

Compatibility Table: Station, Handpiece, Holder, Tip and Nozzle



1-port station



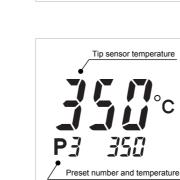
It enables soldering in a shorter time and improves work efficiency.

Cycle time reduced

by approx. 40%

Compact Design

Space saving design helps securing operation space easily.



High Visible Display

It shows information such as set temperature, tip's sensor temperature, and preset setting, clearly and widely. The viewing angle is wide, and the high-brightness display provides high



Intuitive Operation

All settings can be easily adjusted with just four buttons.



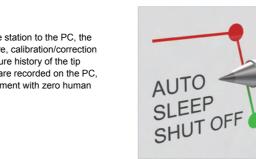
Infrared Communication

Automatic calibration and correction can be completed by transmitting the measurement data from the thermometer (FG-100B/FG-101B) to the main unit, via infrared.



350.°

Software By connecting the station to the PC, the tip set temperature, calibration/correction and the temperature history of the tip during operation are recorded on the PC, enabling management with zero human



Auto Sleep function **Auto Shutoff function**

The built-in sensor of the tip inside makes it possible to use auto-sleep and auto-shutoff functions without connecting the station and the iron holder, and it helps to lay out the station and iron holder freely in the working space.





Station, Handpiece (FX-9701), Iron

sponge and wire), USB cable, Power

holder (FH-215, with cleaning

cord, Instruction manual

Station Only

The dedicated software is available for download on HAKKO website.

Station, USB cable, Power cord, Instruction manual

Tip not included

Compact and space-saving design with high-powered 100 W output — Idial for a wide-range of soldering workpieces.

Specifications Model No.

Station

Weight

Output voltage

Dimensions

Handpiece

Power consumption

Tip to ground resistance

Tip to ground potential

Total length (w/o cord)

Heating element

Weight (w/o cord)

Cord length

Power consumption

Temperature range

Temperature stability

Applicable Handpiece

FX-971



Soldering iron FX-9701



N₂ Soldering iron FX-9702



Micro soldering iron FX-9703



FX-971

100 W

50 to 450°C

±3°C (At idle temperature)

AC 24 V

When tilted: 93 (W) x 126 (H) x 133 (D) mm

When not tilted: 93 (W) x 126 (H) x 123 (D) mm

95 W (24 V)

< 2 Ω

< 2 mV

Composite heater

1.2 m 206 mm (with T39-D24 tip)

31 g (with T39-D24 tip)

Micro N₂ soldering iron FX-9704

2-port multi station

Compact and space-saving design with high-powered 200 W output - Compatible with eight handpieces to enhance work efficiency across vaious applications







FX-972

Station, Handpiece (FX-9701), Iron holder (FH-215, with cleaning sponge and wire), Color band [qty 2], USB cable, Power cord, Instruction manual

The dedicated software is available for download on HAKKO website.

Specifications

Model No.	FX-972
Power consumption	200 W
Temperature range	50 to 450°C With heavy-duty soldering iron connected: 50 to 500°C
Temperature stability	±3°C (At idle temperature) With heavy-duty soldering iron connected: ±5°C (At idle temperature)

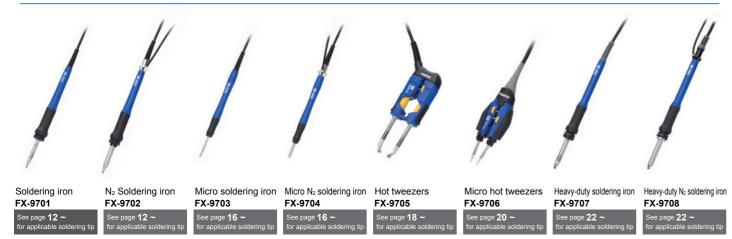
Station

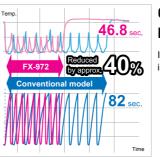
Output voltage	AC 24 V
Dimensions	When tilted: 126 (W) x 151 (H) x 149 (D) mm
	When not tilted: 126 (W) x 151 (H) x 136 (D) mm
Weight	2.8 kg

Handpiece

Power consumption	95 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 (w/o cord)	206 mm (with T39-D24 tip)
Weight (w/o cord)	31 g (with T39-D24 tip)

Applicable Handpiece





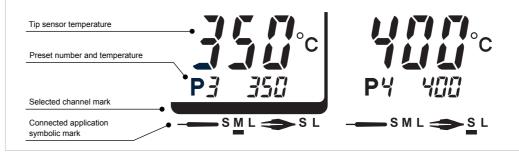
Cycle time reduced by approx. 40%

It enables soldering in a shorter time and improves work efficiency.



