https://sequremall.com

SEQURE

SQ-001 Soldering Iron

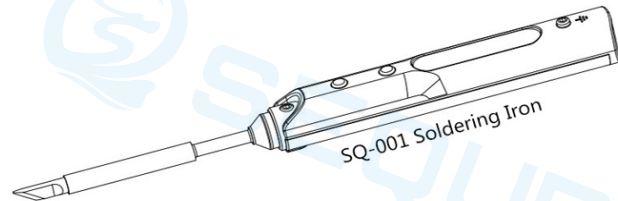## Instruction Manual

Version 1.1

Please read this manual before operating
the SQ-001 (this instruction
manual is based on APP V 2.18)

Content

CAUTION: Failure to comply a CAUTION may cause damage to the product or other equipments.

WARNING:Failure to comply a WARNING may result in serious injury to the user or others.

NOTE:Annotations,operation notes or additional information.

Safety Statememt

1. 1 General Safety

- Use only certified power source/adaptors from your region . (please refer to 3.0 for specifications)

- Do not operate in humid environment.

- Do not operate in inflammable/explosive environment.

- Keep the surface of the product clean and dry.

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1.2 Working condition

Working condition	Requirements
Temperature	Operating Condition: from 0℃ to +50℃
	Non-operating Condition: from -20℃ to +60℃
Humidity	Operating Condition: from 40℃ to 50 ℃,0% to 60% RH
	Operating Condition: from 0℃ to 40 ℃,10% to 90% RH
	Non-operating Condition: from 40℃ to 60℃,5% to 60%RH
	Non-operating Condition : Low temperature: from 0℃ to 40℃, 5% to 90%RH

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1.3 Warnings

When using SQ-001 ,
Turn the power off when not in use,or left unattended.
When power is ON,tip temperatures will between
100℃~400℃(212℉~752℉),please be careful.
Please don't operate SQ-001 when it's wet or operate
it with wet hands,which will cause an electric shock.

1.4 Cautions

When using SQ-001 ,
• The handle is constructed with precision, dropping shall be avoided.
•After continuous use up to 40 minutes, the handle surface temperature
will reach 50℃~60℃.
•For the first time using, SQ-001 may generate a light smoke due to the
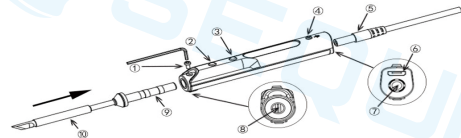heating of heating elements, which is a normal phenomenon.

1.5 Liability Statement

Any damage of the product,or losses related to the product damage ,
if it's man-caused,or assumed to be man-caused, the liability will belong to
the user.

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2. 1 Ports and Control Panel Introduction

1.The tip setscrew
2.Button A
3.Button B
4.Ground cable fixing screw
5.Power connector

6.Micro USB
7.DC 5525 12-24V port
8.Soldering tip port
9.Soldering tip connector
10.Soldering tip heating end

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2. 2 Specifications

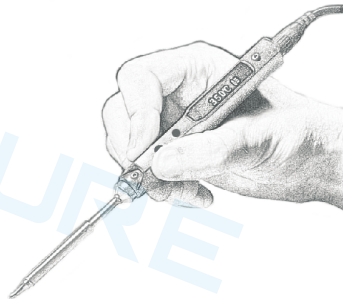| Screen		OLED
USB port		Micro USB
Power port		DC 5525
Dimensions	Operation unit	Length:97mm, Diameter:16.5mm
	Heating unit	Length:76+33mm, Diameter:5.5mm
Weight		30 g(power adaptor not included)

2. 3 Operation Specifications

Power	65W
Temperature range	100℃~400℃ (max)
Temperature stability	±2%
Operation temperature under heat	40℃
Soldering tip resistance to the ground	< 2 Ω

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Power Adaptor Selection

Before connecting DC5525(12-24V)power adaptor, check if the adaptor is in good condition as below standard.

We would recommend the DYS404-190210V (19V,2.1A)power supply as an accessory for SQ-001.

