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Quality Tools For The Electronics Industry
Europe version



HAKKO ESD SAFE
FX-8002



GOOD DESIGN
AWARD 2015

HAKKO Gio



HAKKO brand is much loved in more than 50 countries worldwide.

HAKKO has grown into a global brand. Our soldering irons and related equipment are hard at work in more than 50 countries. We have local branches and sales representatives around the world, and continue to expand our global network.



<http://www.hakko.com>

Global Network



As of Aug. 2016

《《《 WORLDWIDE NETWORK 》》》



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Quality Tools for the



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See the official HAKKO website for all necessary information regarding HAKKO products and services.

• HAKKO WEBSITE



• SELECT TIP SHAPE

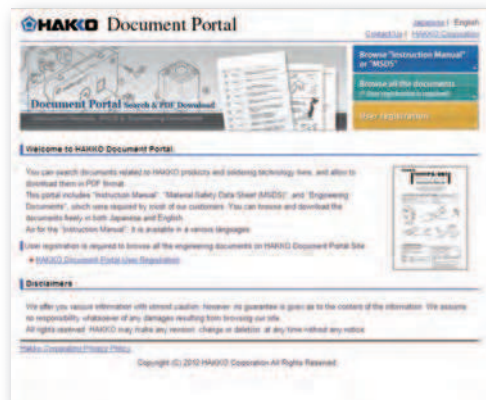
Search for the appropriate tip for your work by following the guidelines.



http://www.hakko.com/english/tip_selection/

• DOCUMENT PORTAL

Download instruction manuals, SDSs, and technical documents from the HAKKO Document Portal.



<https://doc.hakko.com/?l=en>

Electronics Industry



HAKKO FX-801 SOLDERING STATION **ESD SAFE**
Heavy Duty Soldering Station

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HAKKO FR-400 DESOLDERING TOOL **ESD SAFE**
Heavy Duty Desoldering Tool

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HAKKO FR-410 DESOLDERING TOOL **ESD SAFE**
High-Power Desoldering Tool

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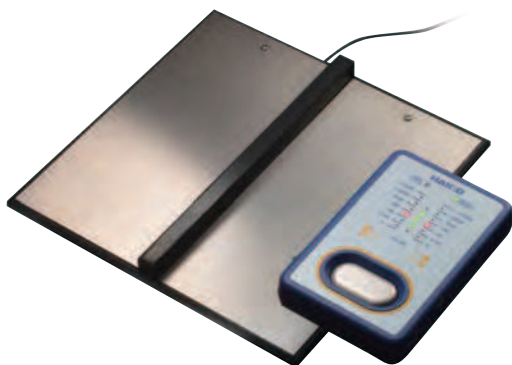
HAKKO FR-811 SMD REWORK STATION **ESD SAFE**
Hot-Air SMD Rework Station

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HAKKO FG-460 FOOTWEAR TESTER
Footwear Tester

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HAKKO FG-102 THERMOMETER
Soldering Iron Thermometer with Traceability Management System

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Soldering Iron

All-round Soldering Station & Accessories

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65 W



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FX-889
2-Port Type



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Soldering Iron M type (65 W)



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FX-8803
Soldering Gun (65 W)



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FX-8804
SMD Hot Tweezers (65 W)



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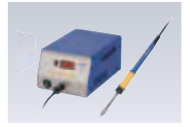
FX-8805
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Heavy Duty Soldering Station

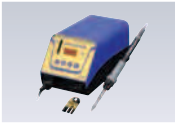
FX-801
300 W



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IH Soldering Station

FX-838
150 W



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FX-100
IH



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High Performance Soldering Station

FX-951
70 W



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FX-950
70 W



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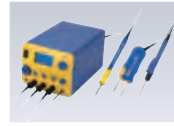
High Performance Rework Station & Accessories

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FM-2030
Heavy Duty Soldering Iron (140 W)



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N₂ System & Soldering Iron

FX-780
N₂ Generator



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FX-781
N₂ Generator



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FX-791
N₂ Flow Meter



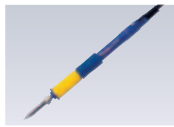
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FX-8802
N₂ Soldering Iron (65 W)



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FM-2026
N₂ Soldering Iron (70 W)



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FM-2031
N₂ Soldering Iron (140 W)



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FX-8302
N₂ Soldering Iron (150 W)



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FX-8003
N₂ Soldering Iron (260 W)



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Ceramic Heater Type

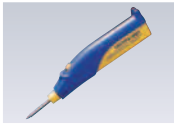
DASH



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Battery-powered Type

FX-901

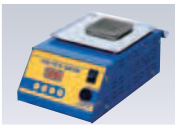


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Soldering Pot

Soldering Pot

FX-301B
High Performance Type



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FX-300
High Performance Type



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Soldering Related Equipment and Materials

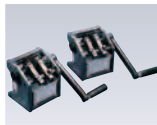
Tools for Lead and Wire

FT-801
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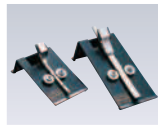
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DIPLINER
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Self Feeder



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Tip Cleaner / Polisher

FT-710
Tip Cleaner



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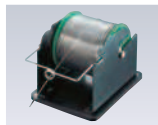
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Flux Pen

FS-210



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Desoldering / Rework

Heavy Duty Desoldering Tool

FR-400
300 W



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Desoldering Tool and Wire

FR-410
140 W



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FM-204
70 W



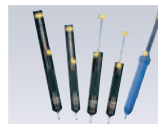
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FR-300
Portable Type



