TENMA®

21-11424

Hot Air Station

USER'S Manual

www.MCMelectronics.com

Warranty

This device is warranted against manufactures defects for a period of one year from the date of purchase from the dealer.This warranty extends solely to the repair or replacement of this product and does not cover additional costs, including but not limited to installation or removal of the product or any incidental or consequential damages. Nor does it cover damage due to improper use, storage or application of this device. Should a service issue arise within the one year period, please contact the dealer in which this device was purchased. It will be the sole decision of Tenma to repair or replace any device found to be defective during this period.

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Copyright Information

The design of this product (including internal software) and its accessories is protected by relevant laws of China, and any infringement of related rights of our company will be punished according to law. Users should consciously abide by relevant laws of China when using this product.

Description of Common Signs

Thank you for purchasing the product, and before using it, please read this Manual carefully and pay attention to the warnings and precautions mentioned wherein.

⚠	**Warn you to prevent possible electric shock.**
⚠	**Warn you to prevent possible personal injury.**

Requirements for Users

Users should possess the basic knowledge of life and basic knowledge about electrical operations before using this product. The underage should use this product under the guidance of professionals or their guardian.

[Note]: To avoid damaging the machine and maintain the safety of working environment, please read this instruction carefully before using and keep it properly for future reference.

Safety Precautions

The following basic measures must be complied with when using this machine in order to avoid electric shock, personal injury, fire or other hazards. To ensure personal safety, the components and accessories must be approved or recommended by the original factory; otherwise, severe consequence will be caused! If failure is discovered during the use, the product must be repaired by qualified electrical technician or the person designated by this factory!

[Note]: This product uses three-wire earth plug, which must be inserted into three-hole earth socket. Don't alter the plug or use unearthed three-head adapter, which may lead to bad earth.

[WARNING]: As the ambient temperature of nozzle is up to 932F , if it is improperly used, it might hurt people and cause fire and other accidents. Therefore, please abide by the following precautions.

- Don't aim the nozzle of hot air rework station at people or animals, don't use the hot air rework station as a hair dryer in any case, and don't touch the heating tube or use the air duct of hot air rework station to blow skin directly.
- Don't use the hot air rework station nearby inflammable gas or other inflammable substances. Don't put the hot air rework station nearby inflammable gas or other inflammable substances immediately after use.
- The power switch should be turned off after use, and the main power should be turned off only when the temperature of hot air rework station is reduced to 212F .
- Please use the hot air rework station carefully, don't drop or violently shake the machine, don't put heavy objects onto the equipment, and don't operate the machine buttons or keys roughly.
- Don't use the hot air rework station when your hand is wet or the wire of hot air rework station is wet, in order to avoid short circuit or electric shock.
- Don't allow children to touch the product.
- Please use the nozzle provided by the manufacturer and don't alter it.
- The temperature of nozzles of different models is different, which is normal, rather than quality problem with the equipment.
- Please notice the specification of input power when using the hot air rework station. The manufacturer can provide hot air rework stations of different power supplies, and please select carefully.
- Please don't play when using the equipment, which might hurt you or other people.

Note

1. Don't damage the earth wire on steel pipe when replacing the heating body.
2. Don't damage the connecting wires of fan when replacing.
3. When installing back the handle shell 1, the fixing pole on handle shell should be installed in fixing hole of steel pipe.

Routine Maintenance

1. Temperature Calibration by User

Please use an appropriate non-inductive screwdriver and stretch it into corresponding “CAL” hole on the panel (the left is used to regulate the hot air rework station, while the right is used to regulate the soldering station) and finely regulate the potentiometer to the left or right to make the measured temperature value consistent with the displayed temperature of the machine.