Compact Design

Space saving design helps securing operation space easily.



High Visible Display

It shows information such as set temperature, tip's sensor temperature, and preset setting, clearly and widely. The viewing angle is wide, and the high-brightness display provides high visibility.



Priority Channel

A built-in sensor detects the handpiece in use and automatically switches channels. The unused handpiece stands by at the set temperature. And the operation delay does not occur after channel switching achieving maximum power with minimum size of station.



Adjustable display angle for better visibility and operation

Tilt mechanism for easy viewing and operation of the screen display, depending on the installation location, e.g., on or under the workbench or on



Infrared Communication

Automatic calibration and correction can be completed by transmitting the measurement data from the thermometer (FG-100B/FG-101B) to the main unit, via infrared.



Software

By connecting the station to the PC, the tip set temperature, calibration/correction and the temperature history of the tip during operation are recorded on the PC, enabling management with zero human



Auto Sleep function Auto Shutoff function

The built-in sensor of the tip inside makes it possible to use auto-sleep and auto-shutoff functions without connecting the station and the iron holder, and it helps to lay out the station and iron holder freely in the working space.

FX-973

3-port rework station

All nine types of handpieces can be used on any port, and a desoldering unit is included as standard. Flexible configuration options enable optimal combinations to meet the demands of various applications and workpieces.





Tip not included

FX-973

Station, Handpiece (FX-9701), Iron holder (FH-215, with cleaning sponge and wire), Handpiece (FR-4103), Iron holder (FH-410, with cleaning wire), Tool box (Cleaning pin for 1.0 mm dia., Cleaning pin for heating element, Cleaning drill for 1.0 mm dia., Nozzle wrench, Filter [qty2], Ceramic paper filter [qty 4]), Color band [green, qty 2], Color band [orange, qty 2], USB cable, Power cord, Instruction manual

The dedicated software is available for download on HAKKO website.

Specifications

Model No.	FX-973
Power consumption	400 W
Temperature range	50 to 450°C
	With heavy-duty soldering iron connected: 50 to 500°C
	With desoldering tool connected: 330 to 450°C
Temperature stability	±3°C (At idle temperature)
	With heavy-duty soldering iron and desoldering tool connected: ±5°C (At idle temperature)

Station

Output voltage	AC 24 V	
Vacuum generator	Vacuum pump, double cylinder type	
Vacuum pressure (max.)	80 kPa (600 mmHg)	
Suction flow	15 L/min.	
Dimennsions	158 (W) x 135 (H) x 254 (D)	
Weight	5.3 kg	

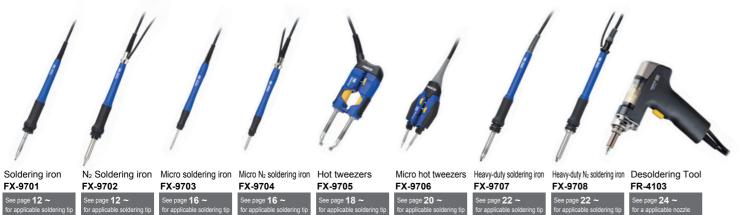
Handpiece (Soldering iron)

Power consumption	95 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 (w/o cord)	206 mm (with T39-D24 tip)
Weight (w/o cord)	31 g (with T39-D24 tip)

Handpiece (Desoldering tool)

Power consumption	140 W (24 V)
Nozzle to ground resistance	< 2 Ω
Nozzle to ground potential	< 2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length (w/o cord)	168 mm (with N61-05 nozzle)
Weight (w/o cord)	190 g (with N61-05 nozzle)

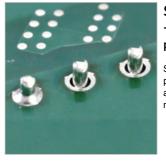
Applicable Handpiece



FX-973 Reduced By approx 40% Conventional model 82 sec.

