

SOLDERING STATION

FX-888DX

Instruction Manual

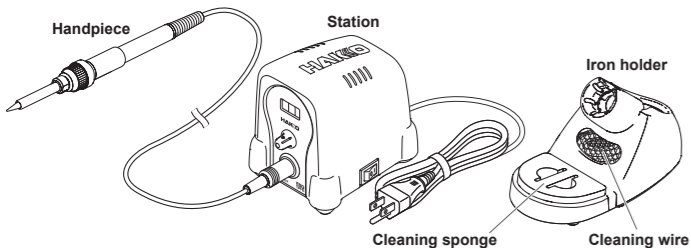
Thank you for purchasing a HAKKO product.
This product is a soldering iron station.

Make sure to read this manual before using the product, and keep it in a safe place for future reference.

1. Set contents and assembly

Confirm the contents before use.
*This product may differ from the following:

Station FX-888DX.....	1	*Cleaning sponge.....	1
*Handpiece FX-8801.....	1	*Cleaning wire.....	1
*Iron holder FH-800.....	1	Instruction Manual (this document).....	1



See the web page for the product information such as replacement parts/options.
https://www.hakko.com/doc_fx888dx-e

2. Specifications

Power consumption	100 W
Temperature range	50 to 480°C (120 to 899°F)
Temperature stability	±1°C (1.8°F) (At idle temperature) (When set to 200 to 480°C (400 to 899°F))

Output	AC 26 V
Dimensions	100 (W) × 120 (H) × 125 (D) mm (3.9 × 4.7 × 4.9 in)
Weight	1.2 kg (2.6 lb)

Power consumption	65 W (26 V)	Cord length	1.2 m (3.9 ft)
Tip to ground resistance	<2 Ω	Total length	217 mm (8.5 in) (with T18-B tip)
Tip to ground potential	<2 mV	Weight	46 g (1.6 oz) (with T18-B tip)
Heating element	Ceramic heater		

- The total length and weight excludes the cord.
- This product is applied with electrostatic countermeasures.
- Please note that specifications and appearance are subject to change without notice in the interest of product improvement.

CAUTION

Handling precautions for ESD Safe products
This product contains electrostatic countermeasures, so please use the following precautions:
1. Not all plastic parts are insulators, they may be conductive. Be careful not to expose live electrical parts or damage insulating materials when performing repairs or replacing parts.
2. Be sure the product is grounded before use.

3. Warnings, Cautions, and Notes

Warnings, cautions, and notes are placed at critical points in this manual to direct your 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.

NOTE: This indicates procedures or information that are important in a process described in this document.

Be sure to observe the following precautions to ensure safety.

WARNING

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- When this product is not used, place the handpiece on the iron holder.
- If the power cord is damaged, it must be replaced by the manufacturer, service agent, or a qualified person to avoid danger.
- The tip reaches high temperatures when the power source is turned on. You may risk getting burned or causing a fire if mishandled.
- Do not touch the metal parts near the tip.
- Do not place anything that easily burns or ignites near the product.
- Make sure that people nearby are aware of the "high temperature danger."
- When the product is not in use, being repaired, or being cleaned, turn the power switch off and disconnect the plug from the power outlet.

3. Warnings, Cautions, and Notes (cont'd)

Failure to observe the following precautions to ensure safety might result in electric shock, malfunction or other trouble.

CAUTION

- Before using this product, fully read all descriptions in this document.
- Only use the product for soldering.
- Do not hit the handpiece against a workbench or subject it to strong shocks to remove solder residue.
- Soldering produces smoke, so make sure to work in a well-ventilated area.
- Do not connect a handpiece that is not compatible with this unit. It may cause failure.
- Turn the station off before connecting or disconnecting the handpiece to prevent damage to the P.W.B.
- Use genuine HAKKO parts for included parts/replacement parts/options.
- Do not modify this product.
- Do not use damaged cords or plugs. Doing so can result in malfunction or injury.
- Do not use the product if it has been dropped or shows signs of damage.
- When inserting and removing the cord, hold the plug body and do not pull the cord.
- Do not allow this product to get wet. Also, do not handle it with wet hands.
- Do not perform any other actions that may be considered to be dangerous.

