SPECIFICATIONS

Receiver—
Range:	-14.2 to 158.0 °F / -9.9 to 70.0 °C
Resolution:	0.1°

Remote —
Ambient range:	-22.0 to 158.0 °F / -30.0 to 70.0 °C
Probe range:	-58.0 to 158.0 °F / -50.0 to 70.0 °C
Resolution:	0.1°

RF transmission—
Frequency:	433 MHz
Range:	Up to 100 feet (30 meters)
Rate:	Every 30 seconds
Remotes:	Up to 3 (1 remote included)
Compliance:	This product complies with standards and specifications of BZT, FCC and article number 334 of PTT.

REMOTE - BATTERY INSTALLATION AND CHANNEL SELECTION
Install the batteries into the remote(s) before doing so for the receiver.
1. Remove the battery compartment.
2. Select the channel number using the CHANNEL slide switch.

Note: When using multiple remotes, make certain to assign different channels to each remote. Once a channel is assigned to a remote, it can only be changed by removing the batteries to reset the unit.

3. Select the temperature display mode using the °C/°F slide switch.
4. Insert the 2 each AAA batteries according to the polarity shown in the battery compartment.
5. Replace the battery compartment door.

RECEIVER - BATTERY INSTALLATION
Install the batteries into the remote(s) before doing so for the receiver.
1. Remove the battery cover.
2. Insert the 2 AA batteries according to the polarity shown in the battery compartment.
3. Replace the battery cover.

REMOTE MODULE SENSORS
The remote module has two sensors, an external/bottle probe sensor and an internal/ambient sensor. Only 1 sensor operates to transmit data. When the probe is plugged in to the remote, the probe temperature is measured/transmitted, when the probe is unplugged, the ambient temperature is measured/transmitted.

The external bottle probe sensor is designed for use in refrigerators and freezers. The solution filled bottle simulates the temperature of other stored liquids. The bottle probe is filled with a nontoxic glycol solution that is GRAS (Generally Recognized As Safe) by the FDA (Food and Drug Administration) eliminating concerns about incidental contact with food or drinking water. Velcro® and a magnetic strip are provided to mount the bottle to the inside of a refrigerator/freezer. (Do not immerse bottle probes in liquid).

Both the remote module and bottle probe may be placed inside the refrigerator or the bottle probe may be placed inside the refrigerator/freezer and the remote may be located outside of the refrigerator/freezer door. The micro-thin probe cable permits refrigerator/freezer doors to close on it.

The internal (ambient) sensor is located inside the case of the remote module. It is ideal for monitoring ambient air temperatures.

OPERATION
Once batteries are installed, the remote(s) will start transmitting temperature readings at 30-second intervals.

The receiver will start searching for signals once batteries are installed. Upon successful reception, the individual channel temperatures will be displayed on the top line and the ambient temperature will be displayed on the bottom line. The receiver will automatically update its readings at 30-second intervals.

Position the remote and receiver within the effective transmission range, which, in usual circumstances is 50 to 100 feet (15 to 30 meters). The effective range is significantly affected by building materials and the remote/receiver location/positioning. Try various setups for best results. (See the "Troubleshooting" section)

If no signals are received, blanks "**- - -**" will be displayed for the remote channel.

If no readings are received for a channel for more than 2 minutes, blanks, "**- - -**" will be displayed until a remote signal search is performed.

To force a remote signal search, press the CHANNEL and MEM buttons simultaneously. This is useful in synchronizing the transmission and reception of the remote and receiver. Repeat this step whenever you find display discrepancies between the receiver and remote.

RECEIVER DISPLAY
The receiver has a built in internal (ambient) temperature sensor used to display the ambient air temperature. The ambient temperature is shown on the bottom portion of the display.

The remote readings, corresponding remote channel and temperature trend are shown on the top portion of the display.

Press the CHANNEL button to switch from one remote channel to another.

The temperature trend indicator shows the trend of readings at the remote. There are three possible trends that will be displayed, rising, steady, and falling.

