# **SEQURE**

## **MSS12 Intelligent Soldering Station Manual**

Thank you for using this product. Please read the manual carefully before using it to avoid errors in your operation.

### 1. MSS12 Introduction

MSS12 intelligent soldering station comes with 0.91 inch OLED display, supports PD3.0, DC5525 12V-25V/3S-6S power supply, programmable firmware upgrade, Celsius and Fahrenheit switching, compatible with T12 soldering iron tips, the temperature can be calibrated and compensated, and the intelligent temperature control can reach plus or minus 1 degree.

### 2. Menu Introduction



Iron Idle Oled Volt Calib About 1. TComp Oc 2. Buzzer ON

### (1) Main Interface

Main interface	Icon display	Icon description	Method of operation	
	Stop	Stop mode	Short press the rotary switch to switch between working mode and stop mode.	
	Work	Work mode		
	Sleep	Sleep mode	1	
1	C-T	Soldering iron tip warning	Please readjust the position of the soldering iron tip or replace the soldering iron tip.  After the warning condition is eliminated, the warning icon will automatically change to Stop.	
	H-V	High voltage warning	Please use DC12-25V/3S-6S power supply. After the warning condition is eliminated, the warning icon will automatically change to Stop.	
	H-T	High temperature warning	Please disconnect the power supply, cool the soldering iron tip to room temperature, and then re-energize to work. After the warning condition is eliminated, short press or turn the rotary switch and the warning icon will change to Stop.	
	L-V	Low voltage warning	Please increase the supply voltage or decrease the LowVolt setting value. After the warning condition is eliminated, short press or turn the rotary switch and the warning icon will change to Stop.	
	P-T	PCB high temperature warning	Please disconnect the power supply, cool the soldering iron to room temperature, and then re-energize to work. After the warning condition is eliminated, short press or turn the rotary switch and the warning icon will change to Stop.	
2	20.0V	Power supply voltage	1	
	300°C	Soldering iron tip temperature	1	
	Check Tip	Soldering iron tip warning	Please readjust the position of the soldering iron tip or replace the soldering iron tip.	
3	High-T	High temperature warning	Please disconnect the power supply, cool the soldering iron tip to room temperature, and then re-energize to work.	
	High-V	High voltage warning	Please use DC12-25V/3S-6S power supply.	
	Low-V	Low voltage warning	Please increase the supply voltage or decrease the LowVolt setting value.	
	Pcb-T	PCB high temperature warning	Please disconnect the power supply, cool the soldering iron to room temperature, and then re-energize to work.	
4	300°C	Working temperature setting value	Turn the rotary switch to set the working temperature value.	
5	100%	Power percentage		

### (2) Level 1 Menu, Level 2 Menu

Level 1 menu Level 2 menu		Description	Default value	Setting range
	1.Tcomp	np Temperature compensation		-20°C-20°C
	2.Buzzer	Buzzer	ON	OFF/ON
	3.TempUnit Temperature unit		°C	°C/°F
Iron	4.WorkTemp	4.WorkTemp Working temperature		100°C-450°C
	5.StartHeat	Automatic heating at startup	OFF	OFF/ON
<u> </u>	6.FactorySet Restore factory settings		OFF	OFF/ON
-	7.TempShield	Stable temperature display	ON	OFF/ON
	8.TempStep	Main interface working temperature setting step value	10	10-50
	1.SleepTime	Sleep time	180s	60-990s
	2.SleepTemp	Sleep temperature	200°C	100°C-450°C
Idle	3.IdleTime	Standby time	360s	60-990s
	4.Sensitive	Wake-up sensitivity	5	1-30
	5.ScreenOpen	Standby screen display	ON	OFF/ON

Level 1 menu Level 2 menu		Description	Default value	Setting range
	1.Brightess	Display Brightness	50	5-255
Oled	2.Direction	Display Direction	0°	0°/180°
	3.KeyAction	Rotation Direction	L-R+	L-R+/L+R-
	1.LowVolt	Low-voltage Protection	OFF	OFF/10-23v
Volt	2.PowerVolt	Supply Voltage Compensation	0v	-5.00-5.00v
Calib / Te		Temperature Calibration	/	T1-T4
About / Information about Soldering station		/	/	

### (3) Menu Operation Guide

#### Main Interface

- ① Short press the rotary switch to switch between "Stop" and "Work" modes.
- 2) Turn the rotary switch to adjust the working temperature setting value.
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- 4 The warning icon appears, after the warning condition is eliminated, the warning icon changes to Stop by pressing or turning the rotary switch.

