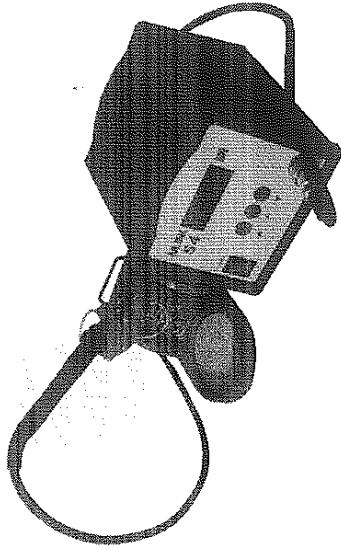


# **M\_LINK S4**

**Intelligent Lead Free Soldering Station**

## **OPERATION MANUAL**



**For your safety, please read this operation manual  
Carefully before operation. And always keep this  
Manual within reach.**

In this instruction manual, "warning" and "caution" are defined as following:

**WARNING**

**WARNING:** Misuse may potentially cause the death, or serious injury to the users.

**CAUTION:** Misuse may potentially cause injury to the users or physical damage to the objects involved.

For your safety, be sure to comply with these cautions.

**CAUTION**

When the power is on, the temperature is between 200°C to 480°C (392°F to 896°F)

- Do not touch the metallic parts near the tip.
- Do not use the product near flammable items.
- Advising other people in the work area that unit can reach a very high temperature and should be considered potentially dangerous. Turn the power off when you take breaks or finish the work.
- Before you replacing the parts or storing the unit turn the power off and allow the unit to cool to room temperature.

To prevent damage to the unit and ensure a safe working environment, be sure to comply with the following precautions:

- Do not use the unit for applications other than soldering.
- Do not rap the soldering iron against the workbench to shake off residual solder, or otherwise subject the iron to severe shocks.
- Do not modify the unit.
- Use only genuine our company replacement parts.
- Do not wet the unit or use the unit when your hands are wet.
- The soldering process will produce smoke, so mark sure the area is well ventilated.
- While using the unit, do not do anything which may cause bodily harm or physical damage.

**SPECIFICATIONS**

Name	MLINK S4
Power Consumption	90W
Output Voltage	36V 400KHZ
Temperature Range	based on mode selection
Maximum ambient temperature	40°C
Temperature Stability	± 2°C
Case material	aluminum
Dimensions	150*130*100mm
Weight(without wire)	1078g

**Soldering Iron**

Power Consumption	AC36V-90W
Tip to ground resistance	<2Ω
Tip to ground potential	<2mv
Heating element	Ceramic heater
Wire Assembly	1.2m
Length(without wire)	1.25m
Weight(without wire)	98g

\* The tip temperature is measured using 191\192 thermometer.

\* Specifications and design subject to change without notice.

## Setting up & Operating the Soldering Station

**⚠ CAUTION:** The sponge is compressed. It will swell when moistened with water. Before using the product until dampen the sponge with the water and squeeze it dry. Failure to do so may result in damage to the soldering tip.

### A. Small Cleaning Sponge

Dampen the small cleaning sponge with water and then squeeze it dry. Place it in one of 4 openings of the iron holder base.

**B:** Add water to approximately the level as shown. The small sponge will absorb water to keep the larger sponge above it wet at all times.

**C:** Dampen the large cleaning sponge and place it on the iron holder.

**⚠ CAUTION:** Be sure to turn off the power switch before connecting or disconnecting the soldering iron. Failure to do so may damage the P.C.B.

## Changing the temperature setting

Temperature upping:

Don't press ✱, and press ▲ directly. If so, the setting temperature will raise 1°C and the display window will display the setting temperature. When loose the ▲, the display window will play the temperature about 2s. If within 2s, press again the setting temperature will raise 1°C again. If press ▲ not loose at least 1s, the setting temperature will raise rapidly, till the needed temperature reaches.