If the temperature goes above or below the temperature measuring range, the display will show "HHH" or "LLL".

The reception icon shows the signal receiving status of the receiver:
Successful Reception	●	◌	◌	◌
Search Mode	●	◌		
No Signal	●			

DISPLAYING °F OR °C (RECEIVER)
To display the temperature readings on the receiver in Fahrenheit or Celsius, slide the °C/°F switch to the desired position. The °F/°C display selection for the remote module(s) is independent of the receiver.

MINIMUM AND MAXIMUM MEMORY
The ambient temperature at the receiver and the temperatures transmitted from the remote(s) are automatically recorded into memory.

Minimum and maximum temperature memories are NOT programmable. The minimum temperature recorded into memory is the minimum temperature achieved since the last time the memory was cleared. The maximum temperature recorded into memory is the maximum temperature achieved since the last time the memory was cleared. The minimum and maximum temperature memories are maintained over the period since the memory was cleared.

VIEWING MIN/MAX MEMORY
1. Press the CHANNEL button to select the desired remote module.
2. Press the MEM button once to display the maximum temperature (MAX will appear on the display).
3. Press the MEM button again to display the minimum temperature (MIN will appear on the display.
4. Press the MEM button again to return to the current temperature display.

CLEARING THE MIN/MAX MEMORY
To clear the MIN/MAX memory, press the CLEAR button, all segments of the display will appear for 2 seconds.

ALARMS (REMOTE MODULE READINGS)
Remote module alarm limits may be set in 1° increments. Remote module alarm limits are set independent of each other.

With the alarm values set:
-The receiver will sound an alarm when the temperature measured is outside the alarm limits that have been set (equal to or lower than the low alarm set point, or equal to or greater than the high alarm set point).

-The display will switch to the respective remote channel with the display flashing. The respective HI/LO indicator(s) will appear to signify the status of the alarm.

-The alarm will sound regardless of which remote sensor is being displayed and regardless of the display mode.

-If the temperatures measured are outside the alarm limits that have been set for more than one channel, the alarm will sound with the display alternating from one alarming channel to another at 5-second intervals.

If undisturbed, the alarm will sound for one minute. Press any key to mute the alarm momentarily.

To completely disable the alarm, select the channel and press the ON/OFF TEMP AL button to turn it off.

SETTING THE TEMPERATURE ALARM LIMITS
1. Press the CHANNEL button to select the desired remote channel.
2. Press the HI/LO button for the upper (HI) or lower (LO) limit.

"OFF" will be displayed if the alarm for that limit is turned off. Press the TEMP AL ON/OFF button to turn on the alarm limit.

3. Press the ▲ button to set the upper and/or lower temperature alarm limits.
4. Press HI/LO button to set another limit or return to normal display.

PLACEMENT/MOUNTING OPTIONS

Main Unit   Wall-mount   Stand

Remote Unit   Stand
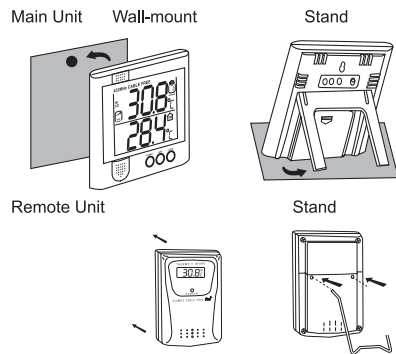
Also included:

Magnet - A magnet is supplied for the remote module. Peel the protective paper off the adhesive tape on the magnet. Press the magnet onto the back of the remote and mount on any metal surface.

Hook & Loop - Self adhesive hook and loop mounting tape is supplied with the remote. Peel off the protective backing. Adhere one piece to the remote and the other to any clean, flat surface.

TRANSMISSION COLLISION/INTERFERENCE

Signals from other radio devices may interfere with those of this product and cause temporary reception failure. This is normal and does not affect the general performance of the product. The transmission and reception of temperature readings will resume once the interference recedes.

