

THERMOMETER

FG-100B

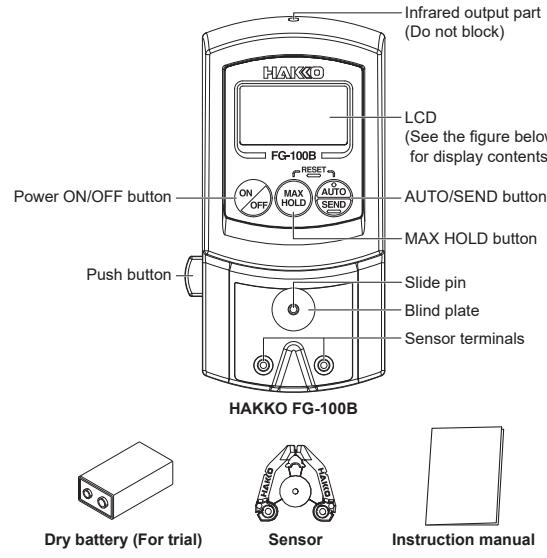
Instruction Manual

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.

HAKKO FG-100B	1
006P 9V Dry battery (For trial)	1
Instruction manual	1

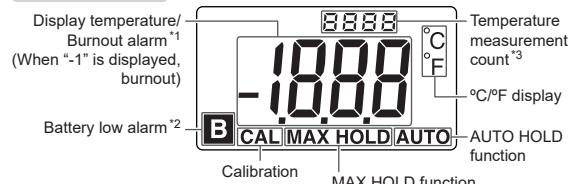


6. REPLACEMENT PARTS AND OPTIONS

● 固定表示式熱電対の取扱い方
● 温度送信機能の取扱い方
● 温度送信機能と接続する方法

● 温度送信機能と接続する方法
● 温度送信機能と接続する方法

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 **CAL** and **HOLD** button for longer, the count is reset.

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 (cont'd)

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

NOTE

- 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.

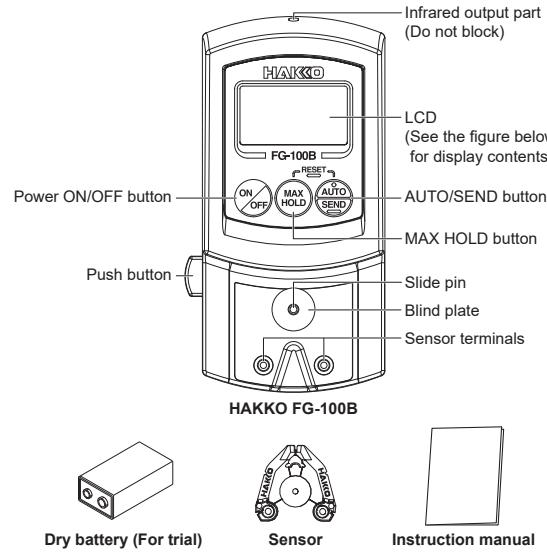
CAUTION

- 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.
- Although the measurement point of the sensor undergoes special treatment, it will deteriorate gradually due to repeated measurements. In order to measure the temperature correctly, if the measurement point is worn out, replace the sensor with a new one.
- If the terminals are contaminated with the soldering flux, wipe them clean with alcohol. Do not use thinner or benzine for cleaning.
- Please read when the temperature stabilizes.

1. PACKING LIST AND PART NAMES

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HAKKO FG-100B	1
Sensor	1
Instruction manual	1

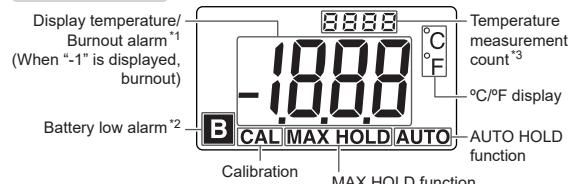


6. REPLACEMENT PARTS AND OPTIONS

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2. SPECIFICATIONS

Type	Celsius type	Fahrenheit type
Model name HAKKO FG-100B		
Resolution	1°C	1°F
Temperature measurement range	0 to 700°C*1	32 to 1,300°F*1
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 1,112°F) ±10°F (Other than above)
Power supply	006P 9V dry battery (alkaline cell recommended)	
Outline dimensions	75 (W) × 44 (H) × 140 (D) mm	
Weight	125 g (excluding battery)	
Operating environment	Ambient Temperature/Humidity Range: 0 to 40°C (32 to 104°F), max.80% RH (without condensation)	
Environmental conditions	Applicable rated pollution degree 2 (according to IEC/UL61010-1)	

- *1 Sensor 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.

