REOTEMP®
INSTRUMENTS

DC DIGITAL COMPOST THERMOMETER INSTRUCTIONS

Thank you for purchasing a REOTEMP digital compost thermometer. You have made a lasting investment in a quality instrument. When used carefully and in accordance with instructions, it should serve you well for many years.

WARNINGS

-The pointed stem of your thermometer is very sharp. Please be careful when handling. When not in use, please cover the pointed stem to prevent accidental injury. The probe can be stored in the PVC pipe it was shipped in.

-Avoid dropping the instrument. Dropping the thermometer could cause permanent damage.

OPERATING INSTRUCTIONS

The temperature sensor is in the bottom first inch of the stem, so for a 36” compost thermometer inserted into a compost pile, it will indicate the temperature of the compost at a depth of 35” - 36”.

When inserting the thermometer into a compost pile, grasp the orange handle and push (**DO NOT** push the head of the thermometer- push the orange handle only). If you push into your compost pile and hit a hard object in your compost, pull the probe out and try again in another area. Do not try to force the probe through hard objects in the pile.

Once the thermometer is inserted in the pile, wait until the temperature has stabilized before reading the temperature. When you are finished using the thermometer, it is recommend to return it to its PVC sheath.

BATTERY REPLACEMENT INSTRUCTIONS

Order replacement batteries at http://reotemp.mybigcommerce.com/

1. Unscrew the bezel of the head.
2. Using a small screw driver, unscrew the two screws on the face of the dial.
3. Carefully lift the green cover to reveal two brass stand-offs. Remove the two stand-offs using a crescent wrench to get them started.
4. Lift the circuit board and display carefully out of the head. Unplug the battery pack with plastic jacket and white clip and replace it with a new battery pack. Do not attempt to disassemble the battery pack. Be sure the white connector is securely plugged in to the back of the circuit board and the battery is clipped back into the metal holder before reassembling.
5. Replace the circuit board, brass stand-offs, green face plate, screws and front bezel.

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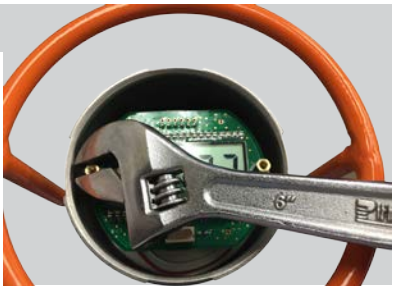

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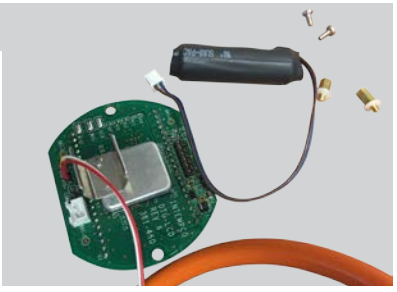


REOTEMP COMPOST

HEAVY DUTY & SUPER DUTY COMPOST THERMOMETER INSTRUCTIONS

Thank you for purchasing a REOTEMP compost thermometer. You have made a lasting investment in a quality instrument that was made in the USA. When used carefully and in accordance with instructions, it should serve you well for many years.

WARNINGS!

- **The pointed stem of your thermometer is very sharp.** Please be careful when handling. When not in use, please cover the point in the protective sheath it was shipped in.
- **Avoid bending the stem.** A bent stem renders the instrument inoperable, and non-repairable.
- **Avoid dropping the instrument.** Dropping the thermometer might knock it out of calibration.

OPERATING INSTRUCTIONS

The bimetal coil which senses temperature is in the bottom two inches of the stem, so if the stem is immersed 36" into a medium, it will indicate the temperature of the medium at a depth of 34" - 36".

When inserting the thermometer into a semi-solid such as compost, grasp the shaft about 6" from the point, and push (**DO NOT** push the head of the thermometer- push on the stem only). Once the stem goes in 6", grasp the stem 6" farther back, and push again. Repeat until the stem is completely inserted. This method will avoid bending the stem.

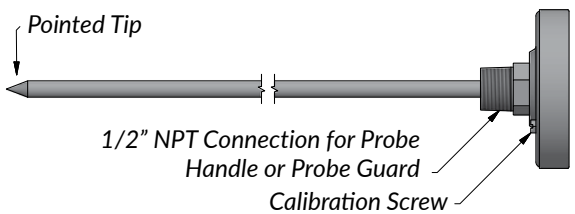
Once the thermometer is inserted in the pile, wait as least 45 seconds before reading the temperature. When you are finished using the thermometer, return it to its protective sheath.

