Operating Instruction and Parts Manual
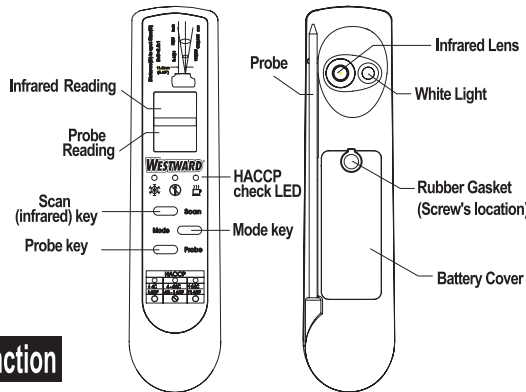# Model 1VEP5

Please read and save these instructions. Read through this owner's manual carefully before using product. Protect yourself and others by observing all safety information, warnings, and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.

WESTWARD®

* Special Features:
1. HACCP Zone Display;
2. Water Proof (IP65)

Infrared Reading
Probe Reading
Scan (infrared) key
Probe key

Probe
Infrared Lens
White Light
HACCP check LED
Rubber Gasket (Screw's location)
Mode key
Battery Cover

Non-contact Infrared Thermometer function

 # The white light targeting feature will automatically turn on while the Scan button is pressed.

Simply aim the thermometer at the target to be measured with the "Infrared Lens" and press the Scan (infrared) key to display the surface temperature. The distance to target ratio is 2.5:1; therefore thethermometer should be positioned as close to the target as possible.

Distance:Spot (FOV)= 2.5:1	Emissivity = 0.1~1 Step.01	Wave Length = 5-14um

While scanning, the newest temperature will be updated on the LCD and the measurement will continue as long as the Scan (infrared) key is depressed. When the Scan (infrared) key is released, the "Hold" icon will appear on the display and the last measurement will remain visible for 15 seconds before the display turns off.

Mode Selection MIN > MAX > LOCK > ºC/ ºF > EMIS
Minimum or Maximum Mode

The thermometer will display the minimum or maximum reading during the measurement period only until the Mode key is pressed.
To utilize the minimum mode, press the Scan (infrared) key > Mode key > Scan (infrared) key. Press the Scan (infrared) key for measurements.
To utilize the maximum mode, press the Scan (infrared) key > Mode key *twice > Scan (infrared) key. Press.the Scan (infrared) key for measurements.

Lock Mode
The lock mode is particularly useful for continuous monitoring of temperatures. The thermometer will continuously display the temperature for up to 60 minutes or until the Scan (infrared) key is pressed.
To utilize the lock mode, please press the Scan (infrared) key > Mode key *three times > Scan (infrared) key.

ºC or ºF Mode
To change the 'ºC' or 'ºF' mode, please press the Scan (infrared) key > Mode key *four times > Scan (infrared) Key. The same steps can be taken when switching from ºF to ºC.

Emissivity
The infrared thermometer is preset with a default emissivity of 0.95 which will work for general applications. The emissivity can be adjusted from 0.10(10E) to 1 (100E) in 0.01 steps. **NOTE: Non-contact infrared thermometers are not recommended for use in measuring the temperature of shiny or polished metals.**

To change the emissivity, press Scan (infrared) key > Mode key*five times > Scan (infrared) key for each 0.01 (1E) adjustment > Mode key

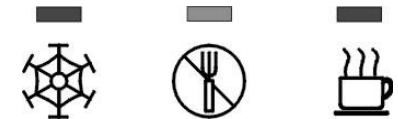## In-Contact Thermocouple Probe function

Insert the probe into the item to be measured and press the Probe key to continuously display the temperature for up to 4 minutes. After that the device will automatically shut off to extend the battery life. Pressing the Probe key will interrupt the scanning to display the last temperature with a 'Hold' message. To reenter scanning mode, press the Probe key again.

⚠ 1. Do not twist the probe or rotate the probe in wrong direction.
2. Placing stress on the probe may cause breakage.
3. After measuring high temperatures, the probe may remain HOT. Allow the probe to cool before touching.
4. Use caution when the probe is in an open position to avoid injury. Remember to fold the probe back to the closed position when not in use.

⚠ **The probe may be damaged if used to measure a temperature that exceeds the specification of measurement temperature range.**

HACCP check

The "HACCP CHECK" feature is incorporated in the thermometer to graphically indicate critical temperature zone. The icons and LED indicators located above the display indicate if a food product stays in a safe or unsafe HACCP "Danger Zone" temperature.