Cycle time reduced by approx. 40%

It enables soldering in a shorter time and improves work efficiency.



Secure Desoldering - High suction power with precise valve control

Suction activates just 0.2 seconds after peak vacuum is reached, enabling rapid and powerful extraction while minimizing residual solder.



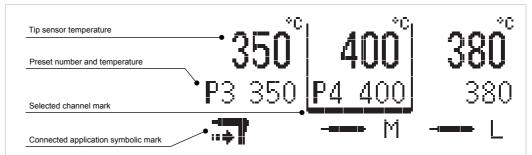
Clogging Indicator

LED indicator shows suction status enabling to know the timing of cleaning, replacement of filter and maintenance



Infrared Communication

Automatic calibration and correction can be completed by transmitting the measurement data from the thermometer (FG-100B/FG-101B) to the main unit, via infrared.



High Visible Display

It shows information such as set temperature, tip's sensor temperature, and preset setting, clearly and widely. The viewing angle is wide, and the high-brightness display provides high visibility.



Priority Channel

A built-in sensor detects the handpiece in use and automatically switches channels. The unused handpiece stands by at the set temperature. And the operation delay does not occur after channel switching achieving maximum power with minimum size of station.



Software

By connecting the station to the PC, the tip set temperature, calibration/correction and the temperature history of the tip during operation are recorded on the PC, enabling management with zero human



Auto Sleep function Auto Shutoff function

The built-in sensor of the tip inside makes it possible to use auto-sleep and auto-shutoff functions without connecting the station and the iron holder, and it helps to lay out the station and iron holder freely in the working space.

FR-850

SMD rework station - Micro hot air

A wide temperature range and fine airflow control make it ideal for precise rework on high thermal mass PWBs and delicate miniature components. Enables targeted rework of densely packed SMDs without affecting surrounding components.







FR-850

Station, Handpiece (FR-8501), Iron holder (FH-225), USB cable, Power cord, Instruction manual

The dedicated software is available for download on HAKKO website.

Specifications

Model No.	FR-850
Power consumption	112 W
Temperature range	50 to 600°C

Station

Power consumption	7 W
Air flow	1.5 to 5 L/min.
Dimensions	98 (W) x 140 (H) x 165 (D) mm
Weight	1.8 kg

Handpiece

Power consumption	105 W (24 V)
Nozzle to ground resistance	< 2 Ω
Nozzle to ground potential	< 2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length (w/o cord)	227 mm (with NA01-C20 nozzle)
Weight (w/o cord)	70 g (with NA01-C20 nozzle)

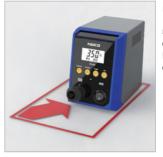
^{*} The airflow values are approximate. The airflow range may vary depending on the nozzle attached.





Highly Effective for Fine Components on High Thermal Mass PCBs such as Multilayer Boards

Adjustable airflow settings allow for precise control tailored to each component. Enhanced heater performance ensures safe and clean removal of microchips without scattering, even with minimal airflow.



Compact Design

55% smaller footprint compared to conventional models. Ideal for space-saving in work environments.



Hot Air ON/OFF Control ①

Control hot air ON/OFF with the iron unit button.

Real-time operating status is clearly indicated via top-mounted LED.



Hot Air ON/OFF Control 2

Wide top-mounted button is also for hot air ON/OFF control.

Real-time operating status is clearly indicated via top-mounted LED.



Infrared Communication

Automatic calibration and correction can be completed by transmitting the measurement data from the thermometer (FG-100B/FG-101B) to the main unit, via infrared



Intuitive Operation

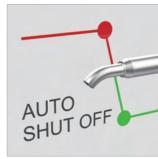
All settings can be easily adjusted with just four buttons.



Software

By connecting the station to a PC, the set temperature of the hot air, calibration/correction, and the hot air temperature history during operation can be recorded on the PC.

Enables management with zero human



Auto Shutoff function

Auto shutoff function reduces unnecessary power consumption and minimize equipment wear.

