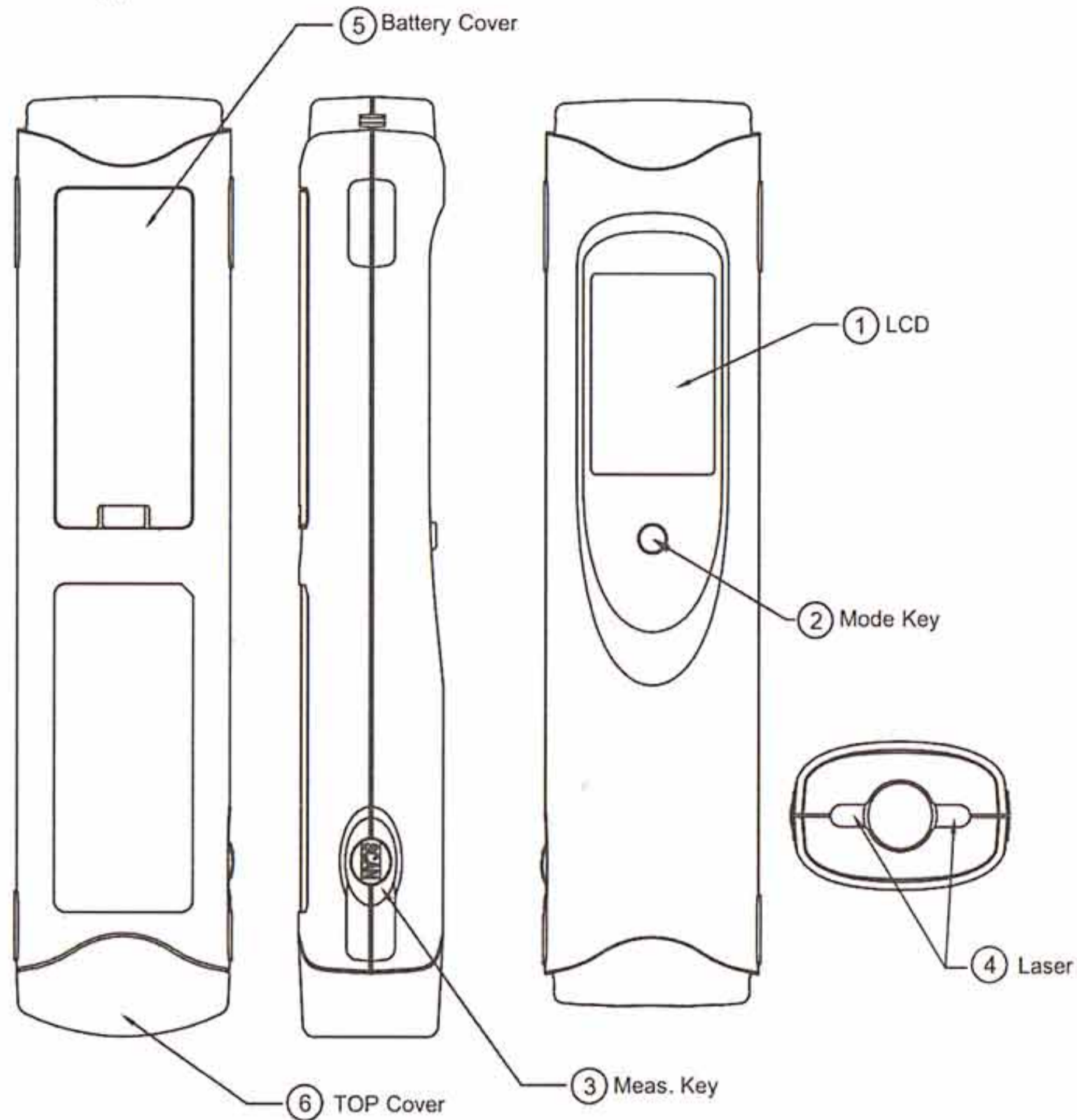


TN01U Thermometer Operation Instructions

Thank you for purchasing our non-contact infrared thermometer. Please remember to keep away from children and don't use it for safety related applications.

