SI012 Pro

SEQURE intelligent soldering iron
Instruction manual



Before first use, read the entire manual carefully, especially the safety instructions, and keep it for future reference.

Importer: Rotorama, s.r.o. · www.rotorama.com

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1. Safety Instructions

Thank you for buying this product. Please read the instructions carefully before use and strictly abide by the specified operating instructions. Users must have basic knowledge of electronics and good soldering skills. Wrong use may cause personal injury and equipment damage.

The soldering iron tip heats up to 450 °C and stays hot for a long time after switching off. Risk of burns and fire!

- Use power supplies and accessories that meet safety standards. The manufacturer recommends SEQURE accessories.
- Before replacing the tip, always **disconnect the power supply** and let the tip **cool down to room temperature**, so as not to scald yourself or damage the product.
- The soldering iron tip burns easily. Switch the iron off and disconnect the power during breaks and after finishing work, and store it out of the reach of children.
- Place the hot soldering iron only in the stand, never on the table, cables or flammable objects. Never leave the switched-on soldering iron unattended.
- Do not touch the metal parts of the tip and do not point the tip at people. Work in a dry place, away from flammable materials.
- Work in a well-ventilated area – flux fumes irritate the respiratory tract. Wash your hands after working with solder.
- Do not use the soldering iron with a damaged housing, connector or power cable. Do not open or modify the product.
- The product is not a toy. Keep it away from children.

▶ Powering from a Li-Po battery

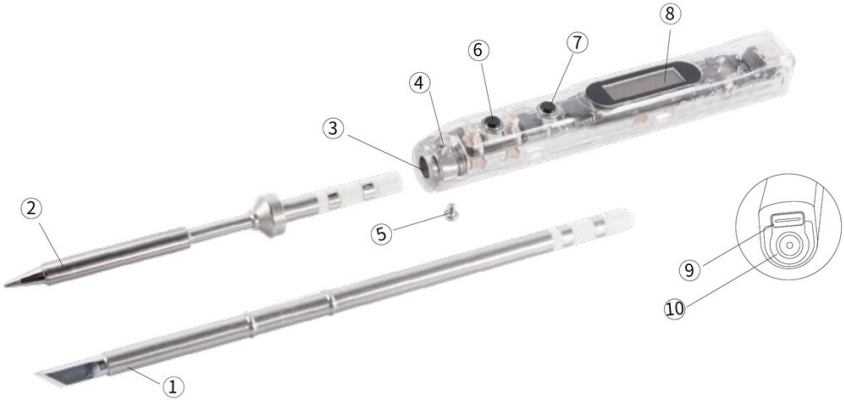
- When powering from a 3S–6S Li-Po battery, monitor its voltage. Do not discharge the battery below **3.5 V per cell** – set *LowVolt* (chapter 4.4) according to the number of cells: 3S = 10.5 V, 4S = 14.0 V, 5S = 17.5 V, 6S = 21.0 V.
- The default *LowVolt* value is 10 V – when powering from a battery, always adjust it as described above.
- Connect only an undamaged battery and disconnect it immediately after finishing work.

2. Product Description

2.1 Introduction

The SEQURE SI012 Pro intelligent soldering iron comes with a 0.91" OLED display, supports PD3.0 and QC2.0 power via USB-C and DC 5525 12–25 V / 3S–6S power supply, programmable firmware upgrade, Celsius and Fahrenheit switching, and is compatible with both long and short soldering iron tips (T12 / TS type). The temperature can be calibrated and compensated, and the intelligent temperature control reaches an accuracy of ±1 %.

2.2 Component Structure



Components of the SI012 Pro soldering iron

No.	Component	No.	Component
①	Long soldering iron tip	⑥	A key
②	Short soldering iron tip	⑦	B key
③	Soldering iron tip mounting port	⑧	OLED display
④	Hex screw 1	⑨	USB-C port (PD3.0, QC2.0, programmable)
⑤	Hex screw 2	⑩	DC 5525 power port (12–25 V / 3S–6S)

2.3 Package Contents (Kit)



SI012 Pro Kit package contents (manufacturer's illustration photo, colour varies by variant)

- 1× SI012 Pro soldering iron
- 1× soldering iron tip (B2 shape for the B2 variant)
- 1× storage bag
- 1× soldering iron stand
- 1× screw pack
- 1× hex wrench
- 1× solder wire tube
- 1× XT60 to DC 5525 cable
- 1× manual (manufacturer's original)

Not included: power supply, battery and USB-C cable.