FX-9702 N₂ soldering iron

Applicable tips





Equipped with a New Composite Tip

Patent Registered

Designed to improve sensor sensitivity and efficiently transfer heat from the heater to the tip, ensuring stable tip temperature and enabling more precise and reliable soldering.



Well-balanced grip for excellent workability

The easy-to-use grip backs up the lineup of tips that can be used for all kinds of operations.

Slim cable design allows for easy handling.





FX9701-81 Handpiece (FX-9701)

FX9701-811 Handpiece (FX-9701), Iron holder (FH-215, with cleaning sponge and wire)

Specifications

Opecinications	
Model No.	FX-9701
Power consumption	95 W (24 V)
Temperature range	50 to 450°C
Tip to ground resistance	< 2 Ω
Tip to ground potential	< 2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length (w/o cord)	206 mm (with T39-D24 tip)
Weight (w/o cord)	31 g (with T39-D24 tip)



Soldering iron working with N₂ system

Most soldering tips in the T39 series can be used for both regular type iron and N₂ type iron commonly. There is no need to keep and use a different tip by a same shape.



Iron Holder

Stable die-cast body. Iron holder allows easy and safe tip replacement/removal.



FX9702-81

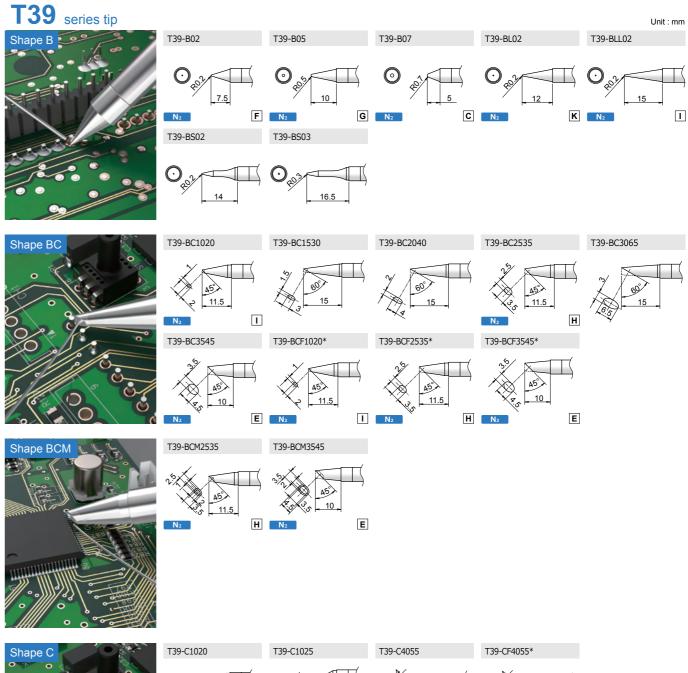
Specifications

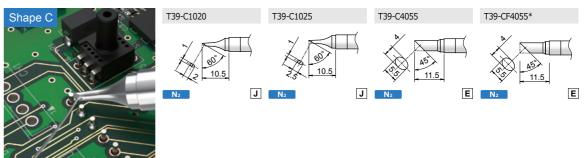
Handpiece (FX-9702), Instruction manual

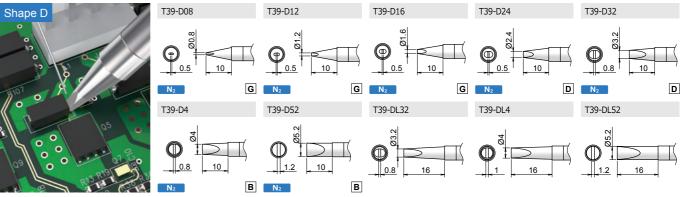
	Tip not included
FX9702-811	Conversion Kit

Handpiece (FX-9702), Iron holder (FH-215, with cleaning sponge and wire), Instruction manual

Model No.	FX-9702
Power consumption	95 W (24 V)
Temperature range	50 to 450°C
Tip to ground resistance	< 2 Ω
Tip to ground potential	< 2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length (w/o cord)	206 mm (with T39-D24 tip)
Weight (w/o cord)	49 g (with T39-D24 tip and nozzle assembly D)