RECOMMENDED

To avoid bending the stem, we recommend inserting the thermometer WITH A PROBE GUARD or PROBE HANDLE, through a pre-cored hole. Probe Guards and handles can be ordered online at reotempcompost.com.

WHAT CAN CAUSE A REOTEMP THERMOMETER TO GO OUT OF CALIBRATION?

- Dropping the thermometer on a hard surface, or any other severe shock
- Inadvertent turning of the calibration screw on the back of the case
- Years of use may result in a slight drift of the sensor



CALIBRATION INSTRUCTIONS

Your thermometer comes pre-calibrated. If you think your thermometer is out of calibration due to dropping, inadvertent turning of the calibration screw or years of use, the following instructions can be used to calibrate.

Reference Bath: You will need a bath of water of a known temperature, typically an ice bath.

• The ice bath should be mostly ice, with just enough water to fill the spaces.
• The reference bath should be at least 4 inches deep (6 or more inches is better.)
• The bath should be agitated (stirred) just before or during calibration.

Immersion: The thermometer should be immersed at least 4 inches into the bath, as the sensitive portion of the thermometer is in the last 2-3 inches of the stem.

Calibration: Leave the thermometer in the bath for at least a minute, to make sure temperatures have stabilized. Then turn the small (1/4") hex screw head on the back of the dial case of the Thermometer until the pointer is at 32°F (0°C). You can use a flat screwdriver, or a small coin, or pliers to rotate the screw head.

Congratulations, your thermometer has been re-calibrated!

If your thermometer will not recalibrate, it may need factory repair. However, if the stem is bent, it cannot be repaired and must be replaced. Contact us at 858-225-1889 or email compost@reotemp.com to discuss repair/replacement options.

WARRANTY

We warrant bimetal dial compost thermometers against defective materials or workmanship under normal use and service for 1 year following the date of shipment. This warranty does not cover exposure to corrosive materials, temperatures in excess of those recommended, excessive vibration, or forces or abrasions that cause bending or unsealing of the case or stem. For United States, International and Canadian customers, the customer is responsible for the cost of shipping product(s) back to REOTEMP's factory. Upon inspection, if the product is determined to have defective materials or workmanship under normal use, then REOTEMP will repair or replace the product(s) and cover the cost of shipping back to the customer. REOTEMP guarantees the products will perform within the cataloged performance specifications if used within specified parameters. Determination of defect or failure will be made by REOTEMP or at a certified test facility. Warranty is limited to replacement of the unit or repair of the unit at the factory. This warranty is expressly in lieu of any other warranty, expressed or implied, and of all other obligations or liability on our part for damages, including but not limited to, consequential damages arising out of use or misuse of our instruments, and we neither assume nor authorize anyone to assume for us, any other liability in connection with the sale of our instruments or sensors. Suitability of the product for the customer's application rests with the customer; REOTEMP does not warranty suitability of its product(s) for the application selected by the customer. REOTEMP reserves the right to make product improvements and change product specifications at any time without notification. Please contact REOTEMP for verification of all critical dimensions and specifications.

REOTEMP®
INSTRUMENTS

MOISTURE METER INSTRUCTIONS

CONGRATULATIONS ON OWNING THIS FINE QUALITY PRODUCT. Remove the red tab on the back of the unit and your new moisture meter is ready to use. However, to realize the best possible results, read these instructions before operating your unit.

GENERAL

Moisture is measured by inserting the probe into the soil or compost at each location to be tested. The unit is sensitive only at the tip, therefore the reading obtained on the meter indicates the amount of moisture only at the probe tip. Now you can determine the moisture condition of your soil or compost without having to remove any mulch or soil. Just insert the probe directly into the soil or compost. Instantly, your moisture meter will give you an accurate reading of moisture content.

CALIBRATION

It is quite important that the calibration of the unit is performed in the same soil or compost composition and location as that in which it will be used. The meter must first be calibrated by taking a sample of your compost or soil and adding water to the sample until it's at your "ideal" moisture level. Your "ideal" sample level will vary depending on what your needs are. Remove the black plug located on the back of the unit. Then insert the moisture meter so that the tip is in the center of your sample. Place a small screwdriver in the adjustment slot and adjust to a reading of "5" on the 0-10 scale. Now that your meter is calibrated, when you come back again to check your compost or soil you'll know if it's too dry or too wet. If the reading is above "5" it's too wet, if it's below "5" it's too dry.

