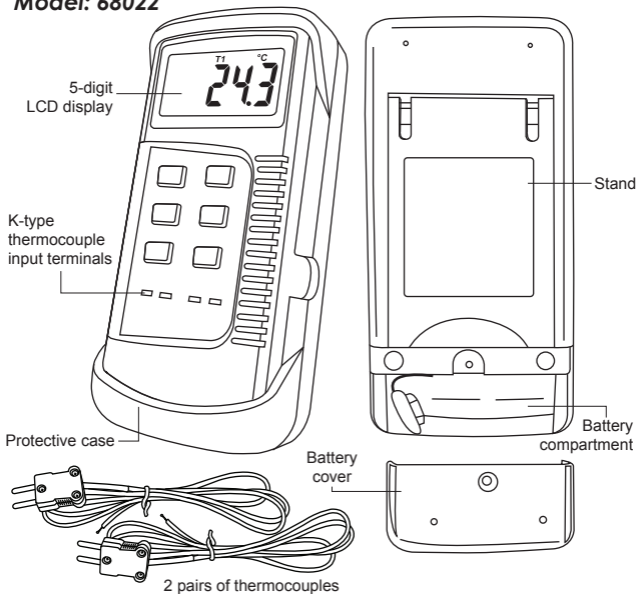


# K-TYPE THERMOMETER

## User Manual

Model: 68022



### SCAN THE QR CODE

to download the  
**USER MANUAL**  
in different languages  
and **SOFTWARE**



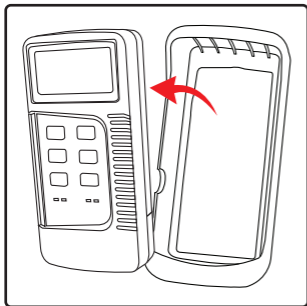
**TUTORIAL VIDEO ON HOW TO USE**



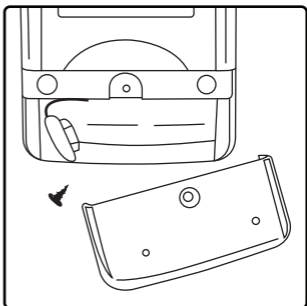
**Need more help? CONTACT US.**

[www.cd50.net/680](http://www.cd50.net/680)

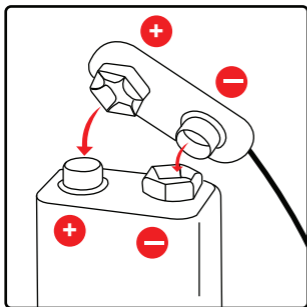
# BATTERY INSTALLATION



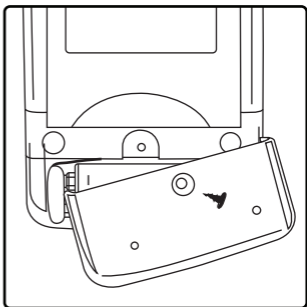
1. Remove the protective case.



2. Unscrew (counterclockwise) and remove the battery cover.



3. Insert the battery and make sure the polarity is correct.



4. Screw tightly the battery cover.

5. Put the device back into the protective case.

## INTENDED USE

68022 is a K-type thermometer with a built-in microcontroller powered by batteries. Its two thermocouples input terminals allow simultaneous measurement and comparison of two samples. With a wide measurement range of temperature and other useful functions like switchable units, this device can be used for ceramics, furnaces, mechanical engineering, laboratory experiments and metallurgical industry.

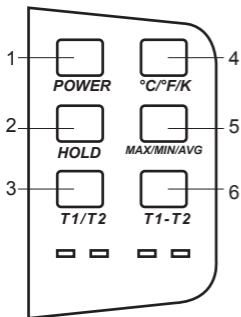
## FEATURES

- Wide temperature measuring range
- Easy battery replacement
- Precise, with automatic temperature compensation (ATC) and microcontroller
- Fast response
- Protective case that makes the device shockproof and durable.