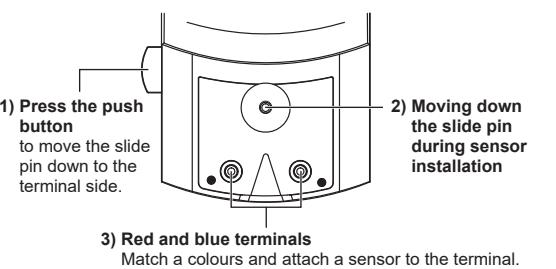
4. OPERATION

CAUTION

Handle the sensor with care. Inadvertent handling may break the K (CA) type thermocouple 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:



4. OPERATION (cont'd)

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

NOTE

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(4) Wet the soldering iron tip with solder and put the tip to the measuring point.

CAUTION

- 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.
- Although the measurement point of the sensor undergoes special treatment, it will deteriorate gradually due to repeated measurements. In order to measure the temperature correctly, if the measurement point is worn out, replace the sensor with a new one.
- If the terminals are contaminated with the soldering flux, wipe them clean with alcohol. Do not use thinner or benzine for cleaning.
- Please read when the temperature stabilizes.

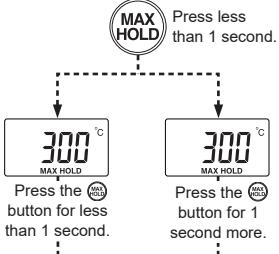
5. FUNCTION AND OPERATION OF EACH BUTTON (cont'd)

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 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.

See the backside for "6. REPLACEMENT PARTS AND OPTIONS".



6. REPLACEMENT PARTS AND OPTIONS

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THERMOMETER

FG-100B

使用说明书

日本白光牌

承蒙惠顾，谨致谢忱。

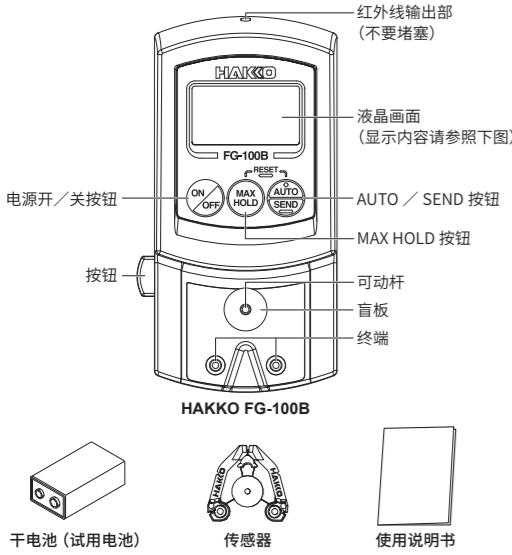
使用 HAKKO FG-100B 前，请详阅本使用说明书，正确使用。

并请于阅读之后小心保管以便日后使用。

1. 包装清单及各部名称

首先请确认包装内容。

HAKKO FG-100B	1 传感器	1
006P 9V 干电池 (试用电池)	1 使用说明书.....	1



6. 交換部品／オプション

● 交換部品

品番	部品名	仕様
AS5000	センサー／鉛フリー対応 校正付き	

● オプション

品番	部品名	仕様
A1310	温度プローブ／はんだ槽用	
C1541	温度プローブ／ホットエア用	センサー A・B 付き
CX1002	温度プローブ／自動機用	
A1556	センサー A	
A1557	センサー B	

※ センサーを外し、温度プローブのコネクターの赤、青の色を合わせて、測定器本体のターミナルに差し込みます。

6. REPLACEMENT PARTS AND OPTIONS

● Replacement Parts

Item No.	Part Name	Specifications
AS5000	Sensor/lead-free with certificate of conformance	

● Options

Item No.	Part Name	Specifications
A1310	Temperature probe/soldering pot	
C1541	Temperature probe/hot air	with sensor A/B
CX1002	Temperature probe/robot	
A1556	Sensor A	
A1557	Sensor B	

* Remove the sensor, and connect the red connector of this option to the red terminal of the thermometer and the blue connector to the blue terminal.

显示内容



※1 传感器断裂时，会显示传感器损坏。请更换新的传感器。
※2 如果显示 B 表示干电池含量不够，不能正确测量温度。必须更换新的干电池。
※3 在使计数复位的时候，同时做长按 MAX HOLD 和 AUTO HOLD 按钮。

2. 规格

型	摄氏型	华氏型
型号 HAKKO FG-100B		
分解	1°C	1°F
量度范围	0 至 700°C ^{※1}	32 至 1,300°F ^{※1}
传感器	K (CA) 热电偶	
测定容许差	±3°C (范围 300 至 600°C) ±5°C (其他温度范围)	±6°F (范围 572 至 1,112°F) ±10°F (其他温度范围)
电源 (电池)	006P 9V 干电池 (推荐：碱性干电池)	
外部尺寸	75 (W) × 44 (H) × 140 (D) mm	
重量	125 g (不包含电池)	
运作环境	使用温度 / 湿度范围 : 0 至 40°C、max.80% RH (无凝结)	
环境条件	适用规格污染度 2 (基于 IEC/UL61010-1)	

