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## **GETTING THE MOST FROM YOUR “TEMPWATCH”**

### **MODEL 750 (-20 to +120 Degrees F.)**

TEMPWATCH was developed to give you a fast, accurate and comprehensive temperature picture so that you can make better decisions in your frost control, crop storage, or other critical temperature operations.

TEMPWATCH will operate at temperatures outside the designated range. However, the readings will not be accurate.

Your TEMPWATCH is supplied with a carrying case and battery. The battery will illuminate the LCD display for about 10 hours of accumulated readings. After that, the display back lighting will cease to illuminate, but the display will still operate. You may change the battery at this time. However, you may continue to use your TEMPWATCH without backlighting illumination for about another 100 hours of accumulated operation. When the decimal point fades completely, the battery must be changed, or erratic readings may occur. Always use a nine-volt alkaline (Duracel) battery, available at local stores.

To replace the battery, remove the four screws at the side of the case, and carefully unsnap the old battery. Battery life can be extended by pressing the button only for the time required to actually take a reading and not, for example, while a sensor is still settling itself to a new temperature. We suggest you make a practice of keeping a spare battery on hand.

### **PORTABLE SENSOR TS701**

The Portable Sensor is very fast responding, giving you rapid checks of air temperature wherever you hold it. Its unique Fiberglass and Mylar construction gives it a truly optimum combination of light weight for fast response, and durability for years of field service.

When not in use, the Portable Sensor mounts to the side of the TEMPWATCH case. To use it, pull it away from its Velcro mount (side to side, not end to end) and plug it onto the top of the TEMPWATCH with the smooth surface facing you. The light facilitates connection in the dark.

To take a reading, hold the TEMPWATCH away from your body and gently wave it so that air flows over the sensor. The time it takes for the sensor to settle to the proper temperature depends on how much temperature change the sensor is required to make.

If there is a breeze, be sure to hold the TEMPWATCH upwind from your body. You will find surprising temperature variations as you take readings at various heights and locations.

Your TEMPWATCH was carefully calibrated at the factory and should never require recalibration. However, a 32-degree instrument accuracy check is built into the Portable Sensor. To check accuracy, plug the Portable Sensor onto the TEMPWATCH with the smooth surface facing you, but offset one pin position to the right. If the display reads less than 31.7 or more than 32.3, contact the factory for instructions.

### **VEHICLE SENSOR TS702**

Installation Instructions are packed with the Vehicle Sensor. To use, press the TEMPWATCH in place on the Velcro mount. Plug the cable connector module into the TEMPWATCH with the fuzzy side facing you. The display should operate when the vehicle ignition is turned on.

As you drive, you will see temperature patterns and variations and detect cold spots with ease and precision.

### **FRUIT PROBE TS703A AND TS703B**

Temperatures inside large fruit and under the soil may vary considerably from air temperature. To use, press it slowly into the fruit or soil, so that the sensor tip is constantly re-exposed to fresh material. This method gives a faster settling time. Also, if the probe is initially at the temperature near the temperature to read, it will take less time to settle to the proper reading.

The Fruit Probe is very sturdy as long as you don't apply a bending force to the probe. An adhesive clip and piece of Velcro are provided to facilitate storing the Fruit Probe on the TEMPWATCH case, dashboard, etc. CAUTION: Because of its sharp point, the Fruit Probe could cause injury if handled carelessly. The TS-703A Model has a retractile cord that extends to arms length. The TS-703B model has a straight lightweight cord which is 10 feet long.

### **INVERSION SENSOR TS704**

Adhesive clips are provided to mount the Inversion Sensor up to 40 feet in the air, with the cable extending downward to the level where you can conveniently plug it onto the TEMPWATCH for comparison with ground level readings taken with the Portable Sensor. For greater accuracy, the tip of the Inversion Sensor should be mounted away from any large object or surface.

### **STORAGE SENSOR TS705**

The Storage Sensor is a very rugged sensor suitable for direct burial under crops in storage, etc. Its heavier construction makes it slower to respond to temperature changes than other TEMPWATCH sensors. To use, simply plug the connector module onto the TEMPWATCH and take a reading.

\*\*\*\*\* "700 Series" sensors must be used with the TW-750 \*\*\*\*\*

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We at RACO have made every effort to make TEMPWATCH a highly beneficial tool for you. We specifically request your suggestions or comments, positive or negative. Your feedback will allow us to make TEMPWATCH do an even better job in the future.

### **WARRANTY**

RACO will repair or replace any TEMPWATCH or sensor found to be defective within one year of purchase date, when returned prepaid to RACO'S Emeryville plant. RACO will not be liable for consequential damage of any kind. Service at nominal charge after warranty period will be performed at RACO's Emeryville plant.