4. Operation

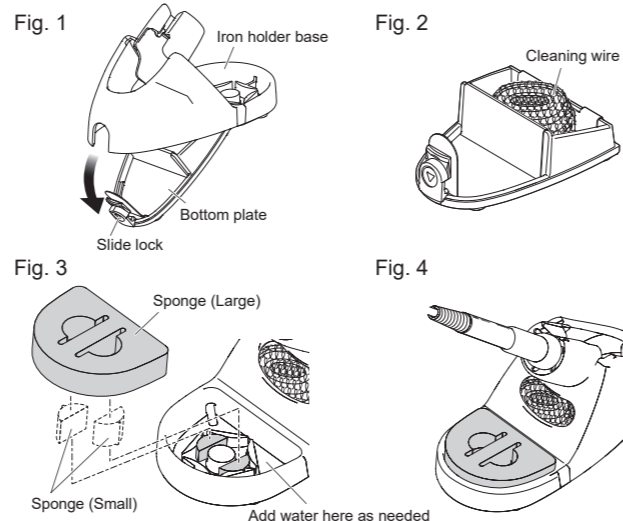
4-1. Iron holder

Preparations

- (1) Push the slide lock and remove the bottom plate. (Fig. 1)
- (2) Place the cleaning wire onto the bottom plate. (Fig. 2)
- (3) Attach the bottom plate to the iron holder base.
- (4) Add water as needed to the front part of the iron holder. The small sponges absorb water and keep them moist. (Fig. 3)
- (5) Wet the large sponge and place it on the iron holder.

NOTE Do not use the cleaning sponge when it is dry. This can damage the sponge and the soldering tip.

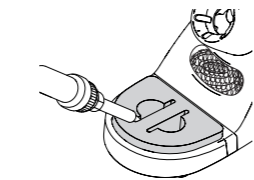
- (6) Place the handpiece in the iron holder. (Fig. 4)



Tip cleaning

Cleaning sponge

Wipe the tip with a moist sponge to remove oxide.



Cleaning wire

Insert and remove the tip into the wire to remove oxide.

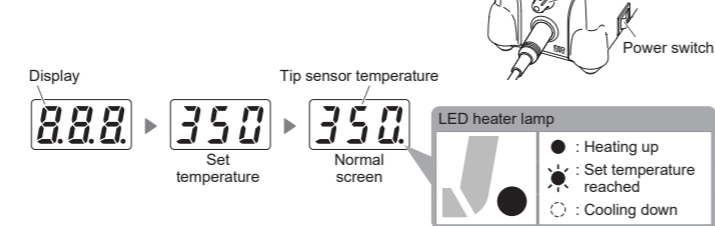


4-2. Operation

CAUTION

Place the handpiece on the iron holder and plug it in.

- (1) Turn the power on.
- (2) The display will change as shown below.
- (3) The tip will heat up.
- (4) The iron will reach the set temperature (Factory default 350°C/750°F).



5s The setting of Normal Mode/Preset Mode/Adjust Mode will time out and return to the normal screen if it is left idle for 5 seconds.

4. Operation (cont'd)

4-2. Operation (cont'd)

How to change the set temperature

Normal mode (Factory default)

Turn the knob to change the set temperature. (Factory default temperature settings: 350°C/750°F)

Change to 400°C.

Set temperature 350 → Turn → Change to 400 → Push → Temperature control ON → Normal screen 400

● To restrict the change of the set temperature, go to "Parameter No. 14".

Preset mode

To enable this mode, set "Parameter No. 11" to [PrE].
The station can store up to 5 frequently used temperatures. To change the set temperature, select the preset number.

Turn the knob to select one of the registered temperatures. (Factory default temperature settings: P1 250°C (600°F), P2 300°C (700°F), P3 350°C (750°F), P4 400°C (800°F), P5 450°C (850°F))

Change from P3 (factory default) to P4 (400°C).

Registered temperature 350 → Preset No. P3 → Turn → Change to 400 → Push → Temperature control ON → Normal screen 400

● To restrict the change of the set temperature, go to "Parameter No. 14".
● To change the registered temperature for each preset number, go to "Parameter No. 23".

5. Parameter Settings

To enter the parameters, press and hold the knob while turning the power on. Then, use the knob to change the parameters.