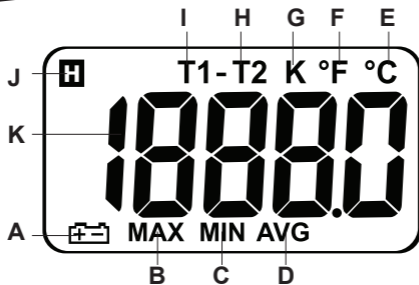
## SPECIFICATION

Dimensions (w*h*d)	77*161*42mm
Temperature range	
Main device	-50~1300°C (-58~2372°F)
TP01	-50~400°C (-58~752°F)
Resolution	0.1°C / 0.1°F
Accuracy	0.1%±0.4°C (excluding sensor error)
Display	5-digit LCD display
Storage environment	10~50°C (50~122°F), 0 ~ 80% RH
Working environment (Main device)	0 ~ 40°C (32 ~ 104°F) 0 ~ 70%RH
Power source:	One 9V battery
Weight:	Approx. 300g

# BUTTONS AND LCD DESCRIPTION



- (1) Power on/off  
(with auto power off function)
- (2) Data hold
- (3) Switchable dual channels
- (4) Switchable °C / °F / K  
temperature units
- (5) Switchable maximum / minimum /  
average readings
- (6) Temperature difference



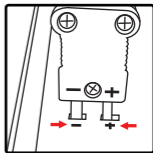
- A. Low battery indicator
- B. Maximum readout symbol
- C. Minimum readout symbol
- D. Average readout symbol
- E. Celsius temperature scale symbol
- F. Fahrenheit temperature scale symbol
- G. Kelvin temperature scale symbol
- H. Measuring probe T2
- I. Measuring probe T1
- J. Data hold symbol
- K. Measurement value

# OPERATION

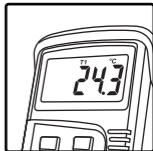
## Measurement

1. Press the 'POWER' button. Before thermocouple(s) is/are plugged in, the LCD will only display "-----".

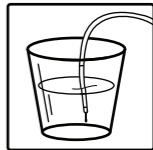
2. Plug into the terminal(s) K-type thermocouple(s) and make sure polarity is correct. Wait for one minute to warm the device up. Switch to the temperature unit( $^{\circ}\text{C}/^{\circ}\text{F}/\text{K}$ ) desired.



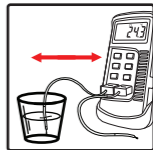
\*Make sure you are on the appropriate channel and the inserted thermocouples(s) is/are compatible with the device so that the data is displayed correctly on the LCD.



3. Place the probe of the thermocouples at the point you want to measure. Wait until the measured value has stabilized. The subsequent measured value is the precisely measured temperature.



\*Make sure that the device does not come into contact with the source of the measured temperature, so that extreme temperatures do not damage the device.



4. Press the 'HOLD' button to lock the reading. Press it again to release the reading.

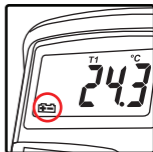
5. Press the "MAX/MIN/AVG" button to view the temperature changes. The 'MAX/MIN/AVG' mode is compatible with the 'T1-T2' function.

6. If terminals T1 and T2 are plugged in with thermocouples, press 'T1/T2' to switch to another channel. Press the 'T1-T2' button to see the temperature difference between the two thermocouples.

## MAINTENANCE

1. When the battery is empty or low, the low battery indicator appears in the lower left corner of the LCD.

Replace the old battery with a new one soon to ensure accurate measurement.



2. If the device will not be used for a long period of time, remove the battery to prevent damage to the device due to battery leakage.

3. To prevent damage or severe deterioration to the device, do not open the inside of the device or modify its circuitry.

4. Do not place the device in a humid, dusty, acidic, alkaline or corrosive environment to avoid damage to the device.

5. Use a clean, soft cloth to wipe the protective cover and housing if they become dirty.