

SGS


SOLDERING IRON STATION

User Manual



SGS TOOLS and PARTS PTY LTD
sgstoolsandparts.com.au
Proudly made in Australia

IMPORTANT SAFETY INFORMATION – READ FIRST

 This soldering station reaches high temperatures and can cause serious burns, fire, or damage if misused.

The soldering iron tip can exceed 350°C during normal operation.

Always place the iron in its holder when not in use.

Never touch the metal parts of the iron while powered.

Do not leave the station unattended while powered on.

This product is intended for skilled users and hobbyists familiar with soldering equipment.

Keep out of reach of children.

POWER, BATTERY & PROTECTION FEATURES

Designed for 18V lithium-ion power-tool batteries only

Use fully charged, undamaged batteries

Remove the battery after use and during storage

Do not short battery terminals or expose batteries to heat, water, or flame


Built-In Over-Discharge Protection:

This product includes a specially designed over-discharge protection circuit to help protect your power-tool battery.

The station automatically cuts power when the battery voltage reaches its lower safe limit (approximately 15V).

This prevents over-discharging, which can permanently damage lithium-ion batteries.

When cutoff occurs, the station will power down and must be switched off and fitted with a charged battery before further use.

 This protection feature does not eliminate the need for proper battery care and storage.

PARTS OVERVIEW

Soldering iron station base unit

T12-compatible soldering iron handle

T12 soldering iron tip (varies by model)

Rear-mounted ON/OFF power switch

Copper wool ball for tip cleaning

BEFORE FIRST USE

Ensure the rear ON/OFF switch is in the OFF position.

Insert a T12-compatible soldering tip into the iron handle and secure firmly.
Insert a fully charged 18V power-tool battery into the soldering station.

BASIC OPERATION

Powering On

Locate the ON/OFF switch on the rear left-hand side of the station.

Move the switch to the ON position.

The display will illuminate and show the current tip temperature.

Powering Off

Move the rear switch to the OFF position.

Allow the iron to cool before storage - Remove the battery after use.

HEATING & TEMPERATURE CONTROL


The station heats rapidly once powered on.

Typical soldering temperature is 300–350°C.

Rotate the control knob to adjust temperature.

Press the knob to confirm the setting.

The display shows both set temperature and current temperature.

 Recommended maximum temperature: 380°C - Higher temperatures may reduce tip life.

USING THE SOLDERING IRON

Always tin the tip before soldering.

Clean the tip regularly using a damp sponge or copper wool.

Do not apply excessive force — allow the heat to do the work.

Return the iron to its holder when not actively soldering.

SLEEP & AUTO-WAKE (SIMPLIFIED)

The station will automatically enter sleep mode after a period of inactivity to reduce tip oxidation.

Lifting or moving the iron will wake the station and rapidly return it to the set temperature.

These features operate automatically and require no adjustment for normal use.

AFTER USE

- Return the iron to its holder.
- Switch the station OFF using the rear power switch.
- Allow the iron to cool completely.
- Remove the 18V power-tool battery.
- Store in a cool, dry location.

MAINTENANCE & TIP CARE

- Keep tips clean and tinned when hot.
- Replace tips if damaged, oxidised, or worn.
- Do not file or grind tips.
- Use T12-compatible tips only.

TROUBLESHOOTING (BASIC)

Station does not power on:

- Check rear ON/OFF switch is set to ON
- Check battery charge and seating
- Try a known good battery

Iron stops heating during use:

- Battery may have reached the over-discharge cutoff
- Switch OFF, remove battery, and install a charged battery

Temperature unstable:

- Allow time for stabilisation
- Clean or replace tip if necessary
- Avoid excessive airflow

WARNINGS & MISUSE ⚠ Do NOT:

- Touch hot components
- Leave the station powered while unattended
- Use near flammable materials
- Use with non-T12 tips
- Modify or disassemble the unit
- Use outdoors or in wet conditions
- Bypass or defeat safety or protection circuits

INTENDED USE

This product is intended for electronic soldering and repair work using T12-compatible soldering tips, powered by compatible 18V lithium-ion power-tool batteries.

