HAKKO

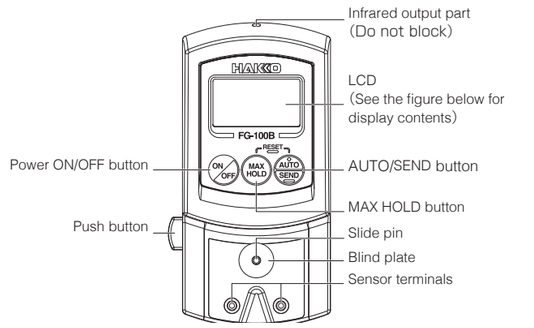
THERMOMETER
FG-100B
Instruction Manual

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

1. PACKING LIST AND PART NAMES

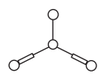
Please check to make sure that all items listed below are included in the package.

Main body..... 1
006P 9V Dry battery (For trial)..... 1
Sensors (10 pcs/set)..... 1
Instruction manual..... 1



Main body

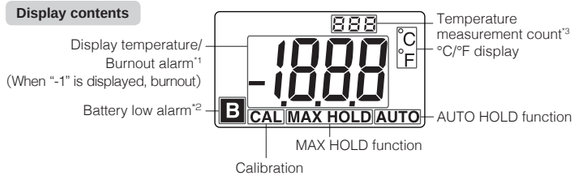
Dry battery (For trial)



Sensor

Instruction manual

Display contents



*1 This alarm indicates a sensor burnout. If this alarm occurs, replace the sensor.
*2 When **B** appears, be sure to replace the battery. Failure to do so will result in incorrect temperature measurements.
*3 When pressing the MAX HOLD and AUTO SEND button for longer, the count is reset.

2. SPECIFICATIONS

Type	Celsius type	Fahrenheit type
Model name	HAKKO FG-100B	
Resolution	1°C	1°F
Temperature measurement range	0–700°C*1	32–1300°F*1
Applicable sensor	K (CA) type thermocouple	
Measurement tolerance	±3°C (between 300 and 600 °C)	±6°F (between 572 and 1112 °F)
	±5°C (Other than above)	±10°F (Other than above)
Power supply	006P 9V dry battery (alkaline cell recommended)	
Outline dimensions	68 (W) × 140 (H) × 38 (D) mm (excluding protrusions)	
Weight	125 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)	

*1 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 "6. REPLACEMENT PARTS AND OPTIONS").

The specifications may be subject to change without notice.

3. SAFETY NOTICE

⚠ CAUTION

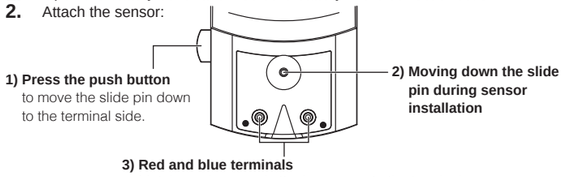
When using the thermometer to measure the temperature of the soldering iron tip or desoldering nozzle, pay great attention to the temperature of the tip or nozzle that will be as high as 200 to 450°C (392 to 842°F). Careless handling of such a hot object may result in a burn or fire.

4. OPERATION

⚠ 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.

1. Open the battery cover and insert the battery in the correct direction.
2. Attach the sensor:



3. 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.

4. 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 recommend 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 benzin for cleaning.**
- **Please read when the temperature stabilizes.**

5. FUNCTION AND OPERATION OF EACH BUTTON

• Auto shutoff function

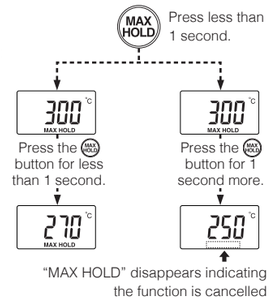
If no measurement is taken within three minutes after power on, the power will be turned off automatically. Measurement of a temperature higher than 100°C (212°F) within three minutes will reset the auto shutoff. To turn on the power, press the power button again.

• MAX HOLD function

When quickly pressing the MAX HOLD button (less than 1 second), "MAX HOLD" is displayed at the lower of the screen.
As long as "MAX HOLD" appears, the maximum temperature will stay displayed

The MAX HOLD button has the following other functions.

- When "MAX HOLD" is displayed, quickly pressing the MAX HOLD button (less than 1 second) displays the updated maximum temperature.
- When "MAX HOLD" is displayed, pressing the button for longer (1 second or longer) releases the MAX HOLD function and returns to normal display.



• AUTO HOLD function

When quickly pressing the AUTO SEND button, **"AUTO"** blinks at the lower right of the LCD. While **"AUTO"** blinks, touch the soldering iron tip to the sensor. After detecting the stabilization of the temperature of the tip, the average temperature will be calculated. After the average value has been calculated, "AUTO" will stop blinking and stay lit, and the calculation result will be displayed.
Each time the AUTO SEND button is pressed, the AUTO HOLD function toggles between ON and OFF.
The AUTO HOLD function does not assume the measurement by temperature probes such as the hot air.

• Temperature sending function

Press the AUTO SEND button for longer than one second. Temperature data will be sent by infrared output from the upper part of the thermometer. Temperature display blinks during sending.
The temperature sending function can only send messages to the receiving machine. When the fixed value can be sent.