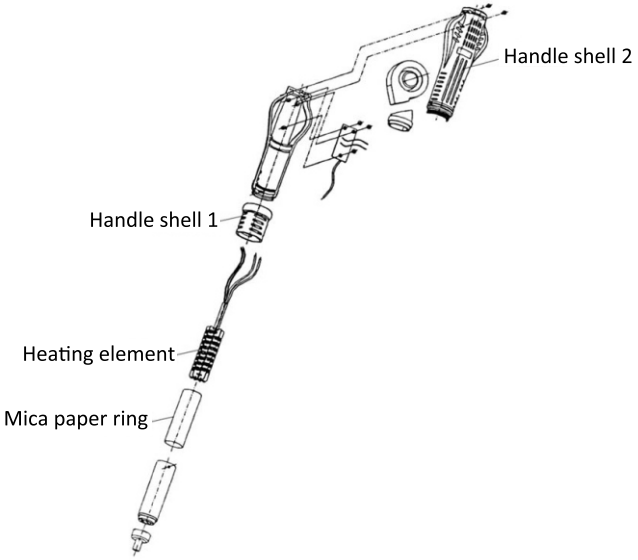
Note: such operation can be performed when the temperature is found not accurate after the heating core or soldering iron tip is replaced.

2. Fault Display

a) Fault symbol S-E means open circuit of heating core sensor.

b) Fault symbol H-E means open circuit of heating wire, or short circuit of sensor.

3. Replacement for Heating Body of Hot Air Rework Station



- The heating element can be replaced when it is cool and the power wire is disconnected.
- As shown in the figure, loosen two fixed screws on the handle.
- Screw out the handle shell 1 and then take out the handle shell 2.
- Remove the fan gently and then take out the fixing screws of terminal block.
- Turn over the terminal block, disconnect the connecting wire of heating element on the terminal block, and pay attention to the position of its connecting wire.
- Take out the heating element and the mica paper ring for wrapping the heating element from the steel pipe and don’t break the earth wire on the steel pipe.
- Wrap the new heating element with mica paper ring, insert it into the steel pipe, and the heating element should be installed in place.
- Connect the connecting wires of heating element according to the original position.
- Install the handles according to the reverse procedure of dismantling.

Disclaimer

- The Company will not take responsibility for any personal injury or property loss arising from the use of this product due to user’s failure to follow related instructions, the natural disasters or other force majeure, individual behavior or other reasons rather than unqualified product quality.
- This Instruction was arranged, compiled and released by MCM Electronics according to the latest product characteristics. The product and the instruction will be subject to subsequent improvement without further notice.

Packing List

Rework station	One unit
Hot air gun bracket	One piece
Mounting screw of bracket PT3.5*8	Two screws
Instruction	One book
Power wire	One piece
Nozzle (Φ5 mm, Φ8mm, Φ12mm)	Three pieces

Product Description

21-11424 is a lead-free rework station controlled by MCU and digitally displayed by LED. Simple to operate and convenient to use, 21-11424 is particularly applicable to R&D, production, scientific research laboratories, etc. Thanks to its superior and practical characteristics, this product has been widely applied to the skill trainings of research institutions, enterprises and institutions, and colleges, as well as industrial production lines and repair industries, etc.

Function Features

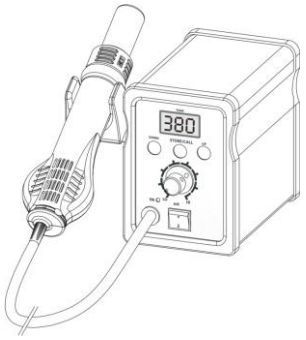
- Adopt sensor closed-loop control, and microcomputer crossing-zero trigger temperature control, thus ensuring fast, accurate and stable temperature rise.
- Knobs are used to regulate the temperature and the air volume, and LED is used to directly display the values of temperature and air volume.
- Turbofan air supply is used, the air is uniform and soft, and it can be used with various nozzles together.
- Fahrenheit/Celsius (℉ / ℃) units can be converted.
- With sleep function, the product is more efficient and energy-saving.
- With the function of temperature calibration by user, the product is highly flexible.
- Temperature store and recall function.
- With air-cooling function, thus meeting users’ special operating requirements.