APPLICATIONS

Sub-soil moisture mapping - This technique is used primarily for checking coverage and penetration of a sprinkler system. After a normal watering, take readings at different locations and at two or three different depths. Next, create a map plotting each of the readings. An ideal system would show equal readings at all locations and depths. Poor coverage would show erratic readings at multiple locations with the same depth. Poor penetration (or insufficient application) would be indicated by unequal amounts of moisture at the same location but different depths. Other applications of sub-soil moisture mapping would be locating leaking water lines, checking effectiveness of septic tank leach lines, locating surface water springs, and locating depths of shallow water tables.

BATTERY

The battery is included and is already installed. With normal usage it should last one season. When replacement becomes necessary, (unable to obtain a meter reading of 10 in saturated soil even with Calibration Trimmer in maximum clockwise position) replace with a standard AAA cell.

WARRANTY

The FACTORY guarantees this unit to be free from defects of material and workmanship for 1 year from date of purchase by the original customer. If this unit shall fail to operate properly, return to manufacturer, accompanied by the completed customer guarantee policy. The factory responsibility shall be limited to repair or replacement of any unit found defective in materials or workmanship when returned prepaid to the factory. This guarantee shall not apply to any unit which has been altered, abused, improperly used, or repaired by anyone other than the factory. This guarantee is in lieu of all other, expressed or implied, including the warranty of merchantability and all other obligations and liability on the factory part, and neither assumes nor authorizes any other person to assume for the factory any other liability in connection with the sale of the factory manufactured equipment.

CHECKING FOR FERTILIZER LEACH

Calibrate meter to center scale setting in area where soil is saturated either by rain or irrigation. Then, probe across saturated area. A high meter reading will be great (salts) fertilizer in solution. Lower reading is less (salts) fertilizer in solution. CAUTION: It is important that the calibration of the unit be checked before relying on the chart. Unusual conditions such as extremely heavy clay soil would require somewhat lower meter readings than shown, while a fine, loose, sandy soil could require higher readings.

OXYTEMP Instructions

Congratulations on purchasing your new OxyTemp Probe!

