HAKKO FX-100

SOLDERING STATION
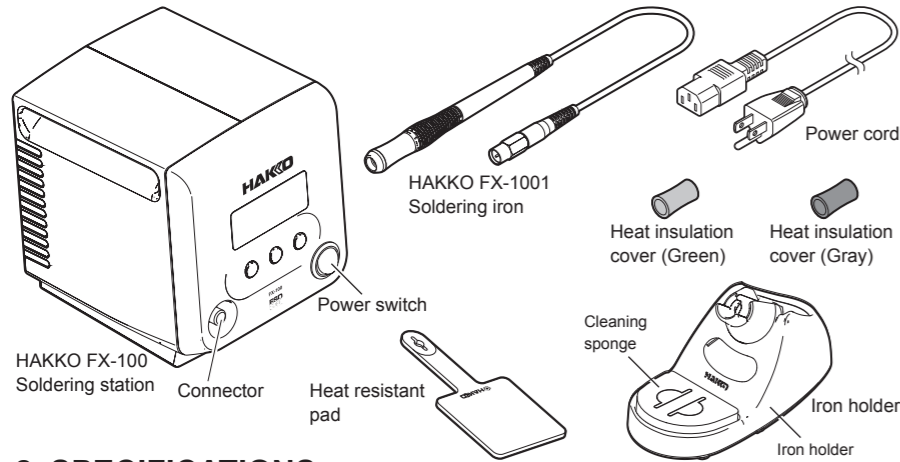
Soldering Station

Instruction Manual

Thank you for purchasing the HAKKO FX-100 Soldering Station.
Please read this manual before operating the HAKKO FX-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.

HAKKO FX-100 soldering station 1
HAKKO FX-1001 soldering iron 1
Heat insulation cover (Green) 1
Heat insulation cover (Gray) 1
Heat resistant pad 1
Iron holder 1
Power cord 1
Instruction manual 1

HAKKO FX-100 Soldering station
Connector
Heat resistant pad
Power switch
HAKKO FX-1001 Soldering iron
Power cord
Heat insulation cover (Green)
Heat insulation cover (Gray)
Cleaning sponge
Iron holder
Iron holder base

2. SPECIFICATIONS

Power consumption	85 W
Tip series /	T31-01 Series / 450°C (840°F)
Tip temperature	T31-02 Series / 400°C (750°F)
Temperature stability	±1.1°C (±2.0°F)

● Station

Output power	50 W
Output frequency	13.56 Mhz
Dimensions	127 (W) × 150 (H) × 167 (D) mm
	(5.0 × 5.9 × 6.6 in.)
Weight	3 kg (6.6 lb.)

● HAKKO FX-1001 soldering iron

Length of cord	1.3 m (4.3 ft.)
Length, (w/o cord)	190 mm (7.5 in.) with T31-02D24 tip
Weight, (w/o cord)	31 g (0.07 lb.) with T31-02D24 tip

NOTE:
The temperature was measured using the HAKKO FG-101 thermometer.
This product is protected against electrostatic discharge.

⚠ **CAUTION**
This product includes such features as electrically conductive plastic parts and grounding of the handpiece and station as measures to protect the device to be soldered from the effects of static electricity. Be sure to observe the following instructions:
1. The handle and other plastic parts are not insulators, they are conductors. When replacing parts or repairing, take sufficient care not to expose live electrical parts or damage insulation materials.
2. Be sure to ground the unit during use.

* Specifications and design are subject to change without notice.

※ 各言語（日本語、英語、中国語、フランス語、ドイツ語、韓国語）の取扱説明書は以下のURL、HAKKO Document Portalからダウンロードしてご覧いただけます。
（商品によっては設定の無い言語がありますが、ご了承ください）
* 各國語言(日語,英語,中文,法語,德語,韓語)的使用説明書可以通過以下下網站的HAKKO Document Portal 下載參閱。
(有一部分的產品沒有設定外語對應,請見諒)
* Instruction manual for the language, Japanese, English, Chinese, French, German and Korean can be downloaded from the following URL, HAKKO Document Portal.
(Please note that some language may not be available depending on the product.)

https://doc.hakko.com

中國RoHS: 產品中有毒有害物質或元素的名稱及含量

部件名稱	有毒有害物質或元素					
	鉛(Pb)	汞(Hg)	鎘(Cd)	六價鉻(Cr(VI))	多溴聯苯(PBB)	多溴二苯醚(PBDE)
焊鐵部	×	○	○	○	○	○
電路板	×	○	○	○	○	○
插頭	×	○	○	○	○	○

○：表示該有毒有害物質在該部件所有均質材料中的含量均在SJ/T 11363-2006 標準規定的限量要求以下。
×：表示該有毒有害物質至少在該部件中的某一均質材料中的含量超出SJ/T 11363-2006 標準規定的限量要求。

3. WARNINGS, CAUTIONS AND NOTES

Warnings, cautions and notes are placed at critical points in this manual to direct the operator's attention to significant items. They are defined as follows:

⚠ **WARNING:** Failure to comply with a WARNING may result in serious injury or death.