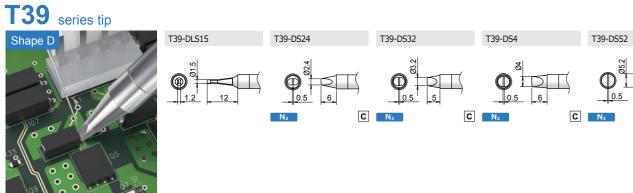


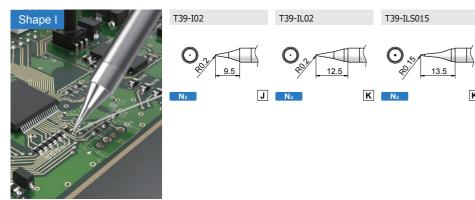


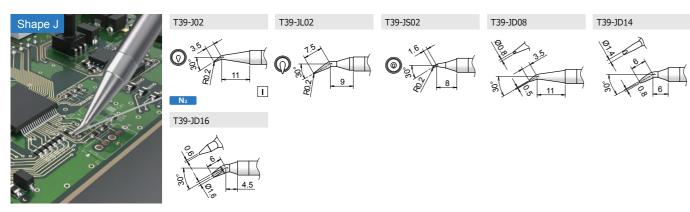


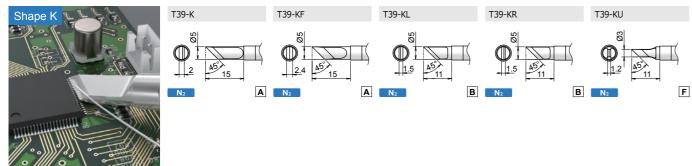
*Pre-tinned on cut surface only

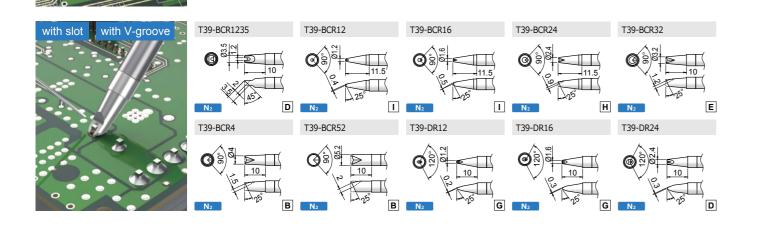
11

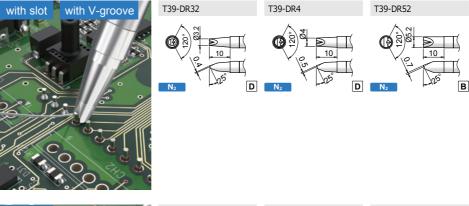




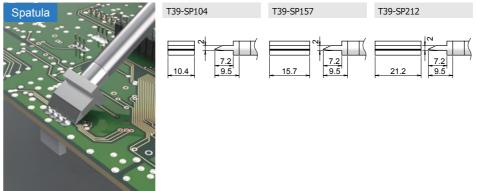




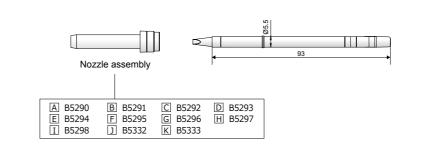




T39 series tip









FX-9704 Micro N₂ soldering iron Applicable tips







Specialized in precise soldering

The distance from the tip end to the handle is only 27mm.

Gripping the handpiece like a pencil makes it easy to approach fine components with high precision.



Well-balanced grip for excellent workability

The easy-to-use grip backs up the lineup of tips that can be used for all kinds of operations. Slim cable design allows for easy handling.



Iron Holder

by a same shape.

Stable die-cast iron holder. The soldering tip can be attached or detached safely.

