate break in tape – splice and seal, or replace. (Contact Solinst)
In Water Level mode: instrument continuously sounds after being immersed in water.	Disconnected wire inside probe.	Contact Solinst to obtain parts/repair instructions.
	Water in probe. Probe may be dirty which could interfere with the circuit connection.	Remove the probe. If sounding stops, check/replace o-ring. If sounding continues, check connection of electronics and wiring in reel. If sounding continues, contact Solinst for assessment or replace probe with new probe.