Operation voltage	Power	Electric current	Time required to increased tip temperature from 30℃ to 300℃
12V	17W	> 1.4A	40s
16V	30W	> 1.9A	20s
19V	40W	> 2.1A	15s
24V	65W	> 2.7A	11s

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Operation

4.1 SQ-001 Installation

1. Loosen the tip set screw, insert the soldering tip connector and tighten the screw;
2. Connect the ground wire to the ground wire set screw;
3. Connect the DC connector to SQ-001, connect the power cord and turn on the power accordingly.

📋 Note: If the screen displays "sen-err" when it's plugged, means the soldering iron tip is not properly fixed, please re-install it properly.
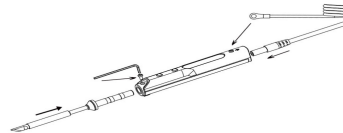
4.2 Default Settings

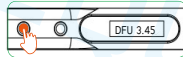| Default temperature unit	℃
Default temperature	300℃ (Default)
Sleep mode temperature	200℃ (Default)
Adjustable temperature range	100℃~400℃ (Max)

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4.3 Basic Control
4.3.1 Screen Display



When plugged into DC 12-24V power adaptor，SQ-001 will display its logo,
Version number and its standby screen in sequence .

When plugging into DC 1 2-24V power adaport , pressing Button A at the sametime
will enter DFU mode,"DFU **3.45** " will appear on OLED screen .
To exit DFU mode: unplug and plug in the device again without pressing
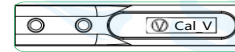any button ,then it will enter standby mode.

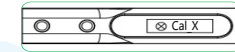## 4.3.2 Automatic Calibration
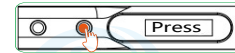
Press Button B in standby mode to
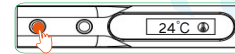enter the thermometer mode
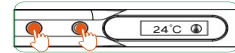
In thermometer mode, press 2 buttons at the same
time to enter the calibration mode

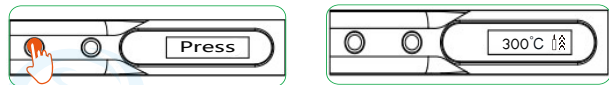Display shows when calibration is succedd.
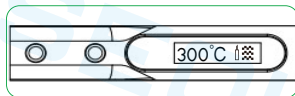
Display shows when calibration failed

Long press any button to exit thermometer mode

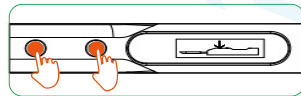Note: Calibration shall be done when SQ-001 in room temperature

4.3.3 Heating up

Press

300℃

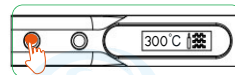When pressing Button A in standby mode, SQ-001 will heat up to preset temperature

300℃

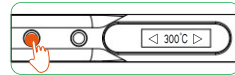When OLED displays as picture, means it's ready for soldering

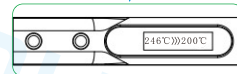In operation mode, holding both buttons for 3 senconds will return to standby mode

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4.3.4 Temperature Adjustment

300℃

◁ 300℃ ▷

In standby mode, press Button A will enter preset temperature

Temperature down: In temperature adjusting mode, hold Button A for at least 2 seconds, until display reads the temperature you want.

300℃

246℃))) 200℃
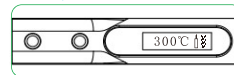
Temperature up: In temperature adjusting mode, hold Button B for at least 2 seconds, until display reads the temperature you want.

Release Button A when display reads the expected temperature, and SQ-001 will automatically adjust to it.
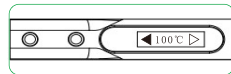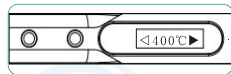
300℃

Release Button B when display reads the expected temperature, and SQ-001 will automatically adjust to it.

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◁ 400℃ ▶

◀ 100℃ ▷

Note: When screen displays arrow pointing to left or right (◀ or ▶)
which means the adjustment has already reached its upper/lower
limit temperature, settings will not be saved when power is off

Remark: Maximum temperature: 400℃

Minimum temperature: 100℃

298℃
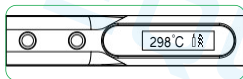
When SQ-001 temperature is stable for 60 seconds, it will automatically enter feedback mode,
temperature status will feedback every 5-8 seconds .

