

pH MONITORING SYSTEM

Model pHMS Operating Instructions

Introduction

Your new pH Meter (pHMS) will allow you to continuously monitor the pH in your hydroponics reservoirs, tanks, and other critical water supplies. A large 3 ½ digit display, pH measurements 0.00 through 14.00, and automatic temperature compensation, make pHMS the only pH meter you'll need. We warranty all our meters for one year from the date of purchase.

Components

- pH Meter.
- 9VDC power supply.
- 0.9M (3') pH probe.

Preparation

1. Unpack meter, power supply and pH probe.
2. Remove the rubber cap from the end of the pH probe, and rinse with a pH 4 solution. Gently shake the probe downward to remove any air bubbles trapped within the glass bulb.
3. Prior to first usage, or after long-term storage, soak the bulb in warm water for about 30 minutes.
4. Attach probe to BNC connector on pH meter.
5. Plug the power supply into the pH meter, and into your standard 120VAC wall power outlet.

Measuring pH

1. Place probe in solution.
2. For temperature compensation, leave the probe in the solution for one or two minutes.
3. The display now shows your correct pH reading.

Calibration

1. Insert probe in a pH 7.0 solution. Allow temperature compensation to occur.
2. Insert a small Philips (#00) screwdriver into the pH 7 calibration hole. **Gently** turn the screwdriver until it is properly seated in the screw head. Make sure don't over turn it or else you will damage the Calibration resistor.
3. Slowly turn screwdriver until the meter reads 7.0
4. Rinse probe in a pH 4.0 solution and then insert it into a fresh pH 4.0 solution.
5. Insert screwdriver into the pH 4 calibration hole, and slowly turn until the pH meter reads 4.0
6. If meter will not calibrate check for probe damage, and/or clean the probe.

Storage

To ensure the continued usefulness of the pH probe **always** keep the bulb wet. Fill the rubber cap with HI 70300 Storage Solution. Slide the rubber cap over the probe tip until it fits snugly.

Cleaning the Probe

Heat a diluted Potassium Chloride (KCl) solution to 60-80°C . Place the tip of the pH probe into the heated solution, and let sit for about an hour. Remove the pH probe from the solution and let it cool to room temperature. Rinse the probe with a pH 4 solution.

Problem With Calibration

If you ever run into problem with calibration, which your pH meter keep calibrate 4.0 for pH4 and 6.6 to 6.8 for pH7 these are the steps you can use to overcome the problem:

1. First check the probe if it still good. Mostly if the probe give the same reading in both, pH4 and pH7 solution that mean the probe is dead. You need a new probe
2. Insert probe in a pH4 solution, slowly turn screwdriver until the meter read 3.8
3. Rinse probe in a pH7 solution and then insert it into a fresh pH7 solution and calibrate pH7 to 7.0
4. Rinse probe in a pH4 solution and then insert it into pH4 again to check if it read 4.0, if not adjust it to 4.0
5. Repeat step 2 to 3 until it calibrate to pH 4.0 and pH 7.0.
6. If your meter fluctuate after it is being use for a long period of time, just unplug the meter and let it sit for a few hour to allow the meter to cool down and it will be working fine again.

WARRANTY POLICY: two years limited warranty on all of our meters.

First Year:

One year manufactures' parts and labour warranty on the pH meters and six months manufactures' warranty on the pH probe. On the probe if it is damaged after six month you can replace it for the cost of \$54.95.

Second Year:

The customer can change their defective meter (only if the problem is a manufacture part's defect) with our reconditioned meter for the cost of \$60.00 plus shipping and handling charge. The reconditioned meter comes with a six months manufacturer warranty on parts and labour.

However, there is no warranty on any part that is to be found defective from customer abuse or tampering. Problems from customer abuse or tampering will result in a charge of \$60.00 per hour plus parts to be repaired.

All returned units must include RA #, supplied from FHD and all parts and accessories must be returned with the units.

If you have any questions or comments please contact us:

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