Soldering iron working

Most soldering tips in the T39 series

can be used for both regular type iron

and N2 type iron commonly. There is

no need to keep and use a different tip

with N₂ system



FX9703-81

Handpiece (FX-9703), Instruction manual



FX9703-811 Conversion Kit

Handpiece (FX-9703), Iron holder (FH-215, with cleaning sponge and brush), Instruction manual

Specifications

FX-9703
70 W (24 V)
50 to 450°C
< 2 Ω
< 2 mV
Composite heater
1.2 m
174 mm (with T50-D1 tip)
15 g (with T50-D1 tip)



FX9704-81 Handpiece (FX-9704),

Tip not included

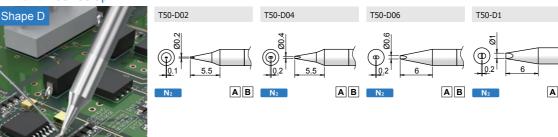
FX9704-811 Conversion Kit

Handpiece (FX-9704), Iron holder (FH-215, with cleaning sponge and brush), Instruction manual

Specifications

•	
Model No.	FX-9704
Power consumption	70 W (24 V)
Temperature range	50 to 450°C
Tip to ground resistance	< 2 Ω
Tip to ground potential	< 2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length (w/o cord)	196 mm (with T50-D1 tip)
Weight (w/o cord)	35 g (with T50-D1 tip and nozzle assembly A)

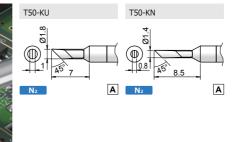
T50 series tip



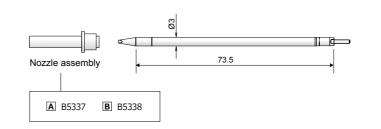






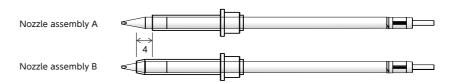


For the Micro N_2 soldering iron FX-9704, please use it with a nozzle assembly that corresponds to the tip.





☐ Image of Nozzle Assembly A and B attached to the T50-D06 tip



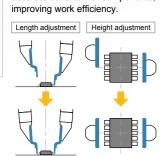
Please use nozzle assembly A when using the soldering tip in a horizontal position or when nozzle assembly B interferes with surrounding components.

15



Fine adjustment of tip height and length

After setting the tips, fine adjustment of the tip direction is possible for accurate contact with components,





Equipped with a New Composite Tip

Applicable tips

*Patent Registered

Designed to improve sensor sensitivity and efficiently transfer heat from the heater to the tip, ensuring stable tip temperature and enabling more precise and reliable soldering.



Improved Operability

Handle design that fits the hand and provides stability. With the two different ways of handling, precise contact with the component is possible.



Iron holder

Stable die-cast iron holder. The soldering tip can be detached safely. Both cleaning sponge and cleaning brush are on the iron holder.



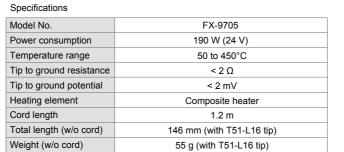
FX9705-81

Handpiece (FX-9705), Instruction manual

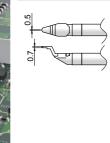


FX9705-811 Conversion Kit

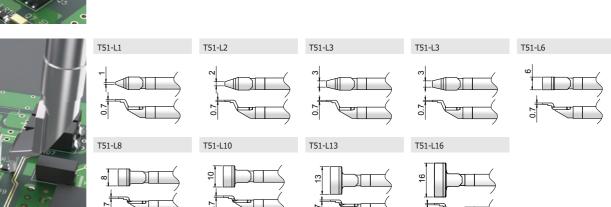
Handpiece (FX-9705), Iron holder (FH-220, with cleaning sponge and wire), Instruction manual





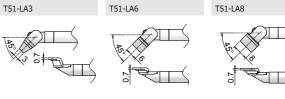






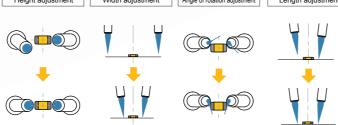
T51-LA10





Fine adjustment of tip height and length

After setting the tips, fine adjustment of the tip direction is possible for accurate contact with components, improving work efficiency.





Improved Operability

The asymmetrical design fits the handle and provides stability. The heat-resistant cover reduces operator strain, and its compact





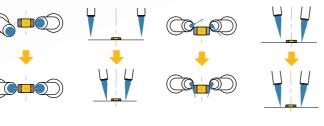
FX9706-81

Handpiece (FX-9706), Instruction manual



FX9706-811 Conversion Kit

Handpiece (FX-9706), Iron holder (FH-215, with cleaning sponge and brush), Instruction manual





Iron Holder

Stable die-cast iron holder. The soldering tip can be attached or detached safely.