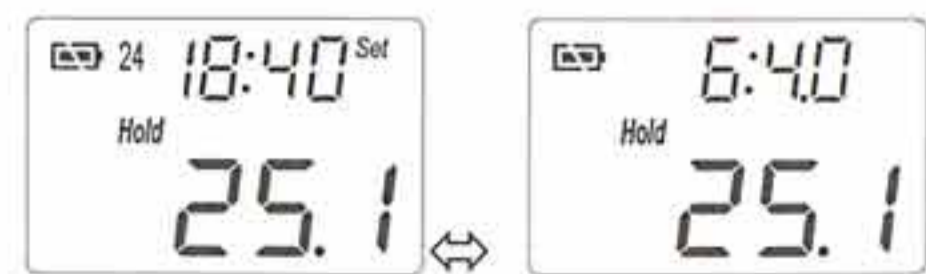


Specifications:

- ✓ Temperature measurement range: -55 to $+220^{\circ}\text{C}$ ($-67\sim 428^{\circ}\text{F}$)
- ✓ Operating temperature range: 0 to $+50^{\circ}\text{C}$ (32 to $+122^{\circ}\text{F}$)
- ✓ Resolution: 0.2°C / 0.5°F (for thermometer); 0.01sec (for Stop Watch)
- ✓ Accuracy ($T_{\text{amb}}=23\pm 3^{\circ}\text{C}$): $-55\sim 0^{\circ}\text{C}$: $\pm(2+0.05/\text{deg})^{\circ}\text{C}$; above 0°C : $\pm 2^{\circ}\text{C}$ (4°F) or $\pm 2\%$ of the reading, whichever is greater
- ✓ Measurement Distance is 18mm , Spot Size is 2.5mm
- ✓ Emissivity Range: 0.95 default –adjustable 0.05 to 1
- ✓ **Auto real time clock and Room temperature while power off**
- ✓ $^{\circ}\text{C}$ / $^{\circ}\text{F}$ Switch, MIN/MAX/LOCK, Stop Watch function
- ✓ Battery Life: 15 hours continuous use (auto power off after 15seconds), The battery life of the shelf = 8month .
- ✓ Power Supply:: AAA*2 batteries

Real time clock setting

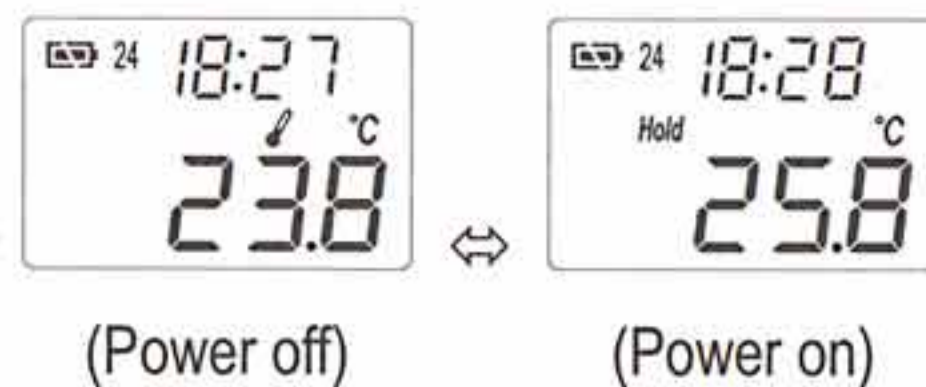
- 1 Power on: Press the "Meas. key".
- 2 Press the "Mode key" seven times and the "Set" icon starts to flash, which indicates the setting screen.
- 3 Press the "Meas. key" to make the "24" icon flashing, which indicates the 12/24-hour setting screen.
Press the "Meas. key" again to set 12/24-hour Format from 24-hour to 12-hour.
- 4 Press the "Mode key" to move the flashing in the sequence shown below to select other settings.
Hour → Minutes
- 5 While the hour, minutes setting is flashing, use "Meas. key" to change it. Press "Mode key" when complete.



(12/24-hour setting screen)

Use of the thermometer

- 1 Always make sure the sensor lens is clean without any damage.
- 2 Power on: Press the "Meas. key".
- 3 Temperature taking: **Remove the head cover before taking temperature.** When you press the "Meas. key", will get the temperature immediately. If you hold down the "Meas. key", the reading of measurement will be continuous updated.



***Note:** The measurement distance is 18mm. Please make sure the target is located at the focus point where two laser dots converged into one.

Note: Applications include the Water, Milk, Cloth, Skin, or visit [Http://www.ZyTemp.com](http://www.ZyTemp.com) for further information.