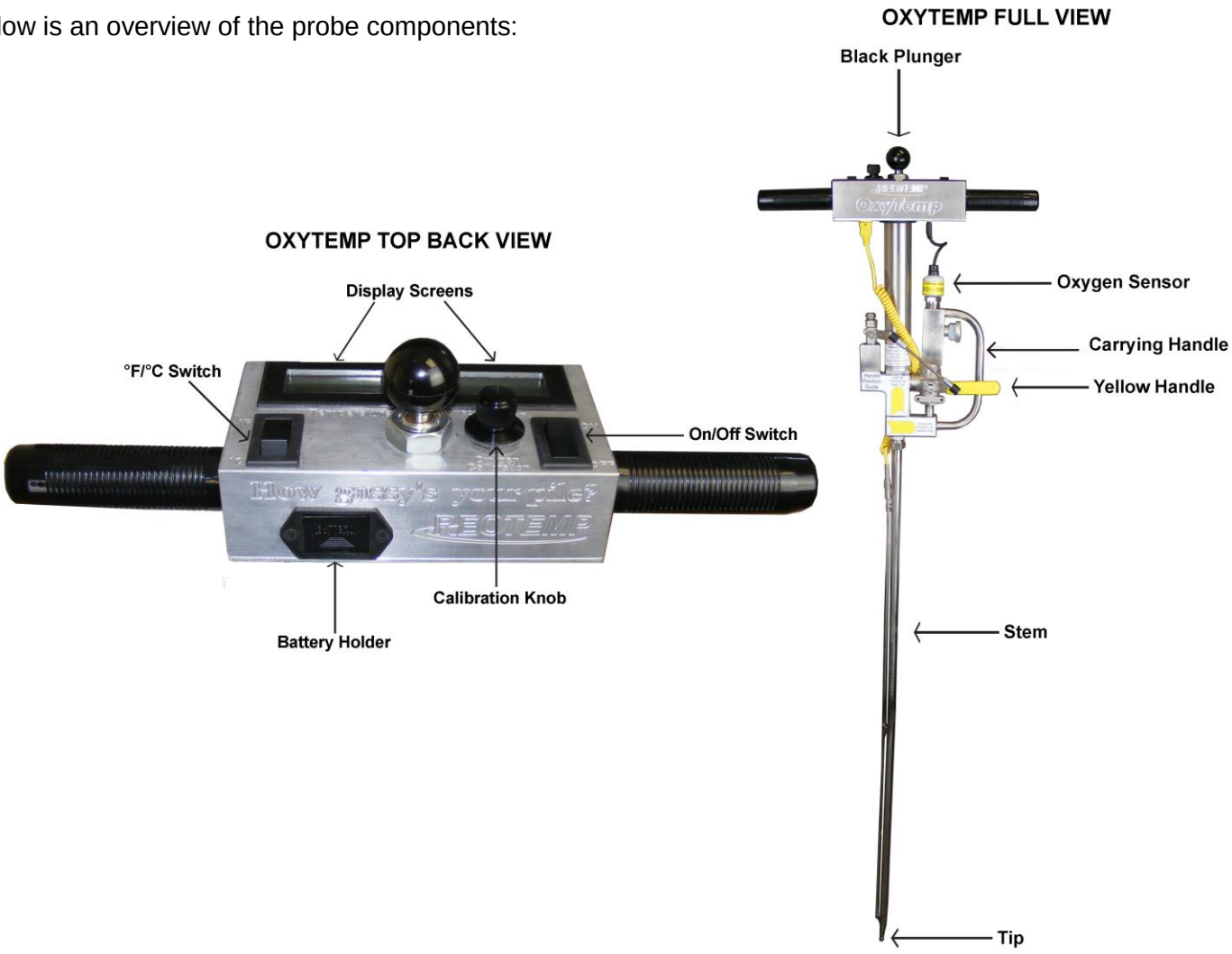
ASSEMBLY INSTRUCTIONS FOR ECO-OXYGEN PROBES

1. Thread the stem into the bottom of the upper housing.
2. Tighten stem with a wrench.
3. Then, insert the yellow cord into the male connection located on the underside of the upper housing.

GENERAL:
The REO*TEMP* OxyTemp Probe allows you to draw a sample of air from your compost pile and then test that same sample to determine the percent oxygen present. All in one simple motion! Samples are only drawn from the tip of the probe, which allows you to control where each one is taken. The unique design of this probe enables you to clean out the tip (if clogging occurs) by forcing ambient air through the tip.

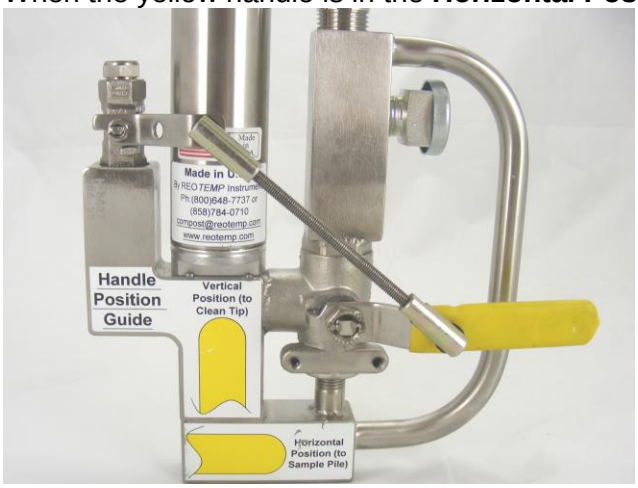
For best results, a slow steady flow of air must be pushed across the sensor. See the sampling section for details. **Calibration must be completed before use**.

Below is an overview of the probe components:



YELLOW HANDLE POSITION GUIDE:

When the yellow handle is in the **Horizontal Position or "Sampling Position"**:



- Pulling the black plunger will draw air from the tip.
- Pushing the black plunger will move the drawn air across the sensor.

Note: the "pushing stroke" should take **6 seconds** for best results.

When the yellow handle is in the **Vertical Position or "Cleaning Position"**:

- Pulling the plunger will draw in ambient air.
- Pushing the plunger will move air out the tip (cleaning it).

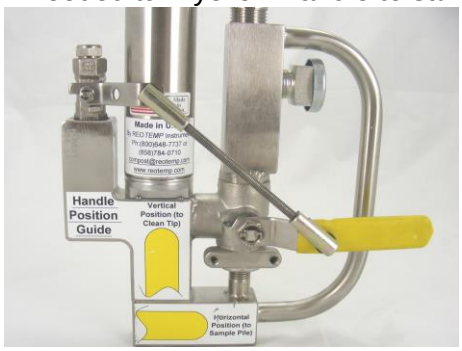
Note: the "pushing stroke" should be fast to clean out tip.