2.4 Power Supply

Input	Supported power supply
USB-C ⑨	Power adapter or power bank supporting PD3.0 (12–20 V) or QC2.0
DC 5525 ⑩	Power adapter or 3S–6S Li-Po battery, 12–25 V; use the included XT60 to DC 5525 cable for batteries with an XT60 connector

The power of the soldering iron depends on the supply voltage – full power is reached at 24 V (see chapter 2.5). If the voltage is outside the permitted range, the soldering iron displays a warning (chapter 4.3).

2.5 Technical Data

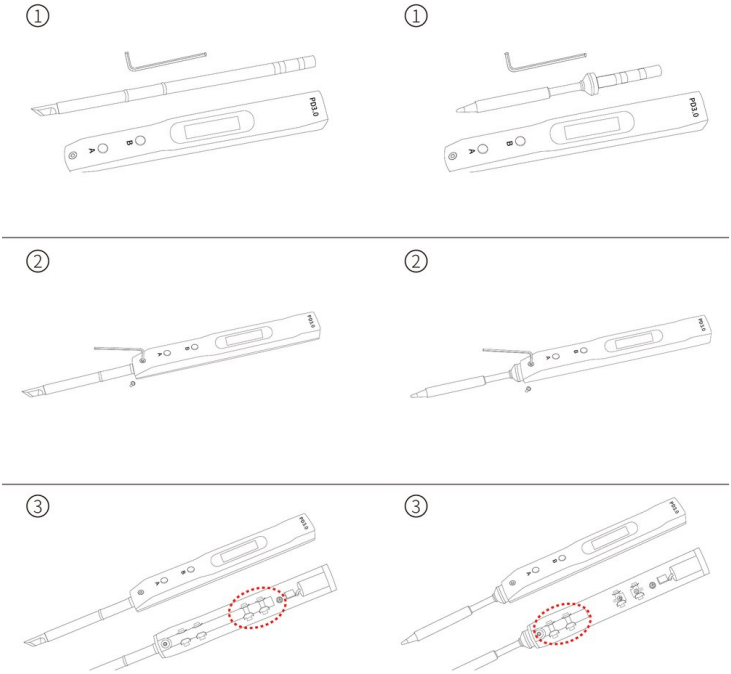
Display	OLED 0.91"
USB-C power	PD3.0, QC2.0
DC 5525 power	12–25 V / Li-Po 3S–6S
Adjustable working temperature	100–450 °C
Temperature control accuracy	±1 %
Temperature units	°C / °F
Compatible tips	long and short (T12 / TS)

▶ Power and heat-up time (manufacturer's data)

Tip	Voltage	Power	Fastest time from 30 °C to 300 °C
	12 V	16 W	37 s
Long tip	19 V	40 W	14 s
	24 V	65 W	9 s
	12 V	17 W	37 s
Short tip	19 V	45 W	13 s
	24 V	68 W	8 s

3. Installing and Replacing the Tip

Be careful not to get burned by the high temperature when assembling and disassembling the tip. Replace the tip only with the power disconnected and after it has cooled to room temperature.



Installing the tip – long tip on the left, short tip on the right

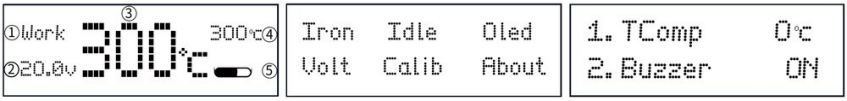
① Prepare the soldering iron, the tip and the hex wrench.

② Insert the tip into the mounting port ③ and secure it with the hex screw using the hex wrench.

③ The installation is complete.

To remove the tip, proceed in reverse order: loosen the hex screw and pull out the cooled tip.

4. Operation



From left: main interface, level 1 menu, level 2 menu

4.1 Main Interface

Field	Display	Operation
①	Soldering iron status or short warning code (chapter 4.3)	long press A: Work / Stop
②	Supply voltage (e.g. 20.0V)	–
③	Tip temperature (e.g. 300 °C) or warning text	–
④	Working temperature setting value (e.g. 300 °C)	short press A or B
⑤	Power progress bar	–

4.2 Menu Operation Guide

▶ Main interface

① Long press A – switch between Stop mode and Work mode.

② Short press A or B – adjust the working temperature setting value.

③ Long press B – enter the level 1 menu.

④ If a warning icon is displayed, short press A or B after the warning condition has been cleared – the icon changes to Stop.

▶ Level 1 menu

① Short press A or B – cycle through the level 1 menu items.

② Long press A or B – enter the level 2 menu.

③ Long press A + B at the same time or no key operation for 5 s – leave the level 1 menu.