Parameter setting screen: 01 → 888 → Knob → Power switch

Change the value: Turn → Set the value: Push → Confirm the settings: Press & Hold → YES or NO → Finalize the settings: Push

* Changes will be lost if the power is turned off in the middle of setting.

Parameter No.	Parameter name/summary	Setting value	Factory default settings (Value when implementing No.25)
01	Display temperature unit Select from °C or °F. ● All set values are converted to the changed display temperature unit.	°C/°F	[] (For USA: °F)
03	Low temp alarm [H-E] will appear and blink to notify the user when the tip temperature drops by specified degrees during soldering.	30 to 150°C 54 to 270°F	150 (°F: 270)
11	Changing the set temperature: Normal mode [nor] /Preset mode [PrE] The number of registered temperatures will be limited to the following when Preset mode is selected. - [2P] P1 and P2 are selectable. - [3P] P1, P2 and P3 are selectable. - [4P] P1, P2, P3 and P4 are selectable. - [5P] All 5 can be selected. (Factory default)	nor/PrE	[nor]
14	Password lock Select the lock range with a password that combines 6 characters of <i>RbLdEF</i> into 3 letters. - Select [0] To unlock all - Select [1] To enable partial lock - Select [1 1] To lock the temperature setting - Select [2 1] To lock the change of preset No. - Select [3 1] To lock the tip temperature correction (Adjust mode) - Select [2] To lock all	0/1/2	[0]
23	Preset temperature: Changing registered temperatures You can register up to five frequently used set temperatures. This function saves time when changing the set temperature. Default value: P1 250°C (600°F), P2 300°C (700°F), P3 350°C (750°F), P4 400°C (800°F), P5 450°C (850°F)	50 to 480°C 120 to 899°F	[P1] 250 → [P2] 260 → [P3] 350 → [P4] 400 → [P5] 450
25	Initial reset Reset the product to factory default settings.	°C/°F	[] → [no] → [YES] → [888] → [350]
31	Adjust mode: [On]/[OFF] setting To correct the tip temperature, turn the adjust mode on.	On/OFF	[On] (For USA: OFF)

Note

● When a password is set in No. 14, [---] will be displayed, and a password will be prompted before moving to the parameter setting. It will return to the normal screen if the wrong password is entered twice. Contact us if you do not know the password.

E-mail: support@hakko.com

Normal screen: 350 → 888 → [---] → Enter the password here to switch to the parameter setting screen.

This function is convenient for when you want to work within a specified temperature range.

To solder between 320 and 350°C at a set temperature of 350°C, change the setting value to [30] in No.03 before beginning soldering. [H-E] will appear and blink to notify the user when the tip temperature drops below 320°C during soldering. The upper limit is restricted by the set temperature.

How to confirm the set temperature

Normal mode: Appears for 1 sec. Push → 350 (Set temperature) → 350 (Normal screen)

Preset mode: Appears for 0.5 sec. Push → P3 (Selected preset No.) → 350 (Registered temperature of P3) → 350 (Normal screen)

Tip temperature correction (Adjust mode)

The tip degradation can cause a deviation between "the set temperature" and "the measured tip temperature". This mode can minimize the deviation by entering "the measured tip temperature". (Soldering tip thermometer required separately)

NOTE To enable [On] or disable [OFF] the Adjust mode, go to "Parameter No. 31".

Press & Hold: Press and hold the knob to correct the tip temperature. (Correctable range: Set temperature ±150°C/±270°F)

Correct the tip temperature. (Example: Set temperature 400°C/measured temperature 395°C)

Adj → Push → 400 (Set temperature) → Turn → 395 (Change to the measured tip temperature) → Push → 400 (Correcting) → Normal screen

It will return to the normal screen if it is left idle

● Correct the tip temperature only after the tip temperature has stabilized.
● Replacing or changing the tip may cause a deviation between the set temperature and the measured temperature. Correct the tip temperature frequently to match the measured tip temperature.

Procedure with [1]: partial lock

Set temperature 170 → Preset No. 20 → Tip temperature correction 30 → [---] → Turn the knob to select "1": To lock" or "0": To unlock" → Turn the knob to enter the password

6. Maintenance

CAUTION

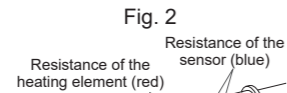
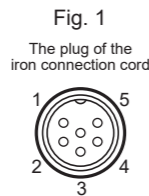
- Turn the power off and unplug the power cord before inspecting or replacing any internal components.
- Do not file the tip end to remove the oxide. It will shorten the tip life.

