

The standard model for lead-free soldering

**HAKKO FX-951** ESD SAFE  
SOLDERING STATION

The standard model for lead-free soldering upgraded



**Optional Tips**

Unit : mm

T12-B SHAPE-B	T12-B2 SHAPE-0.5B	T12-B3 SHAPE-0.7B	T12-B4 SHAPE-0.4B	T12-BL SHAPE-BL	T12-BC1 SHAPE-1BC T12-BCF1 *
T12-BC2 SHAPE-2BC T12-BCF2 *	T12-BC3 SHAPE-3BC T12-BCF3 *	T12-C1 SHAPE-1C	T12-C4 SHAPE-4C T12-CF4 *	T12-D08 SHAPE-0.8D	T12-D12 SHAPE-1.2D
T12-D16 SHAPE-1.6D	T12-D24 SHAPE-2.4D	T12-D4 SHAPE-4D	T12-D52 SHAPE-5.2D	T12-DL08 SHAPE-0.8DL	T12-DL12 SHAPE-1.2DL
T12-DL32 SHAPE-3.2DL	T12-DL52 SHAPE-5.2DL	T12-I1 SHAPE-I	T12-IL SHAPE-IL	T12-ILS SHAPE-ILS	T12-J02 SHAPE-0.2J
T12-JL02 SHAPE-0.2JL	T12-JS02 SHAPE-0.2JS	T12-K SHAPE-K	T12-KF SHAPE-KF	T12-KL SHAPE-KL	T12-KR SHAPE-KR
T12-KU SHAPE-KU	T12-1201 QUAD 13.6 x 8.5	T12-1202 QUAD 10.3 x 10.3	T12-1203 QUAD 12.8 x 12.8	T12-1204 QUAD 17.9 x 17.9	T12-1205 QUAD 23.4 x 17.3
T12-1206 QUAD 22.5 x 16.5	T12-1207 QUAD 15.5 x 15.5	T12-1208 QUAD 15.8 x 15.8	T12-1209 QUAD 8.4 x 8.4	T12-1001 TUNNEL 5.1 x 4.6	T12-1002 TUNNEL 5.1 x 10.4
T12-1003 TUNNEL 9.5 x 18.3	T12-1004 TUNNEL 9.5 x 15.8	T12-1005 TUNNEL 9.5 x 13.2	T12-1006 TUNNEL 6.9 x 11.4	T12-1007 TUNNEL 7.9 x 18.8	T12-1008 TUNNEL 19.5 x 10.2
T12-1009 TUNNEL 13.4 x 20.5	T12-1010 TUNNEL 19.5 x 12	T12-1401 SPATULA 10.4	T12-1402 SPATULA 15.7	T12-1403 SPATULA 21.2	T12-1404 SPATULA 25
T12-1405 SPATULA 32	T12-1406 SPATULA 40	T12-BZ SHAPE-B(Z)	T12-B2Z SHAPE-0.5B(Z)	T12-BC1Z SHAPE-1BC(Z) T12-BCF1Z *	T12-BC2Z SHAPE-2BC(Z) T12-BCF2Z *
T12-BCM2 SHAPE-2BC Bevel with indent **	T12-BC3Z SHAPE-3BC(Z) T12-BCF3Z *	T12-BCM3 SHAPE-3BC Bevel with indent **	T12-C4Z SHAPE-4C(Z) T12-CF4Z *	T12-D12Z SHAPE-1.2D(Z)	T12-D16Z SHAPE-1.6D(Z)
T12-D24Z SHAPE-2.4D(Z)	T12-D4Z SHAPE-4D(Z)	T12-KFZ SHAPE-KF(Z)	T12-KRZ SHAPE-KR(Z)	T12-WB2 SHAPE-0.5WB	T12-WD08 SHAPE-0.8WD
T12-WD12 SHAPE-1.2WD	T12-WD16 SHAPE-1.6WD	T12-WD52 SHAPE-5.2WD	T12-W1 SHAPE-W1		

SHAPE B

SHAPE J

SHAPE K

SMD TYPE(SPATULA)

SHAPE BC

SHAPE C

SHAPE D

SHAPE I

SMD TYPE(QUAD)

SPECIAL APPLICATIONS TYPE

SHAPE E

SHAPE F

SHAPE G

SHAPE H

SHAPE L

SHAPE M

SHAPE N

SHAPE O

SHAPE P

SHAPE Q

SHAPE R

SHAPE S

SHAPE T

SHAPE U

SHAPE V

SHAPE W

SHAPE X

SHAPE Y

SHAPE Z

SMD TYPE(TUNNEL)

HEAVY DUTY TYPE

\* Tinned on the soldering surface only. \*\* The part numbers T12-BCM2 and T12-BCM3 are not available for sale or use in the U.S.A.