Power off: Device will automatically power off if left idle for more than 15sec to extend battery life

****If you have set the "clock" mode, after "power-off", room temperature & clock will be showed on the screen immediately.**

⚠ CAUTION

1. WHEN DEVICE IS IN USE, DO NOT LOOK DIRECTLY INTO THE LASER BEAM-PERMANENT EYE DAMAGE MAY RESULT.
2. USE EXTREME CAUTION WHEN OPERATING THE LASER.
3. NEVER POINT THE DEVICE TOWARDS ANYONE'S EYES.
4. KEEP OUT OF REACH OF ALL CHILDREN.

Use of the Stop Watch

- 1 Power on: Press the "Meas. key".
- 2 Press the "Mode key" four times and the "count" icon starts to flash.
- 3 For start or stop counting, press the "Meas. key".
For reset counting, press the "Mode key".
- 4 Press "Mode key" to enter the thermometer function



< 30min

Min:Sec = 01:28 & 0.75sec



> 30min

Hour:Min:Sec = 01:28:47.5sec

(resolution=0.01sec, range to 24hr)

Other Functions

MIN / MAX

→ Power on and press the "Mode key" once for the Minimum (MIN) or twice for Maximum (MAX) modes. When the MIN or MAX icon flashes, press the "Meas. key" to confirm. Hold down the "Meas. key", the minimum or maximum reading of measurement will be continuous updated.



LOCK

→ Power on and press the "Mode key" three times. When the LOCK icon flashes, press the "Meas. key" to confirm. This mode is particularly useful for continuous monitoring of temperatures for up to 60 minutes or until the "Meas. key" is pressed.



°C / °F

→ Power on and press the "Mode key" five times. When the °C icon flashes, press the "Meas. key" to change the scale to °F. The setting will be reserved even if power off.



Emissivity

→ Power on and press the "Mode key" six times. When the default emissivity "95E" appears, press the "Meas. key" to modify the emissivity setting. Press "Mode key" when complete. The setting will be reserved even if power off.



Battery replacement

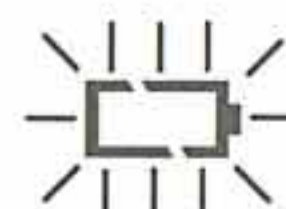
The thermometer incorporates visual low battery indication as follows:



'Battery OK': measurements are possible



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



'Battery Exhausted': measurements are not possible

⚠ When the 'Low Battery' icon indicates the battery is low, the battery should be replaced immediately with AAA, 1.5V batteries. Please note: It is important to turn the instrument off before replacing the battery otherwise the thermometer may malfunction.

⚠ Dispose of used battery promptly and keep away from children.

Important notes

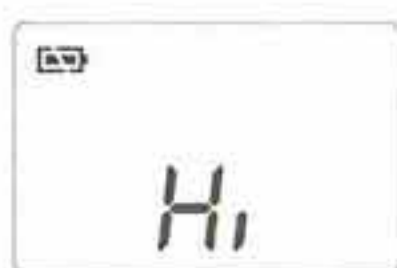
Storage & Cleaning: The sensor lens should be kept clean at all times and stored at room temperature.

1. Use only a soft cloth or cotton swab with water or medical alcohol when cleaning the lens.
2. Remember to allow the lens to fully dry before using.
3. The thermometer should be stored at -20 to $+65^{\circ}\text{C}$ (-4 to 149°F).

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

Note: Under an electromagnetic field of 3V/m from 300 to 350 MHz the maximum error is $\pm 6^{\circ}\text{C}$

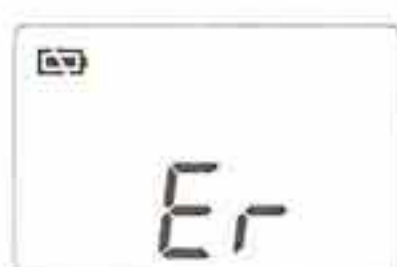
Trouble shooting



'Hi' or 'Lo' is displayed when the temperature being measured is outside of the range of the instrument, 'Hi' when higher than $+220^{\circ}\text{C}$ (428°F) and 'Lo' when lower than -55°C (-67°F). Please select target within specifications. If a malfunction still exists, please contact the nearest retailer.



'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 the thermometer, waiting for the instrument power off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn on. If the error message remains please contact the Service Department for further assistance.



Ref No.:072008