The last digit on the right end of the display shows below messages:

Arrows up-heating

arrows down-cooling

horizontal lines- temperature
stabilizeb

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4.3.5 Sleep Mode

200℃

300℃
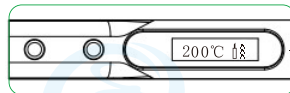
In operation mode, when leaving SQ-001 for more than 180
seconds (3 minutes in Default) will trigger the sleep mode,
and temperature will automatically adjust to preset sleep
temperature.
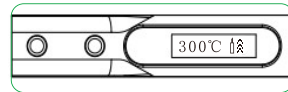
When working, SQ-001 will restart to operation mode and temperature
will automatically heat up to preset temperauture (300 ℃ in Default).

Press
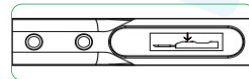
In sleep mode, if it's not being operated for longer than the IDLE_TIME
setting, SQ-001 will then enter the standby mode.

Note: IDLE_TIME can be adjusted (6 minutes in Default). (Preset minimum
IDLE time: 5 minutes)

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4.4 System Parameters

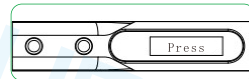| Parameter	Explanation	Default	Adjustable range
T_Standby	Standby mode temerature	200℃	100℃~400℃
T_Work	Operating temperature	300℃	100℃~400℃
Wait_Time	Time from operation mode to sleep mode	180 seconds	60~9999 seconds
Idle_Time	Time from sleep mode to standby mode	360 seconds	300~9999 seconds
T_Step	When preset "1",each step will progress in 1,2,5,25; when preset 2-25, each step will progress according to settings	10	5-25
Turn_Off_v	When operation voltage is lower than default voltage SQ-001 will return to stadby mode	10V	9-12V
TempShowFlag	Temperature unit selection	℃	0 is ℃，1 is °F
ZeroP_Ad	Temperature calibration parameter,SQ-001 automatical adjustment		No manual setting required

Notice: Preset parameter(s) will be updated to SQ-001 after saved .

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Soldering Iron Tip

5. 1 Changing Soldering Tips
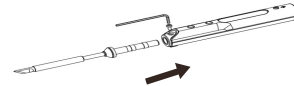
1.Unplug SQ-001 before changing.

2.Loosen the tip setscrew.

3.Pull out the tip, replace with another one.

4.Tighten the screw.

Note: When SQ-001 displays "sen-err", it means the soldering iron tip is not installed properly.

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5.2 Choosing Soldering Iron Tips

Note: Choosing the right tips will help you to work more efficient
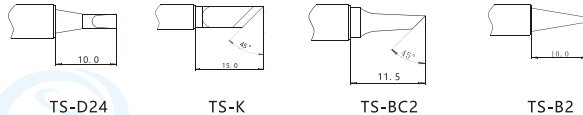

TS-D24   TS-K   TS-BC2   TS-B2

5.3 Soldering Iron Tip Maintenance

(1) Before switching off, wipe the tip´s soldering side with some solder.

(2) Do not leave the tip in high temperature for long time, which may cause it burn out.

(3) Do not push too hard while soldering, which will damage the tip.

(4) Do not use rough material or files to clean the tip.

(5) If the tip surface is oxidized and makes it hard to apply solder on it, you may use 600~800 grit sandpaper to wipe the tip with Ethanol or Isopropyl alcohol, heat up to 200℃ and apply solder immdeiately to avoid it oxidize again.

(6) Do not use Flux that contains high chlorine or acid , use only resin based flux.

5.4 Soldering Iron Tip Lifespan

Soldering iron tips lifespan is related to its maintenance (refer to 5.3)and use intensity.