⚠ **CAUTION :** Failure to comply with a CAUTION may result in injury to the operator, or damage to the items involved. Two examples are given below.

NOTE : A NOTE indicates a procedure or point that is important to the process being described.

⚠ **WARNING**

When power is ON, the tip will be hot. To avoid injury or damage to personnel and items in the work area, observe the following:
● Do not touch the tip or the metal parts near the tip.
● Do not allow the tip to come close to, or touch, flammable materials.
● Inform others in the area that the unit is hot and should not be touched.
● Turn the power off when not in use, or left unattended.
● Turn the power off when changing parts or storing the HAKKO FX-100.
● This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
● Children should be supervised to ensure that they do not play with the appliance.
● The unit is for a counter or workbench use only.

To prevent accidents or damage to the HAKKO FX-100, be sure to observe the following:
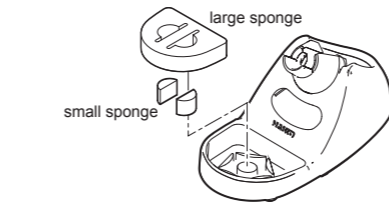
⚠ **CAUTION**

● Do not use the HAKKO FX-100 for applications other than soldering.
● Do not allow the HAKKO FX-100 to become wet, or use it when hands are wet.
● Do not modify the HAKKO FX-100.
● Use only genuine HAKKO replacement parts.
● Be sure to hold the plug when inserting or removing the iron cord.
● Do not strike the iron against hard objects to remove excess solder. This will damage the iron.
● Be sure the work area is well ventilated. Soldering produces smoke.
● While using the HAKKO FX-100, don't do anything which may cause bodily harm or physical damage.

4. INITIAL SETUP

A. Iron holder
● This product includes two methods for cleaning the tip: a wire tip cleaner, and a sponge. Please be sure to soak the sponge in water before using.
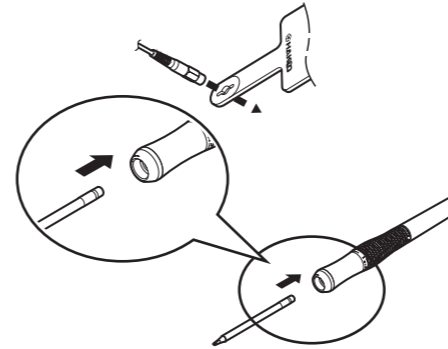1. Set the iron holder.
2. Put the small cleaning sponge in one of the five holes in the iron holder base.
3. Add water to the iron holder base. The small sponge will keep the large sponge moist through capillary action.
4. Wet the large sponge, squeeze it dry and put it on the iron holder base.

large sponge

small sponge

⚠ **CAUTION**
Using the sponge without water may damage the tips.

B. Handpiece cord assembly
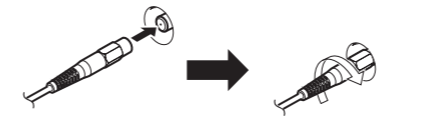1. Pass the iron cord through the hole in the heat resistant pad.

2. Hold the head part of the tip with the heat resistant pad and insert the tip into the handpiece. Push until the tip stops.

C.Station

⚠ **CAUTION**
Be sure the power switch is OFF before connecting or disconnecting the soldering iron cord. Failure to do so may result in damage to the circuit board.

1. Insert the power cord into the receptacle at the back of the station.

2. Insert the connection cable plug into the connector at the front of the station, and turn it in a clockwise direction until it stops.

3. Set the iron in the iron holder.

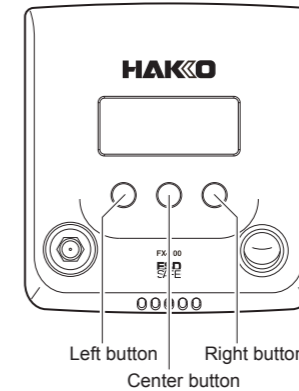4. Plug the power cord into a grounded wall socket.

⚠ **CAUTION**
The HAKKO FX-100 is protected against electrostatic discharge and must be grounded for full efficiency.

5. OPERATION

● Operation
1. Turn ON the power switch.
2. The screen will switch in order of product number indication → greeting → home screen.
3. When the home screen is displayed, the MODE status is indicated on the left and output graph at the center. The graph starts rising as the iron tip temperature increases. The graph starts falling as the iron tip approaches stable temperature, reaching the minimum when the stable temperature is achieved. Start soldering after the stable temperature is reached.