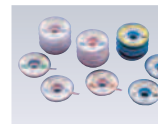
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SPPON



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Repair System

FR-701
Repair System



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Rework System

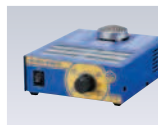
FR-702
Rework System



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SMD Rework Station

FR-810B
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FR-811
Hot-Air SMD Rework Station



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Smoke Absorber

Air Purifying Type

FA-430



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FA-431



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Desktop Type

FA-400



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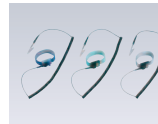


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Static Control

Wrist Strap

442B



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Tester / Meter

Wrist Strap Tester

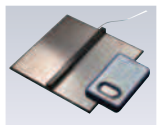
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Footwear Tester

FG-460



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Thermometer

FG-102



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FG-100



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Soldering Tester




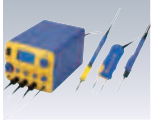


FG-101



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HAKKO Soldering Iron Lineup

		FX-888D	FX-889	FX-801	FX-838	FX-100	
							
Specifications	Power consumption	70 W	135 W	300 W	158 W	25 W (85 W)	
	Power consumption of Handpiece	65 W	65 W × 2 port	260 W	150 W	—	
	Temperature Range	50 to 480°C	50 to 480°C	50 to 500°C	200 to 500°C	350°C/400°C/450°C	
	Soldering Tip	T18 series	T18 series	T33 series	T20 series	T31 series	
Applicable Standard	Lead Free Suggestible	●	●	●	●	●	
	ESD Safe	●	●	●	●	●	
	RoHS Suggestible	●	●	●	●	●	
Accessories	Micro Soldering Iron connectable						
	SMD Hot Tweezers connectable	●	●				
	N ₂ Soldering Iron connectable	●	●		●		
	Desoldering Iron connectable						
	Hot Air Handpiece connectable						
	Self Feeder connectable	●	●		●		
	Heavy Duty Soldering Iron connectable			● Standard feature	● Standard feature		
Function	Auto Shutoff Function: When a set time passed, the function stops to supply power to the heating element.						
				●	●	●	
	Auto Sleep Function: When a set time passed, the tip temperature decreases to a set lower temperature.						
				●	●	●	
	Lock Function: Lockable by password, control card or lock key.						
		Password	Password	Password	Control card	Password	
	Lower Temperature Error Alert: When the temperature drops below a set limit, an error is displayed and the buzzer sounds.						
				●	●		
Offset Temperature Function: Temperature offsettable by analog, digital or adjustment mode.							
	Adjustment mode	Adjustment mode	Digital	Digital			
Preset Temperature Function: The function allows to input several frequently-used temperatures and recall with one push of a button.							
	●	●	●	●			

FX-951	FX-950	FM-203	FM-206	DASH	FX-901
					
75 W	75 W	140 W	410 W (max.)	15 to 16 W	Alkaline Batteries: 6 V (6 W)/ Nickel-Hydrogen Batteries (2150 mAh): 4.8 V (5 W)
70 W	70 W	70 W × 2 port	70 W × 3 port	—	—
200 to 450°C	200 to 450°C	200 to 450°C	200 to 450°C	—	—
T15 series	T15 series	T15 series	T15 series	T34 series	T11 series
●	●	●	●		
●	●	●	●		
●	●	●	●	●	●
●		●	●		
		●	●		
●	●	●	●		
			●		
●	●	●	●		
			●		
●		●	●		
●	● Option	●	●		
Control card	Lock key	Control card	Password		
●		●			
Digital	Manual	Digital	Digital		
			●		

Heavy Duty Soldering Station

HAKKO FX-801 **ESD SAFE**
SOLDERING STATION

New

Heavy Duty Soldering Station **Digital**

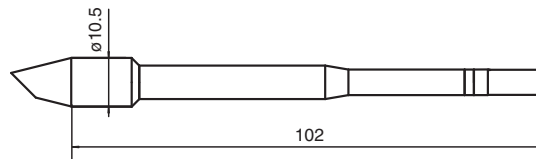
Tip not included



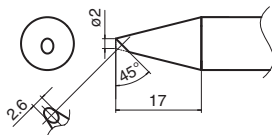
- Super power 300 W
- Best suited for soldering PWB with high heat capacity and high heat dissipation property