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Trouble Shooting Guide

Problem	Check
Problem 1:No Display	Check:If the cable is broken Check:Is there any data in USB mode Check:If the screen needs to be replaced
Problem 2:Every time when installing a new tip, the temperature status display random numbers	Means the machine is checking status,which is normal
Problem 3:Soldering iron restart automatically	Check 1:Is it properly plugged into the power source? Check 2:Is the voltage too low? (need to be set up in the config file)
Problem 4:Soldering iron is heating up and cooling down simultaneously	Check 1:Is the tip first time in use? Check 2:Is the power cord in loose or defective contact? Check 3:Is the tip overheating? Set the temperature in appropriate level Check 4:Is the soldering iron clean? refer to "Soldering iron tip maintenance"
Problem 5:OLED shows "Warning!"	Check 1:Is the SQ-001 overheating? Is SQ-001 temperature higher than the maximun operation temperature When temperature is lower than maximum operation temperature, the warning sign will disappear and it will return to operation mode

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| Problem 6:OLED displays "High-Vt"	Check:Is the voltage too high? (over 24V)
Problem 7:OLED displays "Sen-err"	Check 1:Is the soldering iron installed propely? Check 2:If check 1 passes, then replace the soldering iron tip
Problem 8: The tip doesn't stick to the solder	1.Tip temperature is over 400℃ 2.The soldering side of the tip is not applied with solder properly 3.Lack of flux during operation 4.Rub the tip against dry or high sulfur sponge or fabric 5.Tip touched organic material like plastic,silicone oil or other chemicals 6.Using impure solder or solder that contains low proportion of tin
Problem 9: SQ-001 return to standby mode during operation	Checl:Is the voltage lower than default(10V) ? Wait until voltage recovers , it could work normally when the voltage is over 10V .

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Technical Support

7.1 Standard service

One year of warranty will be provided , if the damage was not man-caused. Please contact your retailer for warranty details.
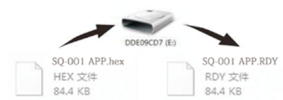Tips are consumables, once it's used, no replacement will be provided.

7.2 Default Parameter Setting
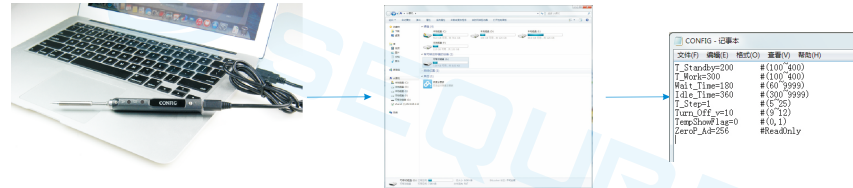
Connect SQ-001 to your PC with USB data cord, OLED will display "CONFIG " and means it's in setting mode. Open config.txt file from the USB drive, set the default parameters .

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7.3 Firmware Update

1. Visit **https://sequremall.com**. and download the latest SQ-001 firmware to your PC .
2. Connect SQ-001 to your PC with USB data cord, meanwhile , press SQ-001's Button A to enter DFU mode and a "DFU 3.45" notice appears on the screen. A virtual disk with 8 serial numbers will appear on your PC .
3. Copy the hex firmware to the root directory of that disk. When the extension of the firmware changes from "hex" to "rdy", disconnect USB and the firmware is upgraded.

7.4 Changing Boot Up Screen

Create your own 96*16 pixel image save as BMP in single color bitmap
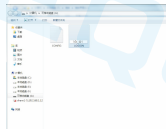
Copy the file to soldering iron's USB drive, change file name to "LOGOIN"

Note:When the "LOGOIN.BMP" exists in the USB drive, the boot up logo will be using the file, if the file doesn't exist, it will be using the default logo instead

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Legal   Statements

8. 1 Disposal

Do not dispose this product with domestic waste

Handling and recycle:Disposal of the product shall be manipulated according to laws and regulations in your area.

8. 2 Statement of Fulfilling FCC Standard

This device fulfills part 15 of the FCC regulations Device must fulfill below 2 conditions:
(1) Device must not generate interference
(2) Device must be able to resist any interferences on it, including interferences that could cause dangerous manipulation

8. 3 Statement of Fulfilling CE Standard

This is a trademark of Europe Union
This product with CE logo on it fulfills related Euro Union laws and regulations

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