Technical Parameters

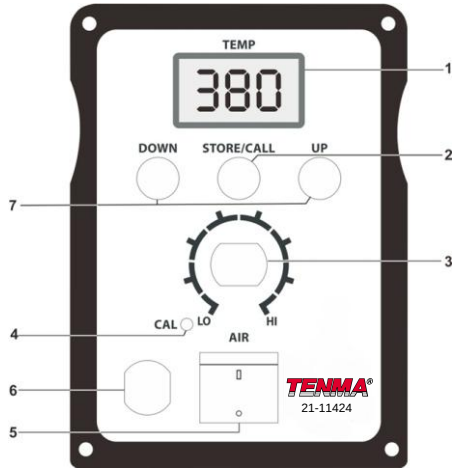
Input voltage	110 120VAC60Hz
Power	700W(MAX)
Display mode	LED digital display (red)
Temperature range	212F ~ 932F (100 ℃~500 ℃)
Temperature control accuracy	±95F
Temperature stability	±41F
Air volume gear	A25-A99
Air supply mode	Turbofan air supply

Air flow rate	120L /min (MAX)
Noise	＜52dB(A)
Handle size	47.2" （L）
Overall dimension of host machine	(L) 59.5" x (W) 39.4" x (H) 55.2"
Net weight	3.3 lbs..

Machine Diagram

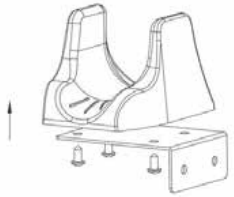


Control Panel



1、Temperature display screen
2、Temperature store and recall button
3、Air volume regulation button of hot air rework station
4、Hot air rework station temperature correction
5、Power switch
6、Hot air rework station handle interface
7、Temperature regulation button

Operation Guide



Installed on the left

Assembled with PM3.5*8 screws from the left

1. Installation
   1.1 The bracket for hot air rework station handle must be installed when the new product is used at the first time, and it should be fixed on the left of the machine, as shown in the machine diagram.
2. Connection
   2.1 Put the hot air handle onto the bracket.
   2.2 Insert the plug of power wire into the power socket.
3. Power-on
   3.1 Electrify the machine and turn on the power switch. (Before turning on the power switch, reconfirm that the power supply meet the product requirements).
4. Settings
   4.1 Temperature setting: short press UP key or DOWN key to adjust the set value of working temperature, one unit each time, and then the LED will display the set temperature value; 3 seconds later after releasing the key, the LED will display the actual temperature value. The temperature can be adjusted to the required value quickly by long pressing UP key or DOWN key.
   4.2 Air volume setting: adjust the air volume knob to set the air volume of air nozzle; the maximum air volume is 120L/min, the digital display is gear A25-A99, and the smaller the value is, the smaller the air volume is.
   4.3 Temperature store and recall: Press the STORE/CALL longer time to set present real temperature and hot air volume. Press the STORE/CALL shortly and get back to the already stored temperature and hot air volume.
   4.4 Air cooling setting: when the hot air rework station is in normal working state, press DOWN key to set the temperature to be lower than 212F , then “---” will be displayed, and the hot air rework station will only supply air and not heat. Press UP key to reset the hot air temperature.
   4.5 Temperature unit conversion: after shutdown, when pressing and holding “SET” key, turn on the power switch to switch the temperature unit (℉ / ℃) freely.
   4.6 Sleep function: when the hot air rework station is in normal working state, put the handle onto the bracket of the machine, and the hot air rework station will stop heating, the fan will start to supply air for cooling, and when the temperature is reduced to 212F , “SLP” will be displayed, and the hot air rework station will stop working. Remove the handle from the bracket and the hot air rework station will return to normal working state.
5. Shutdown
   5.1 When operation is finished or the hot air rework station is not used temporarily, please put the handle onto the handle bracket. When needing to shut down, turn off the front panel switch only when the temperature is reduced to 212F , and finally turn off the main power for rear panel of the machine.