Optional Tips for FX-8002

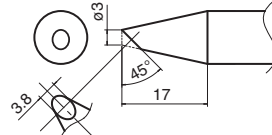
Unit: mm



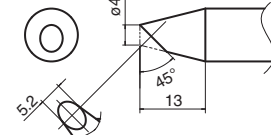
T33-BC2 Shape-2BC



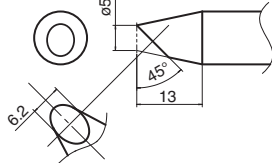
T33-BC3 Shape-3BC



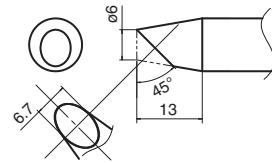
T33-BC4 Shape-4BC



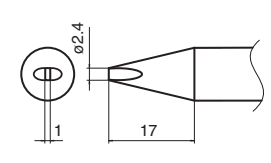
T33-BC5 Shape-5BC



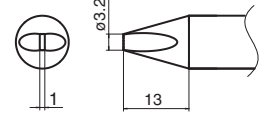
T33-BC6 Shape-6BC



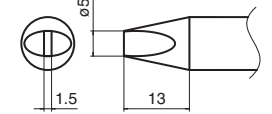
T33-D24 Shape-2.4D



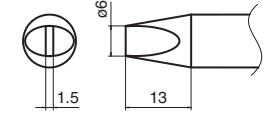
T33-D32 Shape-3.2D



T33-D5 Shape-5D

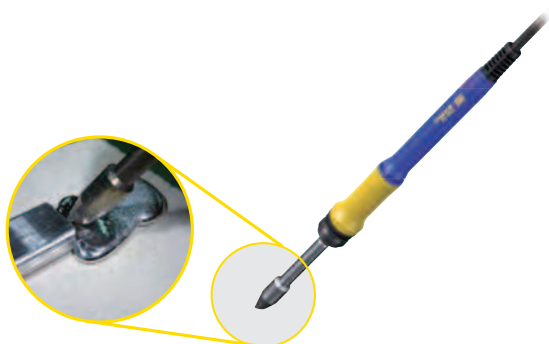


T33-D6 Shape-6D



Features

Make the impossible possible with Super Power of 300 W Heater



Check out the powerful performance of FX-801 easily melting a bar solder.

http://www.hakko.com/mov_e_fx801_feature1



QR code

Compact and lightweight (50 g) for heavy duty 300 W iron
The same weight as the iron part of FX-838, 150 W soldering station, for operator's comfort and better workability.

Large LED display enables easy viewing and operation.



Handles on unit body

Handles on unit body make it easy to carry.

Preset mode

Up to 6 settings can be preset and easily called up by Up/Down buttons.

Password function

Settings can be locked from unnecessary changes by password function.



Selectable alphabets for password

Connectable with N₂ soldering iron

To improve solder wettability and spreadability

HAKKO **FX-8003** **ESD SAFE**
SOLDERING IRON

N₂ Soldering Iron

Tip not included



For further details, see the N₂ soldering system (P.32 & P.33).

Packing List

FX-801	Station, Handpiece (FX-8002), Heat resistant pad, Power cord, Connecting cable, Iron holder (with cleaning wire), Instruction manual
FX-8003	Handpiece, Instruction manual

Specifications

Model No.	FX-801
Power consumption	300 W
Temperature range	50 to 500°C
Temperature stability	±5°C at idle temperature

Station

Output voltage	AC 29 V
Dimensions	145 (W) × 107 (H) × 211 (D) mm
Weight	3.9 kg

Soldering Iron

Power consumption	260 W (29 V)
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length*	228 mm (with 4BC tip)
Weight*	50 g (with 4BC tip)

* Without cord

Model No.	FX-8003
Power consumption	260 W (29 V)
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length*	253 mm (with 4BC tip)
Weight*	65 g (with 4BC tip and nozzle assembly A)

* Without cord

HAKKO FX-100 ESD SAFE SOLDERING STATION

IH Soldering Station **Digital**

Tip not included



- Provides the heat to the tip effectively by an 'Induction heater'
Unique "Power assist" feature that assists the thermal recovery performance of the soldering iron tip
- No calibration is required
- Wide variety of tips available
- Meets or exceeds IPC J-STD-001 and ANSI ESD S20.20.



GOOD DESIGN

Good Design Award has been a sole comprehensive design evaluation and commendation system in Japan since 1957. "G Mark", the symbol of the award has been recognized widely as a mark representing good design.

Packing List

FX-100	Station, Handpiece (FX-1001), Heat resistant pad, Power cord, Sleeve (green), Sleeve (gray), Cleaning wire, Iron holder, Instruction manual
---------------	---

Specifications

Model No.	FX-100
Power consumption	28 W (85 W)
Temperature range	T31-01 Series: 450°C, T31-02 Series: 400°C T31-03 Series: 350°C
Temperature stability	±1.1°C

Station

Output power	50 W
Output frequency	13.56 MHz
Dimensions	127 (W) × 150 (H) × 167 (D) mm
Weight	3 kg

Soldering Iron

Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	IH (Induction heating)
Cord length	1.3 m
Total length*	190 mm with 2.4D tip for 400°C or 350°C 193 mm with 2.4D tip for 450°C
Weight*	31 g (with 2.4D tip for 400°C)

* Without cord

Features

IH technology delivers the ultimate soldering iron
Excellent heat supply. Ideal for the most challenging soldering jobs.

The FX-100 features IH (induction heater) that continuously powers the soldering iron and maintains the set temperature by automatically detecting even minute drops in temperature, plus HAKKO's proprietary "Power Assist" function.

The FX-100 achieves powerful thermal recovery even with fine-shaped tips. It provides excellent thermal responsiveness that conventional IH and sensor feedback systems cannot offer.

Boost function

To increase tip temperature by 5 to 10°C (depends on tip shape) for better working efficiency.



Interactive method by LCD display with 3 buttons

PROFILE

```
PROFILE 1
S:HAKKO-1
U: ID-123
S:0.6 LEAD FREE
```

Station ID, user name and solder type can be registered.

TIP LOAD

```
TIP LOADS
APPROX.
000025 points
<RESET> <OK>
```

The soldering count is displayed.

TIP TIME

```
TIP TIME
0023 hours
<RESET> <OK>
```

The cumulative running time on the iron tip is displayed.

TIP TYPE and NORMAL MODE/BOOST MODE

```
<01>
N
*****
```

Visible tip type (01/02/03) and normal mode (N)/boost mode (B) on display.