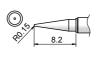
Specifications

Model No.	FX-9706
Power consumption	140 W (24 V)
Temperature range	50 to 450°C
Tip to ground resistance	< 2 Ω
Tip to ground potential	< 2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length (w/o cord)	130 mm (with T52-I015 tip)
Weight (w/o cord)	33 g (with T52-I015 tip)

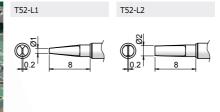


Applicable tips



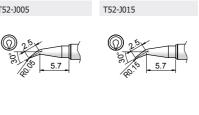






T52-I005 T52-I015







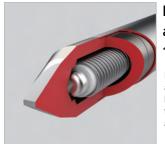


Unit: mm

FX-9708 Heavy-duty N2 soldering iron

Applicable tips

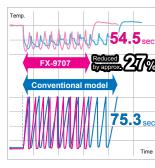




Equipped with a New Composite Tip

*Patent registered

Designed to improve sensor sensitivity and efficiently transfer heat from the heater to the tip, ensuring stable tip temperature and enabling more precise and reliable soldering.



Cycle time reduced by approx. 27%

Soldering operations can be performed in a shorter time, improving work



Iron Holder

by a same shape.

with N_2 system

Stable die-cast iron holder. The soldering tip can be attached or detached safely.

FX9708-811 Conversion Kit

Handpiece (FX-9708), Iron holder

Instruction manual

(FH-220, with cleaning sponge and wire),

Soldering iron working

Most soldering tips in the T39 series

can be used for both regular type iron

and N₂ type iron commonly. There is

no need to keep and use a different tip



FX9707-81

Handpiece (FX-9707), Instruction manual

Specifications

9
Tip not included

FX9707-811 Conversion Kit Handpiece (FX-9707), Iron holder

(FH-220, with cleaning sponge and wire), Instruction manual

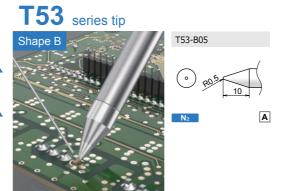
opeomodaene	
Model No.	FX-9707
Power consumption	200 W (24 V)
Temperature range	50 to 500°C
Tip to ground resistance	< 2 Ω
Tip to ground potential	< 2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length (w/o cord)	222 mm (with T53-D24 tip)
Weight (w/o cord)	41 g (with T53-D24 tip)

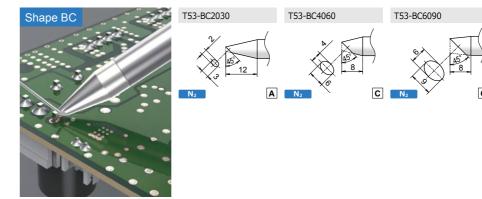


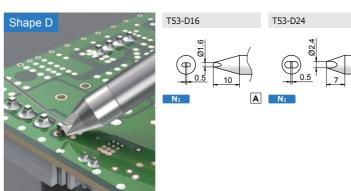
FX9708-81

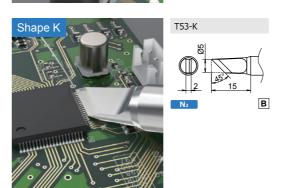
Handpiece (FX-9708), Instruction manual

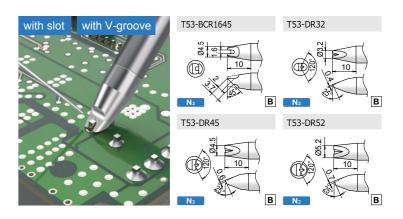
Opecinications	
Model No.	FX-9708
Power consumption	200 W (24 V)
Temperature range	50 to 500°C
Tip to ground resistance	< 2 Ω
Tip to ground potential	< 2 mV
Heating element	Composite heater
Cord length	1.2 m
Total length (w/o cord)	231 mm (with T53-D24 tip)
Weight (w/o cord)	54 g (with T53-D24 tip and nozzle assembly C)









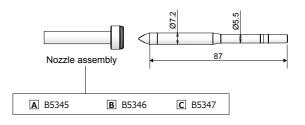


T53-D45

T53-D52

T53-D32

For FX-9708 Heavy-duty N2 soldering iron, use a tip with an applicable nozzle assembly.