IMPORTANT LEGAL NOTICE (AUSTRALIA)

This product comes with guarantees that cannot be excluded under the Australian Consumer Law (ACL).

You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage.

You are also entitled to have the product repaired or replaced if it fails to be of acceptable quality and the failure does not amount to a major failure.

12-MONTH LIMITED WARRANTY (AUSTRALIA)

This product is warranted to be free from defects in materials and workmanship under normal use for 12 months from the date of purchase.

This warranty does not cover:

Normal wear and tear

Soldering tips (consumable items)

Damage due to misuse, modification, or incorrect operation

Damage caused by incompatible or damaged batteries

This warranty is provided in addition to your rights under the Australian Consumer Law.

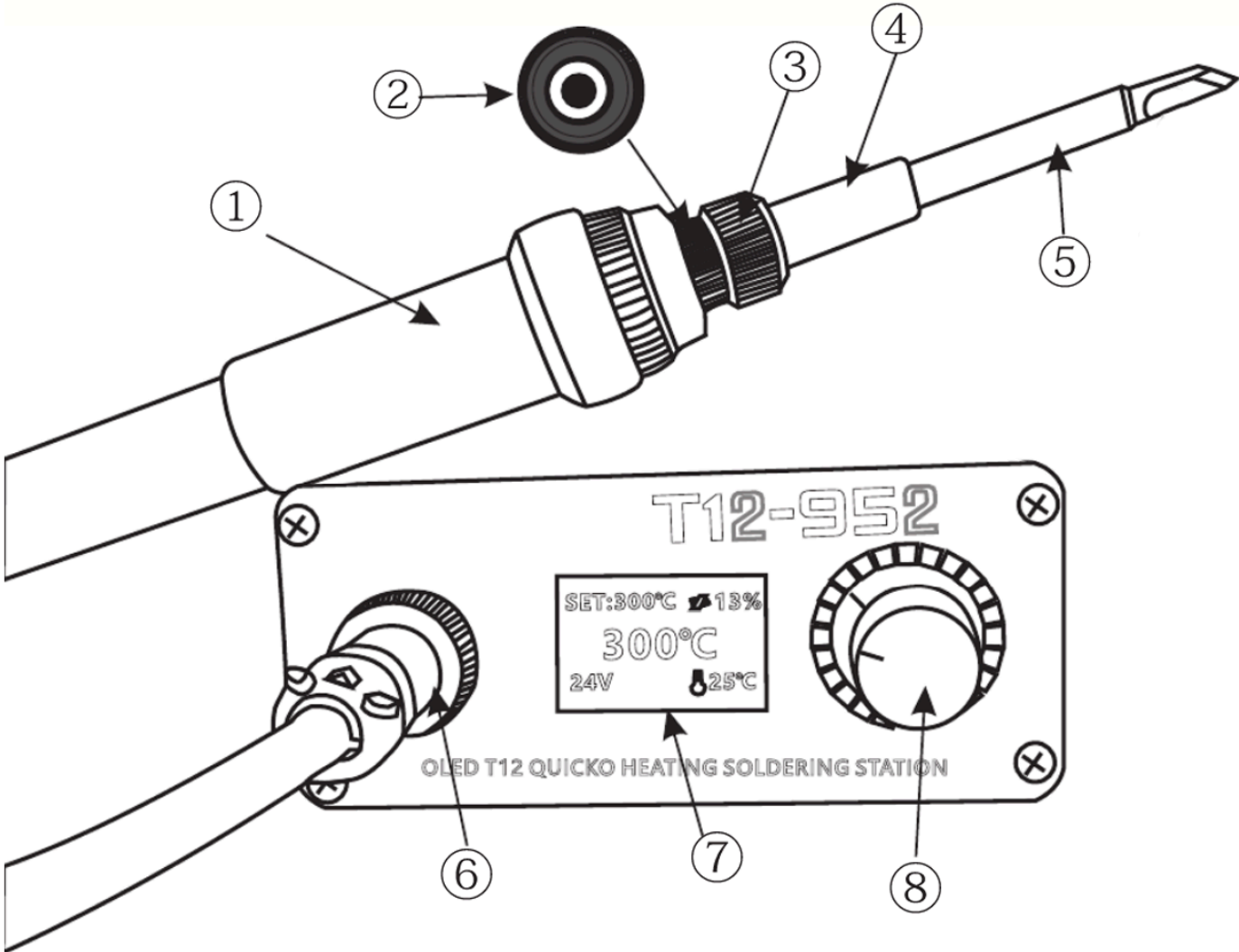
STORAGE

Always remove the battery before storage

Store in a cool, dry place

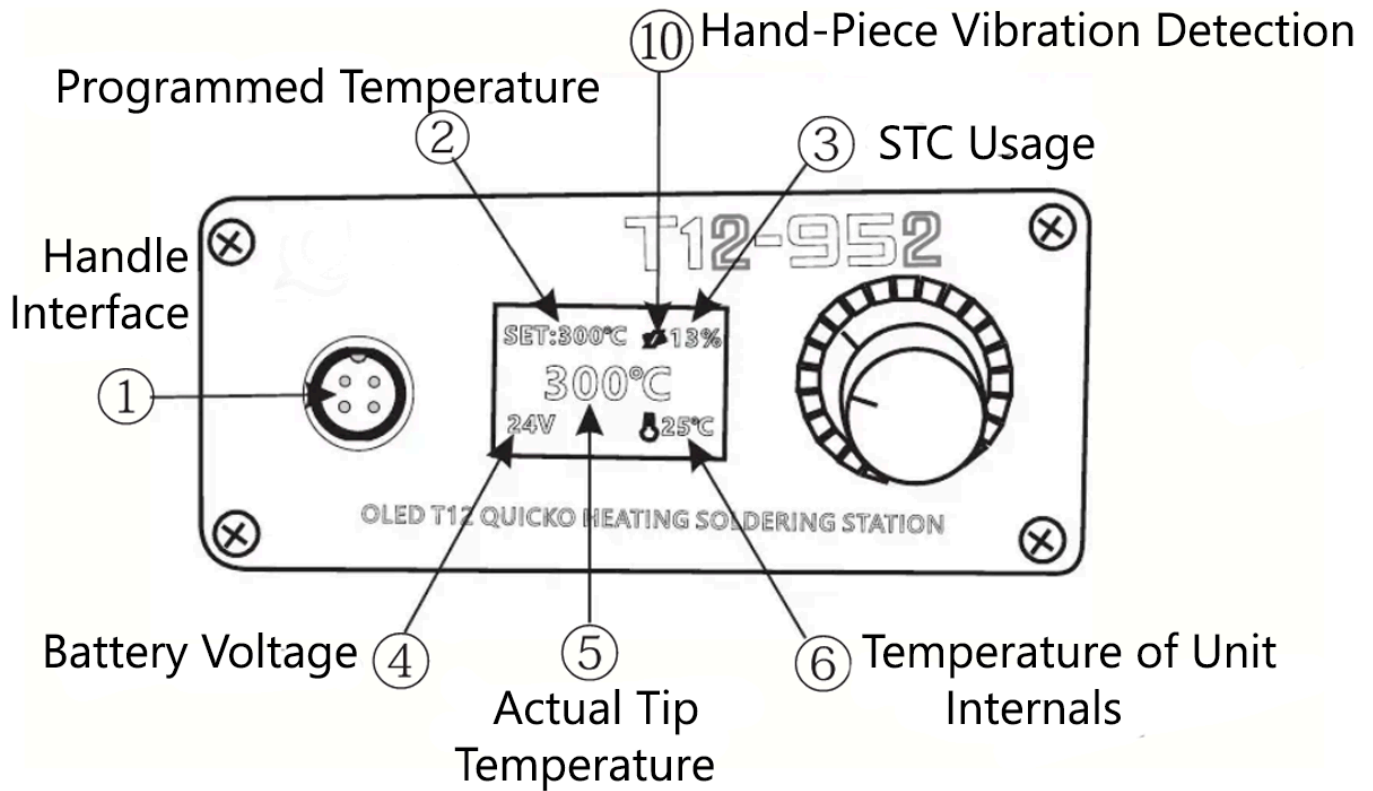
Keep away from children and unauthorised users

