The PCE-895 thermometer is a non-contact infrared thermometer. There are many mathematical modes for the Infrared function. Please remember the emissivity can be changed from 0.10 (10E) to 1 (100E). To see the minimum or maximum data during the probe measurement, please hold down the Up key (4) or Down key (3) for scrolling more display function as follows.

** Data logger function (SD Card - USB): Please push “Micro SD Card Switch” to enable the function. **

** The thermometer will automatically shut off if left idle for more than 60sec., unless in PRB mode. (In PRB mode, it will shut off if left idle for 240min).**

** When the ‘Low Battery’ indicates the battery is low, the battery should be replaced immediately with AA, 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. **

** SPECIFICATION PCE-895 **

<table>
<thead>
<tr>
<th>Item</th>
<th>Non-contact Infrared Scan function</th>
<th>Thermocouple Probe Scan function (K type; probe not included)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement Range</td>
<td>-35 to +1600 °C (+31 to +2912 °F)</td>
<td>64 to +1400 °C (+32.2 to +2552 °F)</td>
</tr>
<tr>
<td>Operating Range</td>
<td>0 to +50°C (32 to +122°F)</td>
<td></td>
</tr>
<tr>
<td>Accuracy (Tamb=23°C)</td>
<td>±0.5% of reading or ±0.3°C (±0.5°F) whichever is greater</td>
<td>±1% of reading or ±1°C (±1.8°F) whichever is greater (Test under Tamb=23°C)</td>
</tr>
<tr>
<td>emissivity Range</td>
<td>18% adjustable 0.1 to 1 step 0.1</td>
<td></td>
</tr>
<tr>
<td>Resolution</td>
<td>0.1°C/0.1°F at ±32 to 999.9°C/°F, otherwise 1°C/1°F</td>
<td></td>
</tr>
<tr>
<td>Spectral Range</td>
<td>3 to 5 µm</td>
<td></td>
</tr>
<tr>
<td>Response Time (90%)</td>
<td>1 sec</td>
<td></td>
</tr>
<tr>
<td>Distance Spot</td>
<td>60:1 (90% energy covered)</td>
<td></td>
</tr>
<tr>
<td>Internal Memory</td>
<td>Detailed 24 Memories with Temperature &amp; Emissivity</td>
<td></td>
</tr>
<tr>
<td>External Memory Type</td>
<td>Support 8G micro SD card (Recommended to use the attaching SD card).</td>
<td></td>
</tr>
<tr>
<td>USB Function</td>
<td>Please download the program from our web site (CD &amp; USB cable are enclosed with the package)</td>
<td></td>
</tr>
<tr>
<td>Output Interface</td>
<td>SPI, USB, SD card</td>
<td></td>
</tr>
<tr>
<td>Battery Life</td>
<td>Typical 10 min hours continuous use (alkaline, with laser and backlight)</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>202.99×175.07×58.31 mm (7.96×6.93×2.30 inch)</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>241g (414.14 oz) including batteries (AAx2pcs)</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Under the electromagnetic field of 3V/m from 180 to 6000 kHz, the maximum error is 10°C (18°F).

** Caution: The measurement range is for thermometer only. User should choose proper probe types for different kind of applications. Please make sure the target to be measured will not exceed the temperature range of the probe to avoid permanent damage of the thermocouple probe.**

** Caution: To avoid electric shock and thermometer damage, do not measure live circuit where voltage exceeding 24V AC RMS or 60V DC with the thermocouple probe.**

**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.

**STORAGE & CLEANING**

It should be stored at room temperature. The sensor lens is the most delicate part of the thermometer. The lens should be kept clean at all times, care should be taken when cleaning the lens using only a soft cloth or cotton swab with water or medical alcohol, allowing the lens to fully dry before using the thermometer. Do not submerge any part of the thermometer.

**LCD ERROR MESSAGES**

The thermometer incorporates visual diagnostic messages as follows:

- **Hi** or **Lo** is displayed when the temperature being measured is outside of the settings of HAL and LAL.
- **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.

**Error 5-9,** 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, reinset the battery and turn on. If the error message remains please contact the Service Department for further assistance.

- **Hi** or **Lo** is displayed when the temperature being measured is outside of the measurement range.

** BATTERIES**

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’ indicates the battery is low, the battery should be replaced immediately with AA, 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. **

** ADD VALUE **

** In E, MAX, MIN, DIF, AVG mode: **

- Press Up key (4) for LOCK mode ON/OFF. The lock mode is particularly useful for continuous monitoring of temperatures for up to 60 minutes.
- Press Down key (3) for °C or °F transferred.

** In MAX, MIN mode: Hold on the Meas. key (C) **

- shows RED color when the reading is close to maximum value, and shows BLUE when close to minimum. While the temperature is between the maximum and minimum, the bar will display in YELLOW.

** In all modes: First hold on the Meas. key (C) **

- CD Backlight: always on.
- and press Down key (3) for laser function ON/OFF.

** 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. **

** PCE-895 Thermometer Operating Instructions **

For Model with thermocouple socket

The PCE-895 thermometer is a non-contact infrared thermometer. There are many mathematical modes for the infrared function. Please remember to keep away from children and don’t use it for safety related applications.

Simply aim the thermometer at the measure target with Lens (2) and press Meas. key (C) to display the surface temperature. The Distance:Spot is 60:1. Please make sure the target area is within the field of view.

* Dual laser points specify the approximate measurement area for better targeting.

* Data logger function (SD Card - USB): Please push “Micro SD Card Switch” to enable the function.

** The thermometer will automatically shut off if left idle for more than 60sec., unless in PRB mode. (In PRB mode, it will shut off if left idle for more than 12 minutes.)

** Function Press Mode key (D) for scrolling more display function as follows: **

- Here will show the emissivity data. (The default emissivity is 0.95.)
- Press Mode key (E), then press Up key (3) or Down key (3) to set the emissivity, then press Mode key (E) to confirm it. The emissivity can be changed from 0.10 (10E) to 1 (100E).
- Press Mode key (F) for the Maximum (MAX), Minimum (MIN), Different between MAX and MIN (DIFF) and Average (AVG) modes. During the measurement, the special modes reading will be displayed beside the mode icon.
- Press Up key (2) or Down key (2) to change the High Alarm (HAL) or Low Alarm (LAL), then press Meas. key (C) to confirm it. For example: When the reading 26.9 °C < LAL 27 °C, the Low icon will flash and you will hear a beep sound.
- After the temperature, press Mode key (G) for the Memory (M00), then press Meas. key (C) to save the measurement.
- Under the Memory (M00), press Up key (2) or Down key (2) to change the record.
- The thermometer will automatically shut off if left idle for more than 60sec., unless in PRB mode. (In PRB mode, it will shut off if left idle for more than 12 minutes.)