Temperature upping

Don't press ✱, and press ▼ directly, the setting temperature will drop 1°C and the display window will display the set temperature. When loose the ▼, the display window will replay the set temperature above 2 seconds. If press ▼ again in this 2s, the setting temperature will drop 1°C again. If press ▼ and not loose at least 1s, the setting temperature drop rapidly, till the needed temperature reaches.

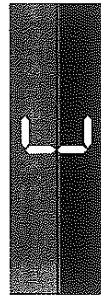
## Parameters setting

Soldering station uses the following parameters, and this parameters can be regulate.

Set password.

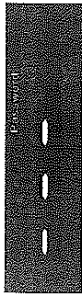
Soldering station's original password is "000", under this position is allowed to be set, if it is limited the temperature adjusted, it must to change the password.


Modify the way to enter the password




1. Put off the power, and press the ▼ and ▲, then put on the power.
2. Press the ▲ and ▼ unloosed, till show "C".
3. When shows "C", soldering station enter the parameter setting mode.

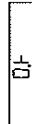

Enter original password:




4. Press "★", display , the left digital flashed, it shows it already in the setting password mode, the 100 position can be changed. Use the ▲ and ▼ to change the display, the way for setting the password is the same with setting the normal temperature. After set all the password press "★".

5. If the display window show the current temperature will into normal working condition, this discripts the password is wrong, the setting temperature will not be go on.

6. If it display , this shows the password is correct, after above 4s, it can go into the normal condition, setting temperature will be allowed.

7. If it display , press "★" and show , it shows it can input the new password, press ▲ and ▼ can change the display.

8. After selected the 3 digital press "★", the window show , then must input the new password, repeat the same steps.

9. If the last two password is the same, press "★", change is achieved.


Enter the password correct:





Enter the new password:

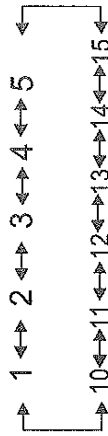


Enter the password again:

10. If the last two password is not same, press "★", the display window show , rework station must enter the new password (see the above steps), till the same of last two time, it shows change the password achieved. NOTE: The password is 0-9, if not, enter password is invalid.

When the window display , while press ▲ or ▼ and display , it

Shows enter the work mode setting, press ▲ and ▼, the display will be changed, change the order of the number as followings:




### Setting the Operation Mode

Decides the work mode, press "★", the choose work mode has been store in the memory.