Controls and displays

HAKKO FX-100 has 3 operation buttons. The operation executed by each button varies depending on what is on the display screen. The operation for each button is indicated at the bottom of the screen. Select the button according to the indication.

By pressing certain buttons from the home screen, the display will change, revealing the button labels and waiting for your selection.

Left button   MODE
Center button DSP (Display)
Right button   SET (Parameters)

If no button is pressed, it will go back to the home screen.

Left button   Right button
Center button

・When MODE is pressed

The mode can be changed to NORMAL mode or BOOST mode.
By changing the mode to BOOST, the performance of the station is increased and the tip temperature rises slightly.

・When DSP (Display) is pressed
The selected information will be displayed on the screen.

SHOW PROFILE
The set profile information (Station, User, and Solder) is displayed.

SHOW TIP LOADS
The soldering count is displayed. By selecting RESET and then OK, the count is reset to 0.
To escape without resetting, select CANCEL.

SHOW TIP TIME
The cumulative running time on the iron tip is displayed. * Not including shut-off period. By selecting RESET and then OK, the period is reset to 0. To escape without resetting, select CANCEL.

SELECT PROFILE
The profile information to be displayed is selected here. Profile information No.1 or No.2 can be selected.

・When SET is pressed
Various settings can be changed. After changing the setting, setting change is reflected by selecting SAVE → OK. To escape without setting change, select CANCEL.

DISPLAY
The fashion in which the output graph is displayed can be changed.
NORMAL: Histogram (rolling bar graph), EXPAND: Horizontal expanding graph, OFF: No display

AUTO SLEEP
The automatic sleep period can be set up. Even when the solder iron is not placed on the holder, it will automatically drop to sleep temperature when it is not used for the set period of time. Sleep function is canceled by removing the solder iron from the holder or pressing one of the 3 buttons.

AUTO SHUTOFF
The time to automatically turn off the soldering station can be set up. Electricity is stopped automatically when the solder iron is not used for the set period of time. SHUTOFF function is canceled by pressing one of the 3 buttons.

PASSWORD LOCK
The setting can be changed so that a password input is required every time a parameter is changed or a count is reset. A 3-letter password comprising of letters A to Z is set up.

PROFILE
The profile information can be set up.
STATION ID: Station name, Asset ID, etc., PROFILE1,2: User name and solder information.

ALERT TIME
"CHG TIP" is displayed on the home screen when the iron tip cumulative running time reaches the set period.

6. TROUBLE SHOOTING GUIDE

⚠ **WARNING**

Before checking the inside of the HAKKO FX-100 or replacing parts, be sure to disconnect the power plug. Failure to do so may result in electric shock.

● The solder iron does not operate even when the power switch is turned ON.

CHECK : Is the power supply cable or connection plug disconnected?
ACTION : Connect it tightly.
CHECK : Is the fuse blown?
ACTION : Replace the fuse. If the fuse blows again, please send the entire product back to us for repair.

● Grip Error is displayed.

ACTION : Check that the soldering iron or the iron tip is connected.If the error is displayed again even when it is connected, the soldering iron or the iron tip may be damaged.
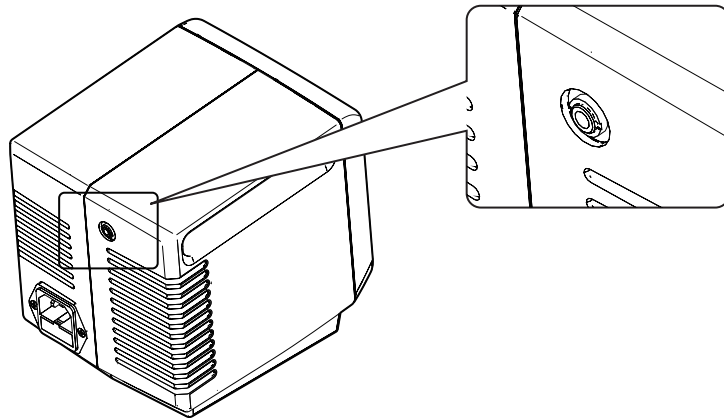
● Solder does not become wet at the iron tip.

CHECK : Is the tip oxidized?
ACTION : Clean the tip to remove oxidation.

● The tip temperature is too Low.

CHECK : Is the tip oxidized?
ACTION : Clean the tip to remove oxidation.

The port on the back of the station is used to display heater output on the external device. (not included)

Detailed information on the parameters and how to change them can be found in manuals available at the HAKKO Document Portal. Please download and make use of them.

➡ **https://doc.hakko.com**