T31-XX BC1

Indicates tip shape and size as usual.

"01" for 450°C
 "02" for 400°C
 "03" for 350°C

Optional Tips for FX-1001

Unit: mm

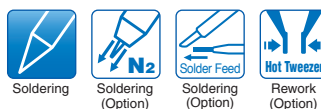
<p>T31-01 Series: 71.5 T31-02/03 Series: 68.5</p>			
<p>T31-01BC1 Shape-1BC T31-02BC1 T31-03BC1</p>	<p>T31-01BC28 Shape-2.8BC T31-02BC28 T31-03BC28</p>	<p>T31-01BL Shape-BL T31-02BL T31-03BL</p>	<p>T31-01D08 Shape-0.8D T31-02D08 T31-03D08</p>
<p>T31-01D16 Shape-1.6D T31-02D16 T31-03D16</p>	<p>T31-01D24 Shape-2.4D T31-02D24 T31-03D24</p>	<p>T31-01D52 Shape-5.2D T31-02D52 T31-03D52</p>	<p>T31-01I Shape-I T31-02I T31-03I</p>
<p>T31-01IL Shape-IL T31-02IL T31-03IL</p>	<p>T31-01J02 Shape-0.2RSB T31-02J02 T31-03J02</p>	<p>T31-01JL02 Shape-0.2RLB T31-02JL02 T31-03JL02</p>	<p>T31-01JS02 Shape-0.2RSSB T31-02JS02 T31-03JS02</p>
<p>T31-01KU Shape-KU T31-02KU T31-03KU</p>	<p>T31-01SBL Shape-SBL T31-02SBL T31-03SBL</p>	<p>T31-01WD08 Shape-0.8WD T31-02WD08 T31-03WD08</p>	

All-Round Soldering Station

HAJKO FX-888D SOLDERING STATION ESD SAFE

All-Round Soldering Station Digital

Tip included



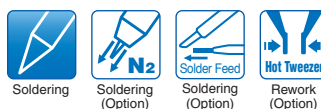
- Features Adjustment mode, Preset mode, and Password function
- Separable tip/heater design provides superior cost performance.
- L type (Large type) soldering iron FX-8805 is added to the lineup.

HAJKO FX-889 SOLDERING STATION ESD SAFE New

2-Port All-Round Soldering Station Digital

Tip included

* 1 piece of FX-8801 is included as standard.



- All the user-friendly functions are succeeded from FX-888D.
- Two applications can be active at the same time.
- Applicable to all the options, N₂ soldering iron, Soldering gun, SMD Hot Tweezers, and L type (Large type) soldering iron.

Common features

Strict temperature management

● Digital display

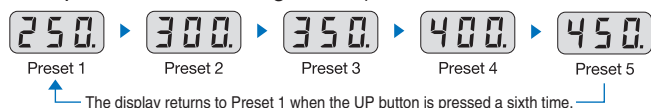
The FX-888D's and FX-889's digital display makes it easy to check the set temperature at a glance.

● Password function

Settings can be locked using a password to prevent them from being changed unexpectedly.

● Preset mode

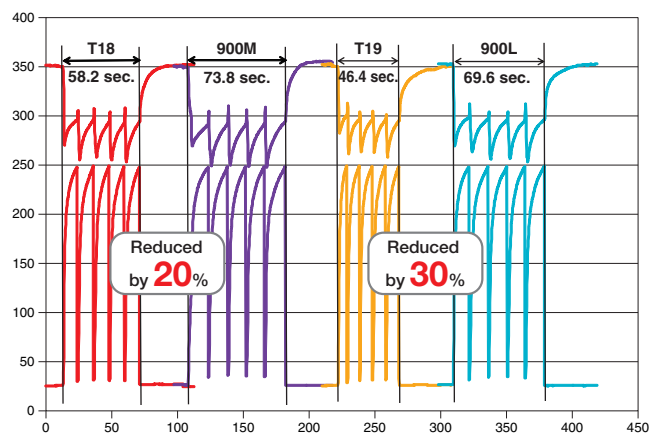
Simply select the desired temperature from a selection of preset temperatures registered in advance. (Up to 5 preset temperatures can be registered.)



● Adjustment mode

With adjustment mode, what used to be a troublesome procedure is now as simple as entering the measured tip temperature in the FX-888D and FX-889.

● FX-888D and FX-889 deliver excellent thermal recovery by using T18 and T19 series tips for their terrific heat conductivity.



Test criteria

Measurement method	Thermocouples are mounted on the tip and the soldered portion on the board, and the time until the soldered portion reaches 250°C is measured for 5 points.
Board	Paper phenol copper board
Component used	Terminal
Tip shape	Shape-2.4D
Temperature setting	350°C
Solder	Lead-free solder (Sn/Ag/Cu), diameter: 0.5 mm



Measuring the tip temperature with a tip thermometer (FG-100)

Packing List

FX-888D	Station, Handpiece (FX-8801), Iron holder, Instruction manual
FX-889	Station, Handpiece (FX-8801), Power cord, Dual Iron Holder, Color band (qty 2), Instruction Manual

Specifications

Model No.	FX-888D	FX-889
Power consumption	70 W	135 W
Temperature range	50 to 480°C	50 to 480°C
Temperature stability	±1°C at idle temperature (when set to 200 to 480°C)	