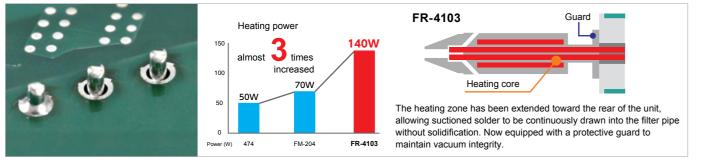


21

FR-4103 Desoldering tool

Applicable nozzles





140W High-Power Heater - Optimized for Solder Removal on Multilayer PWBs

Heating power almost 3 times increased! *1

Solder extraction on multilayer PWBs, once challenging, is now stress-free.

Improvements in the heater and the use of ACF*2 ensure that the extracted solder is reliably conveyed to the filter pipe, reducing solder clogging.

*2 ACF (Anti Clogging Function) is a feature that automatically operates the pump for a certain number of seconds after releasing the trigger.



Easy nozzle replacement

The dedicated wrench allows safe, easy and smooth nozzle replacement.



Nozzle quick changer

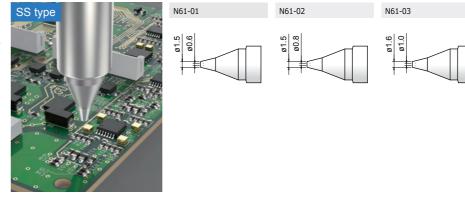
Up to three types of nozzles can be set, enabling even quicker and safer nozzle

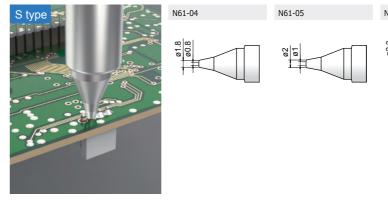


FR4103-81 Handpiece (FR-4103), Instruction manual

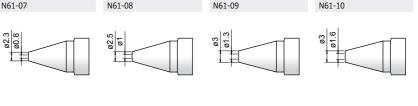
Specifications	
Model No.	FR-4103
Power consumption	140 W (24 V)
Temperature range	330 to 450°C
Nozzle to ground resistance	< 2 Ω
Nozzle to ground potential	< 2 mV
Heating element	Composite heater
Standard nozzle	1.0 mm dia. S type (No. N61-05)
Cord length	1.2 m
Total length (w/o cord)	168 mm (with N61-05 nozzle)
Weight (w/o cord)	190 g (with N61-05 nozzle)

N61 series Unit: mm

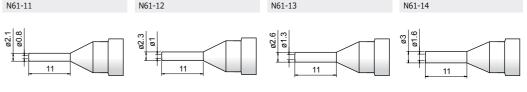




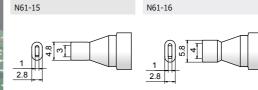












Applicable nozzles

NA01 series nozzle

NA01-C20

NA01-C30



Temperature Measurement

Six Nozzle Types

Provides straight and bent nozzles. The bent nozzle allows hot air to be

efficiently directed at components

. Cartridge-style design enables quick and tool-less nozzle replacement.

during microscope-assisted

operations.

Hot air temperature measurement is possible by installing the A1557 sensor on the stand.



Newly Designed Iron Holder

Hot Air ON/OFF Control

Control hot air ON/OFF with the iron

Real-time operating status is clearly

indicated via top-mounted LED.

unit button.

Equipped with an auto-cooling function that activates simply by placing the handpiece on the stand. One-touch nozzle attachment and removal ensures safe and easy handling. Capable of storing up to four nozzles.



Handpiece (FR-8501), Instruction manual

Specifications

FR-8501
105 W (24 V)
50 to 600°C
< 2 Ω
< 2 mV
Composite heater
1.2 m
227 mm (with NA01-C20 nozzle)
70 g (with NA01-C20 nozzle)