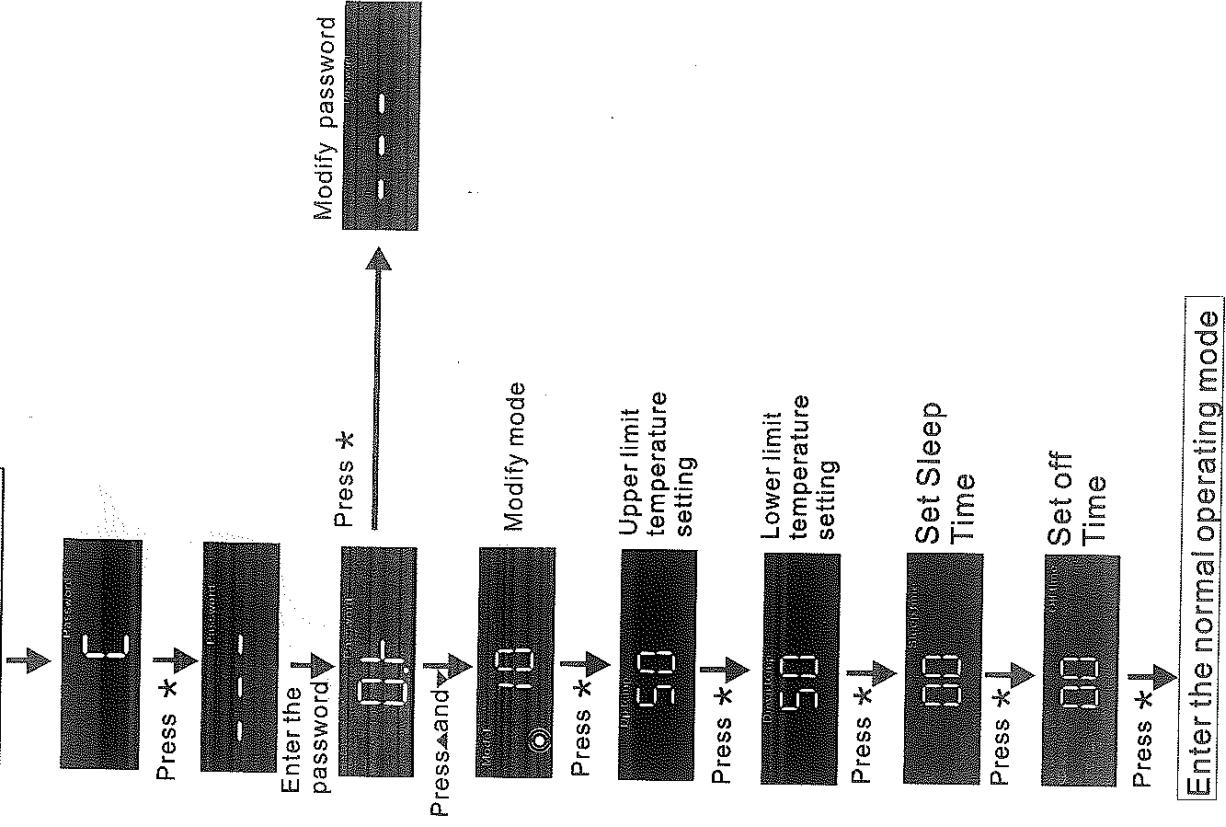
Display the digital can see the "work mode" instruction.

NOTE: "X" haws the original work mode.


 Warn: Use the rework station, may be make the tip severe oxidation or damage, that will shorten the life of the tip, so please choose carefully, use the low temperature as soon as possible.

## Flow chart of parameter settings

Put off the power, and press the  $\nabla$  and  $\blacktriangle$ , then put on the power.



## Work Mode

Work mode	For type	Adjusted temperature range	Alarm	Remarks
00	Small tip	200°C-480°C	No	
10			Yes	
01	The tip	200°C-480°C	No	Operating Mode of the  is an alarm tag
11			Yes	
02	Big tip	200°C-480°C	No	
12			Yes	
03	Small tip	500°C-600°C	No	
13			Yes	
04	The tip	500°C-600°C	No	
14			Yes	
05	Big tip	500°C-600°C	No	
15			Yes	

## Calibrating the Iron Temperature

The olding iron should be recalibrated after changing the iron or replace the heating element or tip. The way to calibrating the iron temperature:

Use the the tip mometer to calivrating.

The function of calibrating temperature, when fact temperature has error with the setting temperature, only enter the right value, iron will calibrating the iron temperature.

Example: The actual temperature of 350,  
Display temperature 300

Press \* while pressing the ▼ and ▲



Enter the calibration temperature the left digital 100 position begins to flash. It shows the digital position may be set. press ▼ or ▲ choose the needed digital.

Press \* ↓

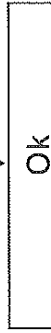


Enter the calibration temperature the left digital 10 position begins to flash. It shows the digital position may be set. press ▼ or ▲ choose the needed digital.

Press \* ↓



Press \* ↓



## Error Marks

When the iron has problems, it will display many wrong marks. If it display marks as followings, please refer to troubleshooting guide.

**S-E** sensor wrong  
If the sensor or sensor circuit wrong, display "S-E", the current transfer to tip will be cut off.

**H-E** heating-element wrong  
If iron does not transfer power to the heating element, the window will be display "H-E", it shows the heating core may be damage.