Station

Output voltage	AC 26 V	AC 26 V
Dimensions	100 (W) × 120 (H) × 120 (D) mm	157 (W) × 121 (H) × 149 (D) mm
Weight	1.2 kg*	2.1 kg

Soldering Iron

Power consumption	65 W (26 V)	65 W (26 V)
Tip to ground resistance	<2 Ω	<2 Ω
Tip to ground potential	<2 mV	<2 mV
Heating element	Ceramic heater	Ceramic heater
Standard tip	Shape-B (No.T18-B)	Shape-B (No.T18-B)
Cord length	1.2 m	1.2 m
Total length*	217 mm (with B tip)	222 mm (with B tip)
Weight*	46 g (with B tip)	52 g (with B tip)

* Without cord

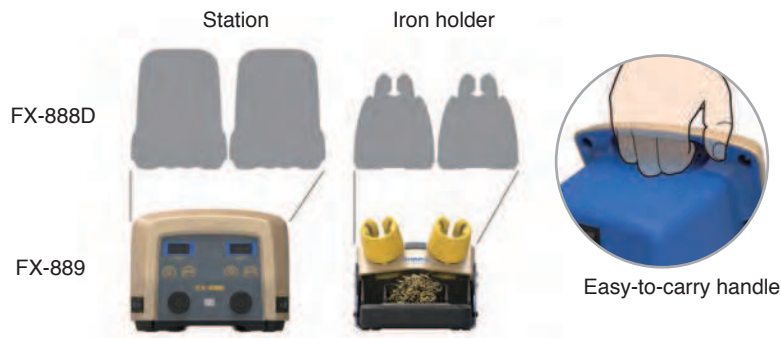
All-Round Soldering Station

Features of FX-889

User-Friendly Design

● Space-saving design

The reduced foot print is smaller than 2 of FX-888D and its iron holder. Efficient setup is available even on smaller workbench.



● Power-saving design

Independent switches cut the power for each iron when not in use. Power-saving design minimizes standby electricity.

● Superior operability

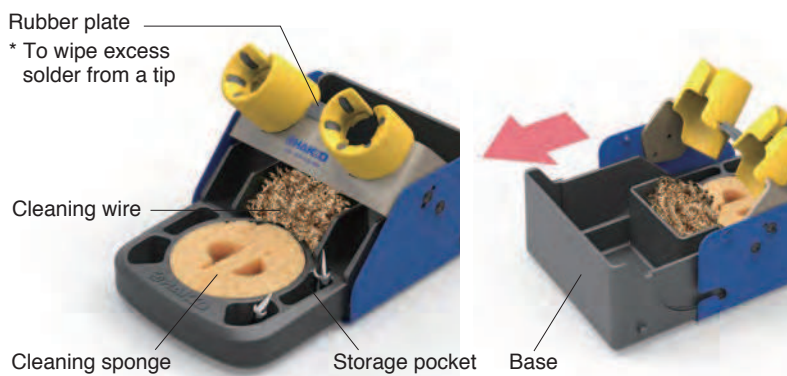
Four buttons were symmetrically placed at the both sides on the front panel. The two buttons on each side allow simple and intuitive operation.

A color band can be attached to the handle, and this makes it possible to see at a glance which side it is connected to. (2 pieces of color band are included as the standard accessories.)



● Rich functions of iron holder

- Convenient pockets to stock soldering tips
- Three different ways for tip cleaning with provided cleaning tools
- Simple and easy cleaning of iron holder inside by removing holder base



Accessories for FX-888D & FX-889

HAJKO FX-8801 SOLDERING IRON **ESD SAFE**

Soldering Iron M type

Tip included



HAJKO FX-8802 SOLDERING IRON **ESD SAFE**

N₂ Soldering Iron

Tip included



HAJKO FX-8803 SOLDERING GUN **ESD SAFE**

Soldering Gun

Tip included



HAJKO FX-8804 SMD HOT TWEEZER **ESD SAFE**

SMD Hot Tweezers

Tip included



HAJKO FX-8805 SOLDERING IRON **ESD SAFE** New

Soldering Iron L type

Tip included



Specifications

Model No.	FX-8801
Power consumption	65 W (26 V)
Temperature range	50 to 480°C
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Ceramic heater
Standard tip	Shape-B (No.T18-B)
Cord length	1.2 m
Total length*	217 mm (with B tip)
Weight*	46 g (with B tip)

* Without cord

Model No.	FX-8802
Power consumption	65 W (26 V)
Temperature range	50 to 480°C
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Ceramic heater
Standard tip	Shape-B (No.T18-B)
Cord length	1.2 m
Total length**	190 mm (with B tip)
Weight**	59 g (with B tip and nozzle assembly A)

* Use this N₂ soldering iron below 450°C.

** Without cord and tube

Model No.	FX-8803
Power consumption	65 W (26 V)
Temperature range	50 to 480°C
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Ceramic heater
Standard tip	Shape-3C pre-tinned surface 45° (No.T18-CF3)
Standard guide nozzle	ø1.0 mm
Usable solder diameter	0.6, 0.8, 1.0, 1.2, 1.6 mm
Cord length	1.1 m
Dimensions	170 (W) × 180 (H) × 23 (D) mm
Weight*	207 g

* Without cord

Model No.	FX-8804
Power consumption	65 W (26 V)
Temperature range	200 to 400°C
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Ceramic heater
Standard tip	Shape-2L (No. A1378) 2 pcs/set
Cord length	1.2 m
Total length*	186 mm
Weight*	93 g

* Without cord

* The recommended (process) temperature is from 200°C to 400°C while setting temperature range of FX-888D is from 50°C to 480°C.