▶ Level 2 menu

① Short press A or B – cycle through the items.

② Long press A or B – open the parameter setting box. Short press A or B to change the value. After 5 s without key operation, the setting box closes automatically and you return to the level 2 menu.

③ Long press A + B at the same time or no key operation for 5 s – return to the level 1 menu.

4.3 Status Icons and Warnings

Field ① shows the status of the soldering iron or a short warning code, field ③ shows the full warning text.

①	③	Meaning	What to do
Stop	–	Stop mode (heating off)	Long press the A key to switch between Work mode and Stop mode.
Work	–	Work mode (heating on)	
Sleep	–	Sleep mode	–
C-T	Check Tip	Soldering iron tip warning	Readjust the position of the soldering iron tip or replace the tip. After the warning condition is eliminated, the icon automatically changes to Stop.
H-V	High-V	High voltage warning	Use a DC 12–25 V / 3S–6S power supply. After the warning condition is eliminated, the icon automatically changes to Stop.
S-O	Short Out	Short circuit warning	Readjust the position of the (long) soldering iron tip or replace the tip. After the warning condition is eliminated, the icon automatically changes to Stop.
H-T	High-T	High temperature warning	Disconnect the power supply, let the tip cool to room temperature and power on again. Then short press A or B – the icon changes to Stop.
L-V	Low-V	Low voltage warning	Increase the supply voltage or decrease the *LowVolt* setting. Then short press A or B – the icon changes to Stop.
P-T	Pcb-T	PCB high temperature warning	Disconnect the power supply, let the soldering iron cool to room temperature and power on again. Then short press A or B – the icon changes to Stop.

4.4 Settings Overview

Menu	Item	Description	Default	Range
Iron	1.TComp	Temperature compensation	0 °C	−20 to +20 °C
	2.Buzzer	Buzzer	ON	OFF/ON
	3.TempUnit	Temperature unit	°C	°C/°F
	4.WorkTemp	Working temperature	300 °C	100–450 °C
	5.StartHeat	Automatic heating at startup	OFF	OFF/ON
	6.FactorySet	Restore factory settings	OFF	OFF/ON
	7.TempShield	Stable temperature display	ON	OFF/ON
	8.TempStep	Main interface working temperature setting step	50	10–50
Idle	1.SleepTime	Sleep time	180 s	60–990 s
	2.SleepTemp	Sleep temperature	200 °C	100–450 °C
	3.IdleTime	Standby time (until heating stops)	360 s	60–990 s
	4.Sensitive	Wake-up sensitivity	5	1–30
	5.ScreenOpen	Standby screen display	ON	OFF/ON
Oled	1.Brightess	Display brightness	50	5–255
	2.Direction	Display direction	0°	0°/180°
	3.KeyAction	Button direction	A-B+	A-B+/A+B-
Volt	1.LowVolt	Low voltage protection	10 V	OFF/10–23 V
	2.PowerVolt	Supply voltage compensation	0 V	−5.00 to 5.00 V
Calib	–	Temperature calibration	–	T1–T4
About	–	Information about the soldering iron	–	–

5. Temperature Calibration

Before calibration, add solder to the cleaned tip and measure the temperature with a thermometer. During calibration the tip is hot – avoid scalding!

Item	Meaning in the Calib menu
Fix	Fixed value
Real	Actual value
T1	Temperature measured by the thermometer
Next	Next step

Temperature calibration is divided into four points T1, T2, T3 and T4:

① After entering the *Calib* menu, the T1 parameter is selected by default (selection box).

② Long press A or B to switch T1 to the setting box (highlighted box).

③ Wait until the "Real" value fluctuates steadily within the range of the "Fix" value. Measure the actual tip temperature with the thermometer.

④ Short press A or B to write the value measured by the thermometer to T1.

⑤ Long press A + B at the same time to exit the setting box.

⑥ Short press B to go to "Next" and calibrate T2, T3 and T4 in the same way.

⑦ Finally go to "Save" and hold A or B until "Save Succeed" appears. Calibration is complete.

※ Long pressing A + B at the same time during calibration exits the calibration interface **without saving** the parameters.

6. Warnings, Sleep and Wake-up

6.1 Eliminating Warnings

When a fault occurs, the soldering iron displays a warning icon on the screen (if the buzzer is on, a warning beep sounds as well). According to the icon (chapter 4.3), eliminate the cause step by step – the buzzer stops immediately. Then short press A or B and the icon in field ① changes to Stop.