Conducting maintenance will help keep the product in good condition and prolong the usage of the unit.

Inspection

Check the resistance of the heating element

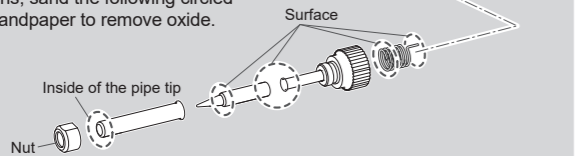
- Unplug the soldering iron from the station.
- Measure the resistance of the plug of the iron connection cord. (Fig. 1)
Between pins 4 – 5 (heating element):
Normal resistance 2.5 to 3.5 Ω (at room temperature)
Between pins 1 – 2 (sensor):
Normal resistance 41 to 58 Ω (at room temperature)
- If the results of (2) is abnormal, measure the resistance of the heating element. (Fig. 2)
Heating element (red): Normal resistance 2.5 to 3.5 Ω (at room temperature)
Sensor (blue): Normal resistance 41 to 58 Ω (at room temperature)
- If the results of (3) is abnormal, replace the heating element. If the result of (3) is normal, send the unit. (including the handpiece)



Check the tip to ground resistance

- Between pins 3 – tip:
Normal resistance <2 Ω (Fig. 1)

"The tip to ground resistance" may increase due to flux residue and oxide built up on the tip during use. If this happens, sand the following circled areas with sandpaper to remove oxide.



NOTE The tip to ground resistance will increase if the nut is loose.

- After replacing the heating element, measure the resistance of (1) to (3) once again.

Daily maintenance

Setting temperature	Using the product at a temperature that is higher than necessary can accelerate tip deterioration and damage parts that are susceptible to heat. Use the lowest temperature whenever possible.
Before beginning work	Perform a visual check of the tip. Replace it if it is deformed or worn out. Use the cleaning sponge to wipe off any oxide or old solder from the tip. Impurities on a circuit board can result in poor soldering.
During the work	Do not leave the soldering iron turned on at high temperatures for an extended period of time. Turn it off when not in use. This prevents tip oxidation, which helps maintain its workability and will help preserve tip life.
After finishing work	Thoroughly clean the tip with the cleaning sponge and then coat it with new solder. Doing so can prevent oxidation of the tip.

Periodic maintenance

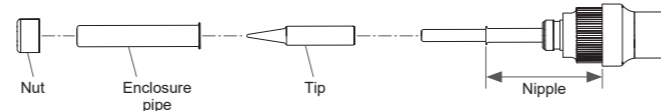
Tip

Wear and tear on the tip will vary due to the operating temperature as well as the quality and amount of solder/flux used. Maintenance should be performed based on what suits your usage.

- Turn the power ON.
- Set the temperature to 250°C (482°F).
- Once the temperature is stable, use the cleaning sponge to wipe the tip.
- If there is any black oxide on the solder plating, apply new solder containing flux and then wipe it off with the cleaning sponge. Repeat this process until the oxide is removed. Afterward, coat it with new solder.

Handpiece

Remove any flux residue, debris, and other particulates on the nut, enclosure pipe, and nipple with industrial alcohol.