A Green LED appears with the "❄" icon to indicate a safe cool or frozen condition below 4ºC(40ºF) or appears with the "☕" icon to indicate a safe holding temperature above 60ºC(140ºF).

When temperature is between 4ºC and 60ºC (40 and 140ºF), the red LED with the "🧭" icon will appear and indicate that the temperature has fallen within the HACCP "Danger Zone" from 4ºC to 60ºC (40~140ºF).

HACCP		
↓4°C ↓40°F	4-60°C 40-140°F	↑60°C ↑140°F
○	⊘	○

BATTERIES

The 1VEP5 Infrared Thermometer uses (2) AAA Alkaline batteries.

BATTERY REPLACEMENT

The 1VEP5 incorporates visual low battery indication as follows:
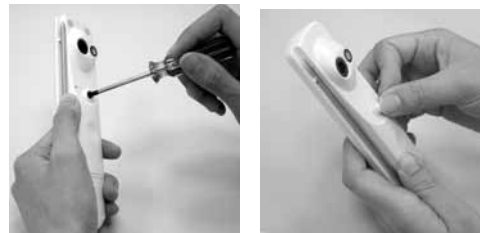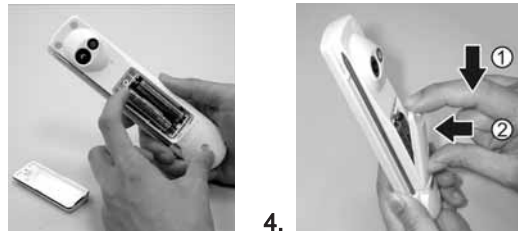
'Battery OK': measurements are possible

'Battery Low': battery needs to be replaced, measurements are possible

'Battery Exhausted': measurements are not possible

1.

2.

3.

4.

5.

> ⚠ **CAUTION:** Since the thermometer is waterproof, please make sure the battery cover and rubber stopper are on tight.

1. Pick out the rubber stopper on the battery cover by carefully using a small phillips screwdriver. Remove the screw that is under the rubber stopper.
2. Remove the battery compartment cover.
3. Replace the 2 AAA 1.5V batteries.
4. First, close the bottom side and insert the battery cover, push downward and then press forward.
5. Replace the screw and the rubber stopper.

⚠ When the 'Low Battery' icon indicates the battery is low, the batteries should be replaced immediately
NOTE: It is important to turn the instrument off before replacing the batteries, otherwise the thermometer may malfunction. Dispose of used batteries properly and keep away from children. Do not dispose of batteries in fire, as they may explode or leak.

SPECIFICATIONS

Item	Infrared Scan function	Thermocouple Probe (K type, Grounded)
Measurement Range	-67 to 482°F/ -55 to 250°C	-67 to 626°F/ -55 to 330°C
Operating Range	32 to 122°F/ 0 to 50°C	
Accuracy (Tobj=15-35°C, Tamb=25°C)	+/-0.6°C (1.1°F)	±1% of reading or 0.8°C (1.4°F) which is greater (tested in Tamb=23±6°C)
Accuracy (Tamb=23+/-3°C)	±2% of reading or 2°C(3.6°F) which is greater (Tamb=23±3°C)	
Emissivity	Preset 0.95 – adjustable 0.1 to 1.00, step 0.01	
Resolution (-9.9~199.9°C)	0.2°C/0.5°F	0.2°C/0.5°F
Dimension	0.87 X 1.5 X 6.3 inch	
Weight (with battery)	3.5oz / 98.1 grams	
Battery Life	18 hours continuous use (auto power off after 15 seconds)	

LCD ERROR MESSAGES
he thermometer incorporates visual diagnostic messages as follows:

'Hi' or 'Lo' is displayed when the temperature being measured is outside of the range of the instrument, 'Hi' when higher than +250°C (482°F) and 'Lo' when lower than -55°C (-67°F).

'Er2' is displayed when the thermometer is exposed to rapid changes in the ambient temperature. 'Er3' is displayed when the ambient temperature exceeds 0°C (32°F) or +50°C (122°F). The thermometer should be allowed plenty of time (minimum 30 minutes) to stabilize to the working/room temperature.

For all other error messages it is necessary to reset the thermometer. To reset it, turn the instrument off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn on.

⚠ **EMC/RFI**
Readings may be affected if the unit is operated within a radio frequency electromagnetic field strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.

LIMITED 1 YEAR WARRANTY
Should this product fail to perform satisfactorily due to a defect or poor workmanship within 1 YEAR from the date of purchase, return it to the place of purchase and it will be replaced, free of charge. Incidental or consequential damages are excluded from this warranty.

⚠ CE 🗑