Model No.	FX-8805
Power consumption	65 W (26 V)
Temperature range	50 to 480°C
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Ceramic heater
Standard tip	Shape-B (No.T19-B)
Cord length	1.2 m
Total length*	222 mm (with B tip)
Weight*	52 g (with B tip)

* Without cord

Accessories for FX-888D & FX-889

Packing List

FX-8801	Handpiece, Instruction Manual
FX-8802	Handpiece, Shield plate, Instruction manual
FX-8803	Handpiece, Instruction manual
FX-8804	Handpiece, Caution label, Heat resistant pad, Instruction manual
FX-8805	Handpiece, Instruction Manual

NOTE: The soldering iron cannot be used as a standalone device.

Option

FX-8803

Part No.	Name	Specifications
C1437	Iron holder (with cleaning sponge)	-

FX-8804

Part No.	Name	Specifications
FH800-04BY	Iron holder (with cleaning sponge)	Blue & yellow

FX-8801 & FX-8805

Part No.	Name	Specifications
B5122	Tip enclosure	With nut, required when converting from FX-8801 to FX-8805
B3730	Nut and tip enclosure	Required when converting from FX-8805 to FX-8801

Replacement Tips for FX-8801 and FX-8803

Unit: mm

<p>Applicable for FX-8803</p> <p>T18-B Shape-B</p>	<p>Applicable for FX-8803</p> <p>T18-SB Shape-SB</p>	<p>T18-BR02 Shape-0.2BR</p>	<p>T18-BL Shape-BL</p>	<p>T18-C05 Shape-0.5C</p>
<p>Applicable for FX-8803</p> <p>T18-C08 Shape-0.8C</p>	<p>T18-C1 Shape-1C T18-CF1*</p>	<p>T18-CF15* Shape-1.5C</p>	<p>Applicable for FX-8803</p> <p>T18-C2 Shape-2C T18-CF2*</p>	<p>Applicable for FX-8803</p> <p>T18-CSF25* Shape-2.5CS</p>
<p>Applicable for FX-8803</p> <p>T18-C3 Shape-3C T18-CF3*</p>	<p>Applicable for FX-8803</p> <p>T18-C4 Shape-4C T18-CF4*</p>	<p>T18-C5 Shape-5C</p>	<p>Applicable for FX-8803</p> <p>T18-K Shape-K</p>	<p>T18-D08 Shape-0.8D</p>
<p>T18-D12 Shape-1.2D</p>	<p>Applicable for FX-8803</p> <p>T18-D16 Shape-1.6D</p>	<p>Applicable for FX-8803</p> <p>T18-D24 Shape-2.4D</p>	<p>Applicable for FX-8803</p> <p>T18-D32 Shape-3.2D</p>	<p>T18-DL12 Shape-1.2DL</p>
<p>T18-DL2 Shape-2DL</p>	<p>T18-DL32 Shape-3.2DL</p>	<p>T18-S3 Shape-S3</p>	<p>Applicable for FX-8803</p> <p>T18-S4 Shape-S4</p>	<p>T18-S6 Shape-S6</p>
<p>T18-S9 Shape-S9</p>	<p>T18-I Shape-I</p>			

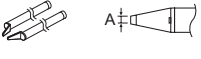
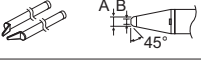
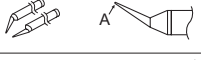

* These tips are tinned on the soldering surface only.

Replacement Tips and Nozzles for FX-8802

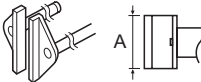
Please see the replacement tips on P.34

Replacement Tips for FX-8804

For Chip Component

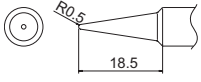
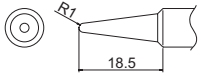
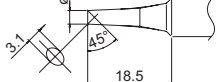
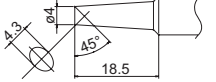
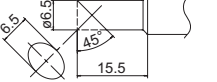
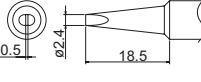

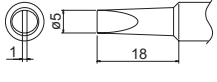
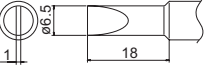
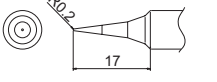
Part No.	Name	Size of A (B)	Tip Shape
A1577	Tip/CHIP 0.5L	0.5 mm	
A1379	Tip/CHIP 1L	1 mm	
A1378	Tip/CHIP 2L	2 mm	
A1388	Tip/CHIP 0.5C	1.5 (0.5) mm	
A1389	Tip/CHIP 0.5I	R0.25 mm	
A1576	Tip/CHIP 2.6C	2.6 mm	

For SOP Component

Part No.	Name	Size of A	Tip Shape
A1390	Tip/SOP 4L	4 mm	
A1391	Tip/SOP 6L	6 mm	
A1380	Tip/SOP 8L	8 mm	
A1381	Tip/SOP 10L	10 mm	
A1382	Tip/SOP 13L	13 mm	
A1392	Tip/SOP 15L	15 mm	
A1383	Tip/SOP 18L	18 mm	
A1384	Tip/SOP 20L	20 mm	
A1385	Tip/SOP 25L	25 mm	

Replacement Tips for FX-8805

Unit: mm

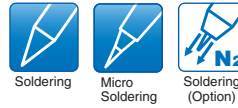
T19-B Shape-B 	T19-B2 Shape-2B 	T19-C3 Shape-3C 	T19-C4 Shape-4C 	T19-C65 Shape-6.5C 
T19-D24 Shape-2.4D 	T19-D32 Shape-3.2D 	T19-D5 Shape-5D 	T19-D65 Shape-6.5D 	T19-I Shape-I 

High Performance Soldering Station

HAJKO FX-951 SOLDERING STATION ESD SAFE

High Performance Soldering Station **Digital**

Tip not included



- Compact high-power thermally-controlled soldering iron
- Informs you of errors by a warning buzzer or display

HAJKO FM-2032 SOLDERING IRON ESD SAFE



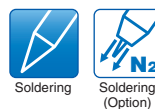
Micro soldering Iron is available optionally.

