

# NUTRA-DIP MONITORING SYSTEM

## Model CMS Operating Instructions

### Introduction

Total Dissolved Solids (TDS) or salts, are found in all aqueous solutions. Dissolved solids can be beneficial in controlled concentrations, but can quickly change to undesired levels, salts can accumulate to toxic levels in sensitive environments like plants, aquariums or drinking water, therefore the need to measure TDS is very important. The Nutra-Dip Continuous Monitoring System (CMS) is an effective TDS management tool.

The CMS family measures TDS in varying sensitivities in either parts per million (PPM) or microseimens ( $\mu\text{S}/\text{cm}$ ). The units display the measured range from 0 to 19990 PPM or  $\mu\text{S}$  and have automatic temperature compensation. The operating temperature for this unit is -20 to 80 in a relative humidity of less than 85%. We have the unit available in either battery or power adapter operated.

### Components

- CMS Meter with 5-foot probe attach to it.
- 9 VDC power adapter/ 9V battery.

### Preparation

1. Unpack meter and power adapter.
2. Plug the power adapter into the CMS meter, and into your standard 120 VAC wall power outlet.
3. CMS meter should turn on as soon as plugged in.

### Measuring Dissolved Salts

1. Place probe in the solution to be measured.
2. For temperature compensation, leave the probe in the solution for 5 minutes.
3. The display unit will indicate the value of the measured solution

### Calibration of the CMS

1. Place probe into a container of calibration solution.
2. Leave probe in solution for 5 minutes to allow temperature compensation to occur.
3. Insert a small Philip (#00) screwdriver into the 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.
4. Slowly turn the screwdriver to adjust the reading until it matches the value of the solution.
5. If the meter will not calibrate check for probe damage, and/or clean the probe.

### Cleaning the Probe

1. Probe should be cleaned about every month.
2. Remove probe from solution.
3. Clean probe with a cotton swab (Q-tips).
4. Do not force probe pins or readings or else will not be accurate any more.

## **Problem With Calibration**

If you ever run into problem with calibration these are the steps you can use to overcome the problem:

1. Check make sure you haven't damage the calibration resister.
2. Make sure the screwdriver seated properly in the screw head.
3. Turn slowly to adjust the reading to match the value of the solution.
4. If the meter still not calibrate check the probe for damage.
5. 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:** We have two years limited warranty on all of our meters.

### **First Year:**

One year manufactures' parts and labour warranty on all of our CMS meters and probes.

### **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 \$45.00 plus \$5.00 shipping and handling charge. The reconditioned meter comes with a six months manufacture warranty on parts, probe 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 \$45.00 per hour plus parts to be repaired.

All returned units must include RA #, supplied from N.A.G.S. and all parts and accessories must be return with the units.

If you have any questions or comments please contact us:

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