

Thank you for purchasing our TC-2200 digital thermometer. This is a dual channel thermometer, simple and easy to use, economical and high quality product.

Please read this instruction manual carefully before using to ensure the correct usage of this device. Please keep this instruction manual for future reference.



## SAFETY PRECAUTIONS

For safe usage of this device, please strictly observe all statements regarding precautions and warnings in this instruction manual.

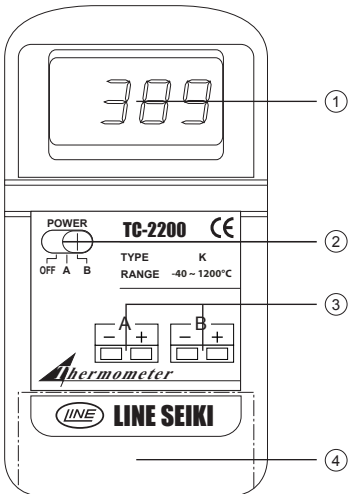
Make sure to read carefully the precautionary instructions written next to the warning symbol in the entire instruction manual.

### ATTENTION

- Do not drop or subject this device to strong impact.
- Do not use or store this device where it will be exposed to water or in places with wet conditions.
- Do not use or store this device where it can be exposed to direct sunlight, dust, high temperature and high humidity.
- Remove the battery when the device will not be used for a long period of time.
- See the battery case markings to ensure that the battery is properly installed.
- For accurate measurements, do not subject this device in measuring sudden change of temperatures.
- Do not attempt to disassemble or modify this device.
- Do not eat the silica gel.

## OPERATING PROCEDURE

### 1. Front Panel Description



- ① Display
- ② Power Switch (A/B Input Select Switch)
- ③ Thermocouple Terminal
- ④ Battery Compartment

### CAUTION

- The thermocouple probe is non-insulated. Avoid measuring places where it can cause electric shock.
- Do not deform thermocouple probes to avoid errors in measurement.
- Do not use the Thermocouple probe to measure over its maximum temperature limit.

## 2. Measuring Procedure

### 2.1 Single Probe Measurement

- 1.) Insert the thermocouple plug into the "A" input terminal.
- 2.) Switch the Power Switch to position "A"
- 3.) Engage the thermocouple probe to the object to be measured.
- 4.) After the display stabilize, take the reading of the temperature.

### 2.2 Dual Probe Measurement

- 1.) First, insert thermocouple plug of Thermocouple No. 1 into the "A" input terminal.
- 2.) Then, insert the thermocouple plug of Thermocouple No. 2 into the "B" input terminal.
- 3.) Engage the thermocouple probes to their respective objects to be measured.
- 4.) Switch the Power Switch to position "A" or "B" depending which of the 2 thermocouple probes measurement will be displayed.
- 5.) After the display stabilize, take the reading of the temperature.

### CAUTION

- When measuring non-metal objects or surfaces, heat conduction is poor. Please take measurement longer than normal.
- For measurement reading to stabilize faster, do not measure sudden changing temperatures.
- Make sure that the polarity is correct when connecting thermocouple probe plugs to the unit.
- To get accurate measurements, make sure that the thermocouple probes and thermometer unit equalize with surrounding temperature.

## 3. Battery Replacement

- 1.) When the upper left corner of the LCD display shows "LO BAT", the battery needs to be replaced.
- 2.) Slide the battery cover to remove it.
- 3.) Remove the battery from the battery compartment.
- 4.) Replace it with a new battery and make sure that it is installed properly according to correct polarity.
- 5.) Replace the battery cover to the unit.

\* The instrument cannot measure accurately after low battery indicator is displayed. Please replace the battery immediately.

## 4. Cleaning

Wipe off dust and other dirt on the unit using a dry cloth.

### CAUTION

Do not wipe the unit with benzene or thinner, this may cause the unit to break and produce white marks on the casing.

## SPECIFICATIONS

### 1. General Specifications

Display	: 15mm, LCD, 3½ digits display
Sensor Type	: Thermocouple K type, (miniature connector)
Measuring Method	: 2 wire type, Max. range 1999 display
Sampling Time	: approx. 0.4 sec.
Operating Temperature	: 0~50°C
Operating Humidity	: 0-90% RH max. (0-35°C)
Power Supply	: 0006P 1 pc.
Battery Life	: approx. 300 hours
Dimensions	: 131(H) x 75(W) x 25(D)
Weight	: approx. 140g (battery included)
Inclusions	: Instruction Manual, Battery x 1 pc.

### 2. Accuracy

Measuring Range	Resolution	Accuracy
-40 ~ -21°C	1°C	± 3°C
-20 ~ -1°C		± 2°C
0 ~ -750°C		± (1% + 1°C)
751 ~ 1000°C		- (2% + 1°C)
1001 ~ 1200°C		- (4% + 3°C)

## OPTIONAL

### Thermocouple Probe

This thermometer does not include the thermocouple probe. There are different kinds of probes that can suit your specific application. Please refer to our probe catalog.



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