OXYTEMP Instructions

CALIBRATION INSTRUCTIONS:

1. Turn on probe (allow a few seconds to warm up).

2. Make sure the tip is in clean ambient air.
3. If needed turn yellow handle to sampling position, shown below:



4. Pull & Push 2 samples of fresh air (using black plunger).

5. Pull a 3rd sample and while pushing back in, adjust calibration knob to read “20.9” (clean ambient air is 20.9% oxygen). Note: “pushing stroke” should take **6 seconds** for best results.

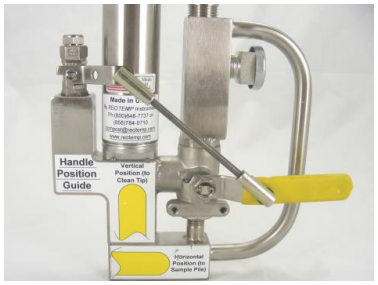
6. Your oxygen probe is now calibrated and ready to measure!

OXYTEMP Instructions

SAMPLING:

Warning: Avoid sucking liquid into the air chamber. Sediments may collect and cause clogging.

1. Calibrate probe (see instructions above).
2. Once calibrated, insert probe into compost pile.
3. Make sure the handle is in the Horizontal or "Sampling" position.



4. Pull the black plunger out. Push the black plunger in. Repeat 2 times. (this will purge the probe of any previously trapped gases).

5. Pull the plunger out a 3rd time.

6. (While watching the display) **Slowly Push** the plunger in a 3rd time. This should take **6 seconds** for best results. Record the percent oxygen displayed as the plunger was being pushed in.

7. Move to your next sampling location or compost pile and start over with step1. Suggestion - While walking to the next sample location you may want to use the clean out function.

CLEANING INSTRUCTIONS:

Clogging can be a major issue when sampling oxygen in compost, which is why Reotemp has designed this probe with a “cleaning” feature. When your probe becomes clogged, perform the steps below.

1. Move the yellow handle to the Vertical or “Cleaning” Position.

2. Pull the black plunger out (sucking in ambient air).

3. Quickly Push the black plunger in (forcing air out the clogged tip).

4. Repeat as necessary.

Note: The cleaning procedure will likely only clean out some of the tip’s holes. This is ok. You should be able to re-insert the probe into your next sampling location and successfully pull a new sample.

BATTERY INSTRUCTIONS:

1. Use your finger to lift the battery holder as shown.

2. Slide battery holder out.

3. Replace battery.

4. Slide battery holder back in until it snaps into place.

REPLACEMENT PARTS:

Order replacement O2 Sensors and replacements tips at http://reotemp.mybigcommerce.com/

CONTACT

Address 10656 Roselle St.
San Diego, CA 92121

Phone (858) 225-1889
E-mail compost@reotemp.com
Web reotemp.com/compost

YouTube Search for "Reotemp Compost" on YouTube!

@reotempcompost

facebook.com/reotempcompost

REOTEMP WARRANTY

We warrant bimetal dial compost thermometers, the digital compost thermometers (model DCXXXXX), probe guards, probe handles, moisture meters, thermocouple probes, EcoProbe™ Medium Duty probe and OxyTemp™ probes against defective materials or workmanship under normal use and service for 1 year following the date of shipment. We warrant hand held digital displays for 90 days from date of shipment. We warrant the EcoProbe™ Super Duty Probe (wireless temperature monitoring) for 3 years from the date of shipment. This warranty does not cover exposure to corrosive materials, temperatures in excess of those recommended, excessive vibration, or forces or abrasions that cause bending or unsealing of the case or stem. For United States, International and Canadian customers, the customer is responsible for the cost of shipping product(s) back to REOTEMP's factory. Upon inspection, if the product is determined to have defective materials or workmanship under normal use, then REOTEMP will repair or replace the product(s) and cover the cost of shipping back to the customer. REOTEMP guarantees the products will perform within the cataloged performance specifications if used within specified parameters. Determination of defect or failure will be made by REOTEMP or at a certified test facility. Warranty is limited to replacement of the unit or repair of the unit at the factory. This warranty is expressly in lieu of any other warranty, expressed or implied, and of all other obligations or liability on our part for damages, including but not limited to, consequential damages arising out of use or misuse of our instruments, and we neither assume nor authorize anyone to assume for us, any other liability in connection with the sale of our instruments or sensors. Suitability of the product for the customer's application rests with the customer; REOTEMP does not warranty suitability of its product(s) for the application selected by the customer. REOTEMP reserves the right to make product improvements and change product specifications at any time without notification. Please contact REOTEMP for verification of all critical dimensions and specifications.

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reotemp.com/compost

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