For further details, see the micro soldering iron (P.25).

HAJKO FX-950 SOLDERING STATION ESD SAFE

High Performance Soldering Station **Analog**

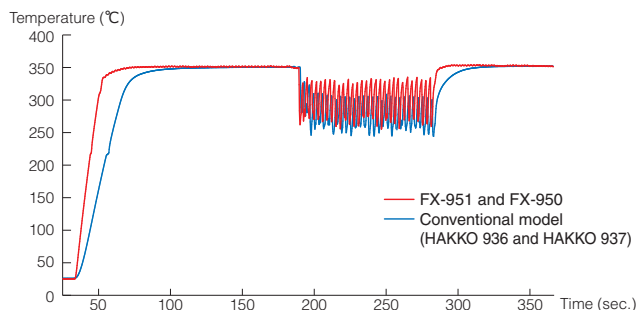
Tip not included



- Analog type high-power soldering iron
- “Lock key” can lock the temperature setting.
- Informs you of various errors by a lamp

Features

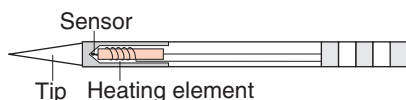
Thermal recovery graph (Comparison of HAKKO products)



Test criteria

Measurement method	A thermocouple is mounted on the tip and the tip temperature is measured when soldering $\phi 1.6 \text{ mm} \times 5 \text{ mm}$ solder to paper phenol copper board once every 3 seconds.
Board	Paper phenol copper board.
Temperature setting	350°C
Solder	Lead-free solder (Sn/Ag/Cu), diameter: 1.6 mm x 5 mm

Composite tip



The composite tip with an integrated heating element and sensor offers superior thermal responsivity and thermal recovery.

Variety of tips



Connectable with N₂ soldering iron

To improve solder wettability and spreadability



For further details, see N₂ soldering system (P.32 & P.33).

Packing List

FX-951	Station, Handpiece (FM-2028), Control card, Power cord, Connecting cable, Heat resistant pad, Iron holder, Instruction manual
FX-950	Station, Handpiece (FM-2028), Lock key, Heat resistant pad, Iron holder, Instruction manual

Specifications

Model No.	FX-951	FX-950
Power consumption	75 W	
Temperature range	200 to 450°C	
Temperature stability	±5°C at idle temperature	

Station

Output voltage	AC 24 V
Dimensions	FX-951: 80 (W) x 130 (H) x 131 (D) mm FX-950: 80 (W) x 118 (H) x 138 (D) mm
Weight	1.2 kg

Soldering Iron

Power consumption	70 W (24 V)
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length*	188 mm (with 2.4D tip)
Weight*	30 g (with 2.4D tip)

* Without cord

Option

Part No.	Name	Specifications
FH200-01	Iron holder	With power-save function and cleaning wire
FH200-02	Iron holder	With power-save function and cleaning sponge

* In order to use the power-save function with FX-950, FH200-01 or FH200-02 iron holder is required.

K	T15-K Shape-K 	T15-KF Shape-KF 	T15-KL Shape-KL 	T15-KU Shape-KU 	
	T15-R20 Shape-2.0R 	T15-R23 Shape-2.3R 	T15-R27 Shape-2.7R 	T15-R34 Shape-3.4R 	T15-R48 Shape-4.8R
SB	T15-SB02 Shape-0.2SB 	T15-SB03 Shape-0.3SB 	T15-SB05 Shape-0.5SB 	T15-SB08 Shape-0.8SB 	T15-SBS04 Shape-0.4SBS
	T15-SBS07 Shape-0.7SBS 				
TUNNEL	T15-1001** Tunnel 5.1 x 4.6 	T15-1002** Tunnel 5.1 x 10.4 	T15-1003** Tunnel 9.5 x 18.3 	T15-1004** Tunnel 9.5 x 15.8 	T15-1005** Tunnel 9.5 x 13.2
	T15-1006** Tunnel 6.9 x 11.4 	T15-1007** Tunnel 7.9 x 18.8 	T15-1008** Tunnel 19.5 x 10.2 	T15-1009** Tunnel 13.4 x 20.5 	T15-1010** Tunnel 19.5 x 12
	T15-1201** Quad 13.6 x 8.5 	T15-1202** Quad 10.3 x 10.3 	T15-1203** Quad 12.8 x 12.8 	T15-1204** Quad 17.9 x 17.9 	T15-1205** Quad 23.4 x 17.3
	T15-1206** Quad 22.5 x 16.5 	T15-1207** Quad 15.5 x 15.5 	T15-1208** Quad 15.8 x 15.8 	T15-1209** Quad 8.4 x 8.4 	T15-1210** Quad 15.4 x 12.8
	T15-1401** Spatula 10.4 	T15-1402** Spatula 15.7 	T15-1403** Spatula 21.2 	T15-1406** Spatula 40 	
SPECIAL APPLICATIONS TYPE	T15-1603** Shape-Long reach chisel 	T15-1605** Shape-Long reach bent chisel 			

* These tips are tinned on the soldering surface only.