Due to continuing product improvement efforts, specifications and external appearance are subject to change without notice.  
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**HAKKO**

# HAKKO's advanced lead-free soldering model added safe function and upgrading performance.



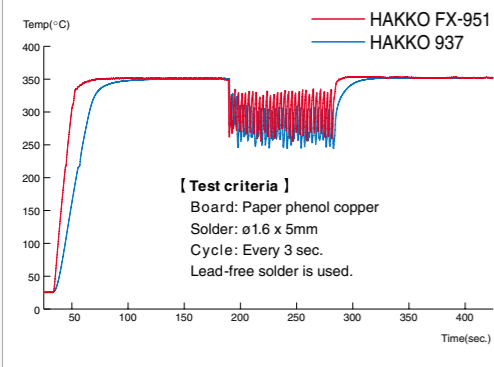
## Basic functions

### Excellent thermal control

#### Shows great thermal recovery and thermal accuracy

The composite tip combining heating element and sensor allows great thermal recovery and thermal accuracy.

#### Thermal recovery graph



### User-friendly design

#### Space-saving vertical design allows more space on the work bench.

The neat and compact design conforms to the work space more easily. Dimensions: 80(W) x 130 (H) x 131 (D) mm

#### User-friendly iron holder

The angle can be adjusted to suit the individual working style.

The unit can be used with HAKKO 599B instead of a cleaning sponge.

**HAKKO 599B**  
 No water is required.

#### Thermal control function

- The temperature setting can be locked with the control card.
- An alarm can be set to inform reaching the preset lower limit.
- The digital display makes it easier to offset the temperature.

#### Safe design

- ESD safe by design.
- Various kinds of information by a buzzer or display.

### Standard 84 types of tip variations

- The standard 84 types of tips are available to suit various kinds of soldering work.

## New functions

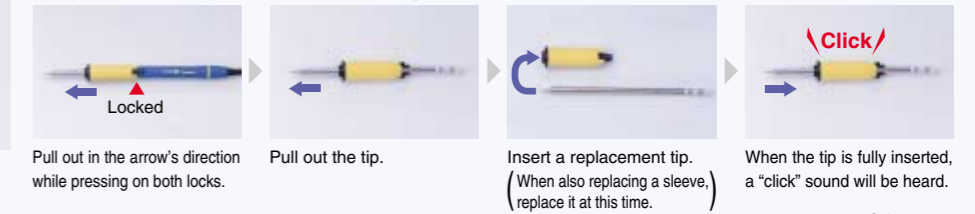
### Point 1



### Lock-type sleeve

The lock-type sleeve enables it to be firmly secured. When replacing a tip, a clicking sound shows that it is inserted fully.

#### < Replacement of tip and sleeve assembly >



### Sleeve assembly in 4-color

Yellow, blue, orange and green color sleeve assemblies are available. Workability increases if sleeves are changed according to the tip shape and job application.

- Sleeve assembly (Lock-type/antibacterial)
- Yellow : No. B3216
- Blue : No. B3218
- Orange : No. B3217
- Green : No. B3219



### Point 2

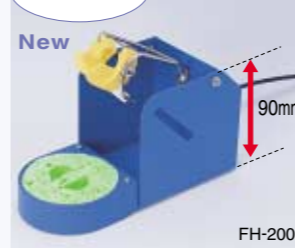


### Power-save function performance increased

The power-save function operates while being linked to the iron holder. After the iron is inserted into the iron holder, the sleep function\*1 activates for an arbitrarily-set time (0 to 29 min.) and the tip temperature will decrease to 200°C. After 30 minutes have elapsed, the automatic power-off function\*2 activates.

\*1 To use sleep function, it is necessary to set the desired time arbitrarily in advance.  
 \*2 In order to use the automatic power shut-off function, it is necessary to set it in advance.

### Point 3



### Solder-splashing prevention

A higher side plate of the iron holder prevents solder from splashing when placing the tip.

#### [ For customers using the former FX-951 unit ]

- In the former FX-951 station, FM-2028/lock-type sleeve can be used. (A new sleeve assembly cannot be used interchangeably.)
- The former FX-951 station cannot be connected to the new iron holder/FH-200.
- A new sleeve assembly is available for the FM-2028 soldering iron only.

## Specifications

### ● HAKKO FX-951 soldering station

Power consumption	75W
Temperature range	200 - 450°C
Temperature stability	±5°C

### ● Station

Output	24V
Dimensions	80(W) x 130(H) x 131(D)mm
Weight	1.2kg

### ● HAKKO FM-2028 soldering iron

Power consumption	70W
Tip to ground resistance	< 2
Tip to ground potential	< 2mV
Length of cord	1.2m
Total Length (w/o cord)	188mm with 2.4D tip
Weight (w/o cord)	30g with 2.4D tip

**NOTE :** The temperature were measured using the HAKKO 191 or FG-100 thermometer.  
 This product is protected against electrostatic discharge.

## Packing List

Station	1
Iron (FM-2028)	1
Power cord	1
Iron holder (FH-200)	1
Control card	1
Connecting cable	1
Heat resistant pad	1

\*Tip is an optional part.

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**Optional Tips**

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				SHAPE B	SHAPE BC	SHAPE C	SHAPE D	SHAPE I
				SHAPE J	SHAPE K	SMD TYPE(QUAD)	SMD TYPE(TUNNEL)	
				SMD TYPE(SPATULA)	SPECIAL APPLICATIONS TYPE	HEAVY DUTY TYPE		

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