#### Level 1 Menu

- (1) Rotate the rotary switch to recurrently select the function box of the level 1 menu.
- 2 Short press the rotary switch to enter the level 2 menu.
- 3 Long press the rotary switch or operate without keys for 5 seconds, return to the main interface.

#### Level 2 Menu:

- (1) Turn the rotary switch to recurrently select the function box of the level 2 menu.
- 2) Short press the rotary switch, confirm to enter the level 2 menu setting item, and the parameter setting box appears. Turn the rotary switch to set this parameter. After the parameter settings are complete, automatically exits the parameter setting box and returns to the level 2 menu after operating without keys for 5 seconds.
- (3) Long press the rotary switch or operate without keys for 5 seconds, return to level 1 menu

### (4) Temperature Calibration

	Fix	Fixed Value
Calib	Real	Actual Value
Calib	T1	Thermometer Temperature
	Next	Next Step

Temperature calibration consists of four parameters: T1, T2, T3, and T4. After entering the calibration interface, the T1 temperature parameter is the selecting box by default 53, short press the rotary switch, T1 temperature parameter changes to the setting box  $\boxed{53}$  , wait for the value of "Real" to fluctuate within the value range of "Fix", and the thermometer to measure the actual temperature of the iron tip. turn the rotary switch to write the thermometer data to T1, set T1 calibration temperature, long press the rotary switch to exit the setting box, turn the rotary switch to select "Next", and short press the rotary switch to enter T2. Continue to complete temperature calibration of T2, T3 and T4. Finally, enter "Save", short press the rotary switch until "Save Succeed" appears, the calibration is completed.

During the calibration process, long press the rotary switch to exit the calibration interface, the parameters are not saved.



In the process of temperature calibration, add tin to clean the iron tip first, then use a thermometer to measure the temperature. During the calibration, the iron tip is in a high temperature state, avoid scalding.

### 3. Eliminate The Warning

When the soldering iron occurs a warning, a warning icon is displayed on the screen (if the buzzer is open, will accompany the warning beep), according to the prompt warning icon, after the warning condition is troubleshot and eliminated step by step (if the buzzer is open, immediately stop warning prompt), short press or rotate the rotary switch, warning icon (main interface 1) changes to Stop.

### 4. Sleep Wake Up

- In work mode, the soldering iron will enter sleep mode automatically after SleepTime for seconds when it is in a static state without any operation and the temperature will be automatically set to SleepTemp.
- In sleep mode, wake up the soldering iron and automatically restore the original setting of WorkTemp when pressing or turning the rotary switch or shaking the soldering iron; If the soldering iron is not woken up, after waiting for IdleTime the soldering iron stops working and enters the Stop mode.
- In stop mode, the soldering iron is in a static state without any operation. After 180s, it enters ScreenOpen and can exit by pressing or rotating the rotary switch or shaking the soldering iron.

### 5. Technical Reference

Working Voltage	Power	Fastest Time from 30°C to 300°C
12v	16w	37s
19v	40w	14s
24v	65w	9s

### 7. Safety Precautions /



- Use power supplies and accessories that meet safety standards. SEQURE accessories are recommended.
- Before replacing the iron tip, ensure that the power is off, so as not to damage the product, watch out for heat burns.
- The soldering iron tip burns easily. Power off after rest or completion and store away from children.

### 6. Firmware Update

Visit www.sequremall.com to obtain firmware and upgrade steps.



- www.seguremall.com
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Do not use 5525 interface and Type-C for power supply at the same time. Upgrading the firmware, ensure that port 5525 is disconnected when port Type-C is connected to the PC.