All radio signals are inherently affected by interference or blockage. Performance is best when there is little or no interference or blockage. Some of the causes of interference and blockage are metal, reflective surfaces, motors, elevators, florescent lights with electric ballasts, sparking environments, emergency radios, power lines, portable/mobile radio transmitters and walkie-talkies. On occasion, momentary interference with the remote transmitter may cause an erroneous minimum or maximum readings to be captured by the receiver.

If two or more remotes in the same area are set to the same channel then any or all receivers will probably receive scrambled signals and report erroneous readings.

TROUBLESHOOTING

If the receiver is not obtaining a signal from the remote(s), or if without obvious reasons, the display for a particular channel goes blank, press the CHANNEL and MEM button simultaneously to force an immediate remote signal search.

The remote transmitter sends a signal to the main receiver every thirty seconds. Wait at least two minutes to see if a signal has been received before continuing with the additional troubleshooting steps.

If the receiver is not able to receive the remote signal:
1. Check the remote to see that it is still in place.
2. Check the batteries of both the remote and the receiver.
3. Verify that the transmission distance is within range and the path is clear of obstacles and interference (shorten the distance if necessary).
4. Make certain that the channel number displayed on the remote matches the channel number indicated on the receiver.
5. If there are two or more remote transmitters, make certain that they are not set to the same channel.

Additional Steps--

Check to make certain that the unit will pick up a nearby signal:
1. Place the remote and receiver in a vertical position approximately 6 feet away from the each other with no obstructions between the units.
2. Make certain the main receiver is set to display the correct remote channel.
3. On the receiver simultaneously press the CHANNEL and MEM button to force a signal search.

If, after waiting at least 2 minutes, the main receiver displays the temperature from the remote transmitter, the units are functioning properly and will perform within their limitations.

If after performing the above steps, the units do not perform when placed further apart, try the following.
  – Place the remote as high as possible.
  – Place the remote in a vertical/stand-up position.
  – Place the receiver in a vertical/stand-up position.
  – Place the remote and the receiver in locations where the radio signal does not need to be sent through metal panels, thick walls, multilevels, etc.
  – Try several locations. Sometimes moving either unit several feet or as little as 6 inches will make a significant difference.
  – Try several different orientations (turn the remote and/or the receiver to the left and/or right).
  – Try setting both the remote and receiver to channel 2.
  – Replace the batteries in both units with new alkaline batteries.

On occasion radio-transmitted signals may not work in some environments. If this unit does not work in your environment, call 281 482-1714 for additional assistance.

ACCESSORIES

Control Cat. No. 6425
Additional Traceable® Remote Sensor Module
with external bottle probe (identical to the remote module supplied).

Control Cat. No. 4116
Accessory Traceable® Remote Sensor Module
with waterproof/immersible probe (non-bottle probe)

Control Cat. No. 4117
Accessory Traceable® Stainless-Steel Probe
Triple-purpose probe for liquids, air/gas, and semisolids. Diameter is ⅛-inch. Overall length is 8½ inches. Cable length is 5 feet.

Control Cat. No. 4118
Replacement Bottle Probe
for the remote module.

Control Cat. No. 4618
Accessory 5ml "Vaccine Vial" Bottle Probe
for the remote module.

ALL OPERATION DIFFICULTIES

If this meter does not function properly for any reason, replace the batteries with a new, high quality batteries (see the "Battery Replacement" section). Low battery power can occasionally cause an number of "apparent" operational difficulties. Replacing the batteries with new fresh batteries will solve most difficulties.

BATTERY REPLACEMENT

An erratic display, faint display, no display, or a battery symbol appearing on the display are all indicators that the batteries need replacement. See the "Remote - Battery Installation and Channel Selection" and/or the "Receiver - Battery Installation" section.

TRACEABLE® RADIO SIGNAL REFRIGERATOR THERMOMETER INSTRUCTIONS