** The iron tips marked with double asterisk (**) have a temperature accuracy of 25°C. Others have a temperature accuracy of 15°C.

Heavy Duty Soldering Iron

HAKO FX-838 SOLDERING STATION ESD SAFE

Heavy Duty Soldering Iron **Digital**

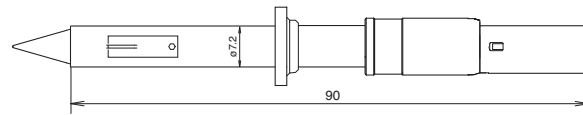
Tip not included



- High powered 150 W soldering iron
- Best suited for soldering of power-supply boards, heat sinks, and shield cases
- Applicable also to the soldering of multilayer boards with micro components

Optional Tips for FX-8301

Unit: mm

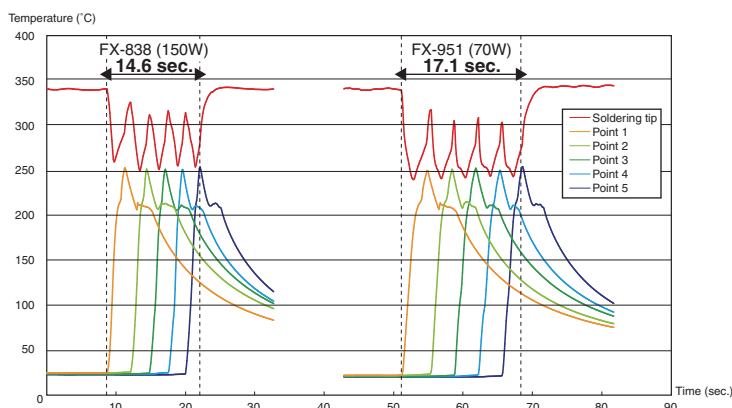


T20-B2 Shape-0.5B 	T20-BC2 Shape-2BC T20-BCF2* 	T20-BC3 Shape-3BC T20-BCF3* 	T20-BC4 Shape-4BC T20-BCF4* 	T20-BCM2 Shape-2BC Bevel with indent
T20-BCM3 Shape-3BC Bevel with indent 	T20-BL Shape-BL 	T20-BL2 Shape-2BL 	T20-BL3 Shape-3BL 	T20-C5 Shape-5C
T20-C6 Shape-6C 	T20-D16 Shape-1.6D 	T20-D24 Shape-2.4D 	T20-D32 Shape-3.2D 	T20-D6 Shape-6D
T20-J02 Shape-0.2J 	T20-K Shape-K 	T20-KU Shape-KU 	T20-1610 	T20-1611

* These tips are tinned on the soldering surface only.

Features

Graph of a comparison of the performance of FX-838 and a conventional station

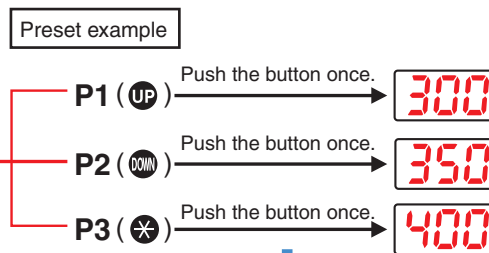


Test criteria

Measurement method	Thermocouples are mounted on the tip and the soldered portion on the board, and the time until the soldered portion reaches 250°C is measured for 5 points.
Board	Bakelite board
Component used	Terminal
Tip shape	Shape-1.6D
Temperature setting	340°C
Solder	Lead-free solder (Sn/Ag/Cu), diameter: 0.5 mm

Temperature preset mode

The temperature preset mode allows you to input three frequently-used temperatures in advance and recall them with one push of a button.



One push of a button can quickly recall each setting.

Connectable with N₂ soldering iron

To improve solder wettability and spreadability

HAKO FX-8302 ESD SAFE SOLDERING IRON

N₂ Soldering Iron

Tip not included



For further details, see the N₂ soldering system (P.32 & P.33).

Packing List

FX-838	Station, Handpiece (FX-8301), Control card, Power cord, Heat resistant pad, Connecting cable, Iron holder, Instruction manual
FX-8302	Handpiece, Instruction manual

Specifications

Model No.	FX-838
Power consumption	158 W
Temperature range	200 to 500°C
Temperature stability	±5°C at idle temperature

Station

Output voltage	AC 27 V
Dimensions	110 (W) × 110 (H) × 205 (D) mm
Weight	3.2 kg

Soldering Iron

Power consumption	150 W (27 V)
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Ceramic heater
Cord length	1.2 m
Total length*	175 mm (with 2.4D tip)
Weight*	31 g (with 2.4D tip)

* Without cord

Model No.	FX-8302
Power consumption	150 W (27 V)
Temperature range	200 to 500°C
Tip to ground resistance	<2 Ω
Tip to ground potential	<2 mV
Heating element	Ceramic heater
Cord length	1.2 m
Total length*	195 mm (with 2.4D tip)
Weight*	41 g (with 2.4D tip and nozzle assembly D)

* Without cord and tube