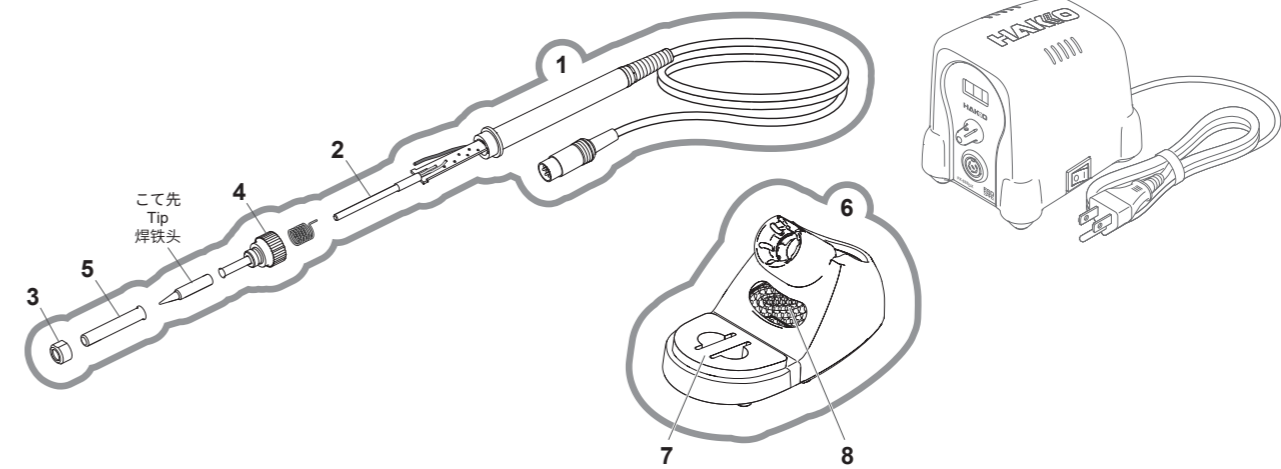
Iron holder

- Push the slide lock and remove the bottom plate, then remove the solder waste collected in the plate.
- Rotate the cleaning wire as need to a clean side where solder is not accumulated.



部品リスト / Parts List / 零件清单

図番 Item No. 图号	品番 Part No. 部件编号	部品名	Part Name	部件名称
1	FX8801-01	こて部 FX-8801 B型こて先付き	Soldering iron FX-8801 With B Tip	焊铁部 FX-8801 附带 B 型焊铁头
	FX8801-02	こて部 FX-8801 1.6D型こて先付き USA 専用	Soldering iron FX-8801 With 1.6D Tip for USA	焊铁部 FX-8801 附带 1.6D 型焊铁头 美国用
2	A1560	ヒーター	Heating element	发热元件
3	B1785	袋ナット	Nut	螺帽
4	B2022	ニップル	Nipple	螺纹套头
5	B3469	保護パイプ	Tip enclosure	保护管
6	FH800-05SV	こて台 シルバー	Iron holder FH-800 silver	焊铁架 FH-800 银色用
7	A1559	クリーニングスポンジ	Cleaning sponge	清洁海绵
8	A1561	クリーニングワイヤー	Cleaning wire	清洁丝



7. Troubleshooting

CAUTION

Unplug the power cord before inspecting or replacing any internal components.

No operation even if power switch is turned ON.	Is the power cord securely plugged in? ▶ Insert the plug into the outlet. If the problem persists, send the main unit (including handpiece) back for service.
[H - E] appears.	Is the heat capacity of the tip too small for the object to be soldered? ▶ Use a tip with a larger heat capacity.
	Is the set value for the low temp alarm too small? ▶ Increase the value of the setting. (See "Parameter No. 33" in "5. Parameter Settings")
Is the heating element not working?	Measure the resistance of the heating element, and if the measured value is abnormal, replace the heating element. (See "Inspection" in "6. Maintenance") ▶ If the problem persists, send the main unit (including handpiece) back for service.
	Is the handpiece plug loose/disconnected? ▶ Turn the power off, reconnect the handpiece, and then turn on the power.
[S - E] appears.	Measure the resistance of the sensor, and if the measured value is abnormal, replace the heating element. (See "Inspection" in "6. Maintenance") ▶ If the problem persists, send the main unit (including handpiece) back for service.
	Is the sensor is not working? ▶ (See "Inspection" in "6. Maintenance")
[- -] appears.	The main unit is not working. ▶ Send the main unit (including handpiece) back for service.

Sometimes the tip is not heating up.	Is the heating element properly soldered? ▶ Solder heating element once again. If the problem persists, send the main unit (including handpiece) back for service.
The solder is not wetting on the tip.	Is the tip temperature too high or too low? ▶ Set the appropriate temperature.
	Is there any oxide on the tip? ▶ Remove the oxide. (See "6. Maintenance")
The tip temperature is too high/low.	Is the tip temperature corrected? ▶ Measure and correct the value. (See "Tip temperature correction (Adjust mode)" in "4-2. Operation")

If you cannot find a solution in this manual, or if another problem occurs, please contact the retailer where you purchased the product.



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