

# HAKKO FG-100 THERMOMETER

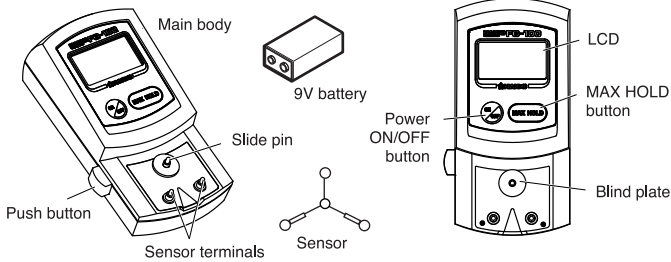
## Thermometer Instruction Manual

Thank you for purchasing the HAKKO FG-100 thermometer.  
Please read this manual before operating the HAKKO FG-100.  
Keep this manual readily accessible for reference.

### 1. PACKING LIST AND PART NAMES

Please check to make sure that all items listed below are included in the package.

- Main body .....1    Sensors (10 pcs/set) ..... 1  
9V battery .....1    Instruction manual ..... 1



\* The display is covered with a protective film.

### 2. SPECIFICATIONS

	Celsius type	Fahrenheit type
Model name	HAKKO FG-100	
Resolution	1°C	1°F
Temperature measurement range	0 - 700°C <sup>1</sup>	32 - 1300°F <sup>1</sup>
Applicable sensor	K (CA) type thermocouple	
Measurement tolerance	±3°C (between 300 and 600°C) ±5°C (Other than above)	±6°F (between 572 and 1112°F) ±10°F (Other than above)
Display	Besides measured temperatures, display indications include the following: Burnout alarm <sup>*3</sup> Battery low alarm <sup>*2</sup> MAX HOLD	
Power supply	9V battery (alkaline cell recommended)	
Outline dimensions	68 (W) x 140 (H) x 38 (D) mm (excluding protrusions)	
Weight	115 g (excluding battery)	
Ambient temperature/humidity range	0 - 40°C, 20 - 90%RH, without condensation	
Environmental Condition	Applicable rated pollution degree 2 (According to IEC/UL61010-1)	

<sup>\*1</sup> Temperature sensor (191-212) can only be used to measure temperatures below 500°C (932°F). To measure higher temperatures, use an applicable temperature probe (see "5. REPLACEMENT PARTS AND OPTIONS").  
<sup>\*2</sup> When appears, be sure to replace the battery. Failure to do so will result in incorrect temperature measurements.  
<sup>\*3</sup> This alarm indicates a sensor burnout. If this alarm occurs, replace the sensor.  
\* The specifications may be subject to change without notice.

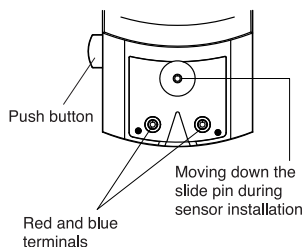
### 3. SAFETY NOTICE

#### CAUTION

When using the thermometer to measure the temperature of the soldering iron tip or de-soldering nozzle, pay great attention to the temperature of the tip or nozzle that will be as high as 200 to 450°C (392 to 842°F). Careless handling of such a hot object may result in a burn or fire.

### 4. OPERATION

- Open the battery cover and insert the battery in the correct direction.
- Attach the sensor:
  - Press the push button to move the slide pin down to the terminal side.
  - While moving down the slide pin, attach a sensor to the slide pin and terminals by connecting the red connector of the sensor to the red terminal and the blue connector to the blue terminal.



#### CAUTION

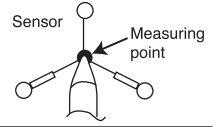
Handle the sensor with care. Inadvertent handling may break the CA sensor wire as it is as thin as 0.2 mm in diameter.

- Turn on the power. When the room temperature appears on the LCD, the thermometer is ready for measurement.

#### NOTES :

- Pressing the power button for a short duration may result in failure to turn on the power. In such a case, press the button again for a longer duration.
- The power cannot be turned off until all screen elements are displayed after the power is turned on.

- Wet the soldering iron tip with solder and put the tip to the measuring point.



#### CAUTIONS

- Do not bring the hot iron tip into contact with the plastic body, slide pin and terminals of the thermometer. Doing so will damage them.
- The measuring point of the sensor generally undergoes degradation as a result of repeated measurement activities. It is recommended that the sensor be replaced every 50 measurements as a guideline to ensure measurement accuracy.
- If the terminals are contaminated with the soldering flux, wipe them clean with alcohol. Do not use thinner or benzoin for cleaning.
- Please read when the temperature stabilizes.

English

#### Auto shutoff function

If no measurement is taken within three minutes after power on, the power will be turned off automatically. Measurement of a temperature higher than 100°C (212°F) within three minutes will reset the auto shutoff. To turn on the power, press the power button again.

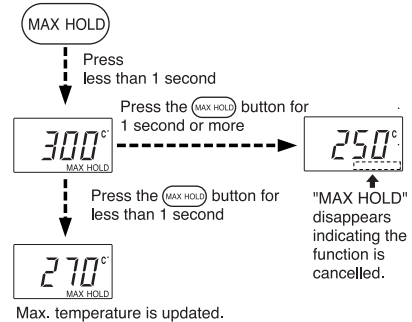
#### MAX HOLD function

When pressing the button, "MAX HOLD" is displayed at the lower right of the LCD. As long as appears, the maximum temperature will stay displayed.

#### OPERATION

The button provides two additional functions: The max. temperature update function when quickly pressing the button and the MAX HOLD cancellation function when pressing the button longer.

- Quickly pressing the button for less than one second, with "MAX HOLD" displayed, updates the maximum temperature. See the figure to the right.



- With "MAX HOLD" displayed, pressing the button for longer than one second cancels the MAX HOLD function. See the figure to the right.

#### NOTE:

Turning off the power always cancels the MAX HOLD function.

### 5. REPLACEMENT PARTS AND OPTIONS

#### Replacement Parts

Item No.	Part Name	
191-212	Sensor / Lead-free	10 pcs.

#### Options

Item No.	Part Name	
A1310 <sup>*4</sup>	Temperature probe for soldering pot	
C1220	Temperature probe for automatic	

<sup>\*4</sup> Remove the standard sensor, and connect the red connector of this option to the red terminal of the thermometer and the blue connector to the blue terminal. Insert the top of the probe into solder to measure the temperature.



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