※1 传感器是可以使用至 500°C (932°F)。
如果测定 500°C (932°F) 以上时，请使用温度探针 (请参考「6. 更换部件／选购部品」)。

规格及外观有可能改良变更，恕不先行通知。

3. 安全及使用上的注意事项

为安全起见，请严格遵守“注意事项”。

△ 注意

测量焊铁的焊铁头和除锡器的吸嘴温度时，由于温度会高达 200 至 450°C，必须小心处理。
滥用可能会导致灼伤或火灾，请注意。

4. 使用方法 (续)

(3) 传感器安装完毕后打开电源开关。当显示屏显示室温时，温度计便可使用。

— 注 记 —

- 按电源开关的时间太短，可能无法打开。请长按电源开关。
- 电源打开后的液晶显示全部点亮时，电源无法立即关闭。

(4) 请在焊铁头上放上新的焊锡，使用焊铁头触及传感器的测量点。

△ 注意

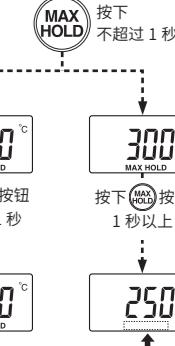
- 温度计本身是用塑料制成，请注意不要用焊铁头触及。另外请注意也不要将焊铁头碰触终端和可动杆。
- 尽管传感器的测温部进行过特殊处理，但反复测定会逐渐劣化。为了能够正确测定温度，如果测定点损坏后，请更换新的传感器。
- 终端上粘附了助焊剂时，请用酒精擦拭。请不要用稀释剂和汽油擦拭。
- 请于温度的显示状态安定后辨读。

5. 各按钮的功能和操作方法 (续)

● MAX HOLD 功能

按下 (MAX HOLD) 按钮 (小于 1 秒)，画面下方则显示“MAX HOLD”。

MAX 温度更新功能打开，最大值始终显示。



● HOLD 按钮另有以下功能

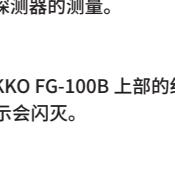
显示“MAX HOLD”时，按下按钮 (小于 1 秒) 将显示更新的最高温度。

显示“MAX HOLD”时，长按按钮 (1 秒或更长时间) 会释放 MAX HOLD 功能并返回正常显示。



● AUTO HOLD 功能

按下 (AUTO HOLD) 按钮 (小于 1 秒) 后，画面右下会闪灭显示“AUTO”。在此状态下将焊铁头接触传感器，读取焊铁头温度的平均值后算出。平均值算出后“AUTO”转为点亮状态，会固定显示出算出结果。每按一下按钮，AUTO HOLD 功能会进行 ON 和 OFF 的切换。AUTO HOLD 功能没正假定在热风机的温度探测器的测量。



● 发送温度功能

按纽长时间 (1 秒以上) 按下时通过 HAKKO FG-100B 上部的红外线输出发送温度数据。通信中的温度显示会闪灭。温度发送功能只在能接收的机器能发信。只表示被固定了的值能发信。

6. 替换部件／选购部品

● 替换部件

编 号	部 件 名 称	规 格
AS5000	传感器／可对应无铅焊锡具备 COC 符合性证明书	

● 选购部品

编 号	部 件 名 称	规 格
A1310	温度探测针／焊锡槽用	
C1541	温度探测针／热风用	附传感器 A / B
CX1002	温度探测针／机械人用	
A1556	传感器 A	
A1557	传感器 B	

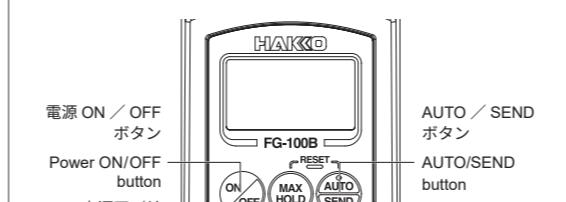
※ 将传感器拆下，再把探针连接部的红色对红色终端，蓝色对蓝色终端连接到测试仪机身。

△ 注意／CAUTION

AUTO / SEND 按钮被按住的同时电源打开时，显示 °C 和 °F 的表示会切换。

When the power turned on by pushing the power ON/OFF button while pressing the AUTO/SEND button, the display of °C and °F is replaced.

按住 AUTO / SEND 按钮并打开电源时、将更换 °C 和 °F 的显示。



△ 注意／CAUTION

将焊铁头直接接触到测温部，请勿直接接触。直接接触时，HAKKO FG-100B 本体可能会损坏。

Do not directly expose the HAKKO FG-100B body to hot air when taking measurements. Direct exposure to hot air can damage the HAKKO FG-100B body.

请勿直接将热风机来用 HAKKO FG-100B 测量温度。直接接触的话，会使 HAKKO FG-100B 主机受损。



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