6.2 Sleep and Wake-up

- **Work mode:** if the soldering iron is static without any operation, it automatically enters sleep mode after *SleepTime* and the temperature is set to *SleepTemp*.
- **Sleep mode:** pressing a key or moving the soldering iron wakes it up and restores the *WorkTemp* setting. If it is not woken up, after *IdleTime* it stops heating and enters Stop mode.
- **Stop mode:** if the soldering iron is static without any operation, after 180 s it switches to the standby screen (*ScreenOpen*). Exit it by pressing a key or moving the soldering iron.

The sensitivity with which movement wakes the soldering iron is set by *Idle → Sensitive*.

7. Firmware Upgrade

The firmware for the soldering iron is available on the manufacturer's website www.sequremall.com. The upgrade is uploaded via the USB-C port ⑨.

Always download the firmware version that corresponds exactly to the SI012 Pro. An incorrect upgrade may result in an unusable or damaged product.

Manufacturer contact: SEQURE, www.sequremall.com, info@sequremall.com.

8. Information for the EU and Czech Market

8.1 Importer and responsible person in the EU

The product is placed on the European Union market by the importer stated below, who is at the same time the responsible person within the meaning of Article 16 of Regulation (EU) 2023/988 of the European Parliament and of the Council on general product safety (GPSR).

Importer / responsible person in the EU	Rotorama, s.r.o.
Company ID (IČO)	051 57 692
VAT ID (DIČ)	CZ05157692
Registered office	Okrajová 1351, 674 01 Třebíč, Czech Republic
E-mail	info@rotorama.cz
Phone	+420 252 252 098
Website	www.rotorama.com

8.2 Product conformity

CE

- The product bears the **CE** marking and complies with the requirements of the applicable European Union harmonisation legislation.
- A copy of the **EU Declaration of Conformity** is available from the importer at the address stated above or at the e-mail address info@rotorama.cz.
- **Product identification:** the type designation (SI012 Pro) is given on the product and its packaging; information about the device can be found in the *About* menu.

8.3 Disposal of electrical equipment



- The crossed-out wheeled bin symbol on the product, its packaging or in the documentation means that at the end of its service life the product **must not be disposed of together with mixed municipal waste**.
- Hand it over at a take-back point for electrical equipment – at a collection yard, at a take-back point of a collective system, or at the retailer when purchasing a new equivalent product. Take-back is free of charge for the end user.
- The obligations under Act No. 542/2020 Coll., on end-of-life products, are fulfilled by the importer through a collective take-back system.
- Proper disposal helps prevent negative impacts on the environment and human health and contributes to the reuse of secondary raw materials.

Through its contractual partner **ASEKOL a.s.**, the company ensures the take-back of waste electrical equipment from households and the separate collection of waste electrical equipment, batteries and accumulators in accordance with the applicable legislation. The customer is entitled to hand over old electrical equipment or a battery or accumulator at any collection point of the above contractual partner. The addresses of these take-back points are listed at www.asekol.cz, www.ecobat.cz and also https://visoh2.mzp.cz/RegistrMistZO/RegistrMistZOPublic/MapaMistZpetOdberu.

9. Warranty and rights arising from defective performance

9.1 Rights of the buyer under Czech law

The rights and obligations of the contracting parties are governed by Czech law, in particular by Act No. 89/2012 Coll., the Civil Code, and Act No. 634/1992 Coll., on consumer protection. The manufacturer's warranty terms set out below (Chapter 9.2) **do not in any way limit** the buyer's rights arising from these regulations.

- The seller is liable to the buyer for the product being free of defects on receipt. If the buyer is a consumer, a defect may be notified **within two years of receipt** of the product (Section 2165 of the Civil Code).
- If a defect appears within **one year** of receipt, the product is deemed to have been defective already at the time of receipt (Section 2161(5) of the Civil Code).
- When purchasing online, a consumer has the right to **withdraw from the contract within 14 days** of receiving the goods without giving a reason (Section 1829 of the Civil Code).
- Claims should be made with the retailer from whom you purchased the product. The importer's contact details are given in Chapter 8.1.
- The competent body for out-of-court settlement of consumer disputes is the **Czech Trade Inspection Authority**, Štěpánská 796/44, 110 00 Prague 1, www.coi.cz.

9.2 Manufacturer's warranty terms

❊ The following text is the manufacturer's original warranty statement.

For performance faults caused by non-human factors within **3 months from the date of purchase**, the manufacturer provides repair and maintenance service free of charge. After 3 months, no labour fee is charged for repairs; replacement parts must be paid for.

The manufacturer's warranty does not cover:

- all man-made damage,
- faults caused by self-disassembly and improper use,
- all consumables such as soldering iron tips.