GETTING TO KNOW YOUR SGS T12 SOLDERING STATION

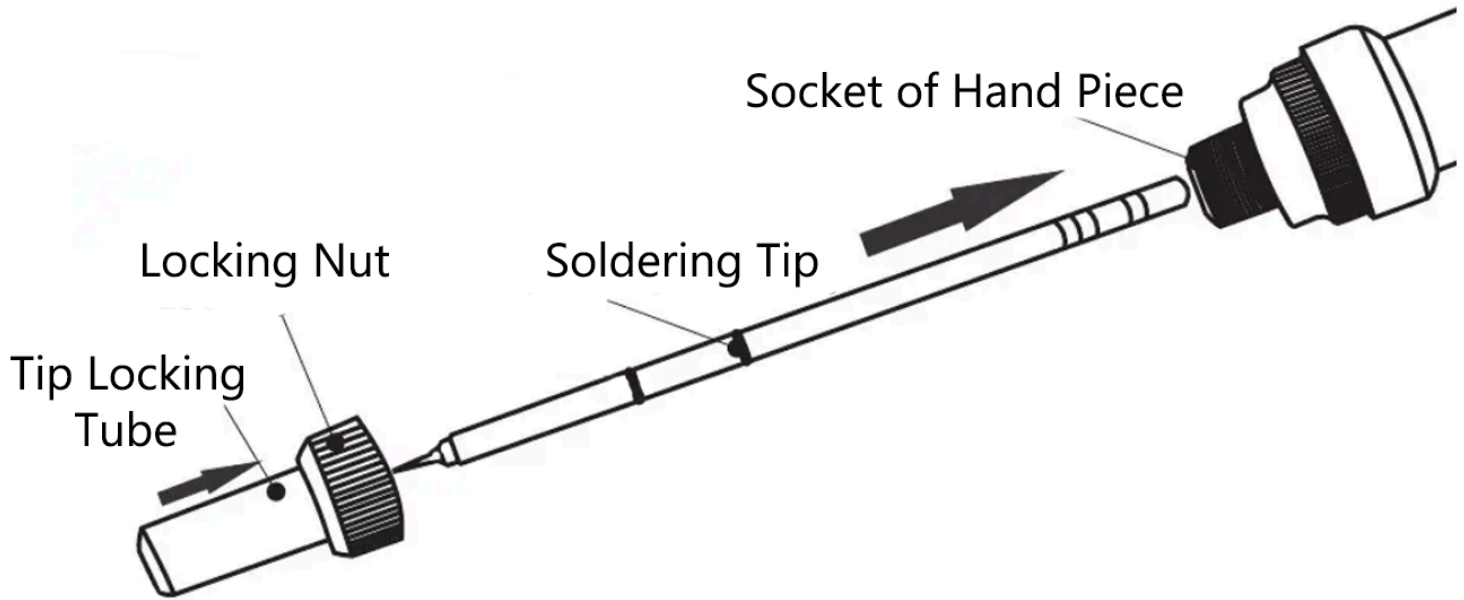


- 1. T12-907 Hand piece
- 2. Soldering Tip Socket
- 3. Locking Nut
- 4. Tip Locking Tube
- 5. T12 Soldering Iron Tip
- 6. Aviation Style Hand Piece Plug
- 7. OLED Display Screen
- 8. Temperature Control Dial

OLED DISPLAY PANEL FEATURES



T12 TIP AND HAND PIECE ASSEMBLY

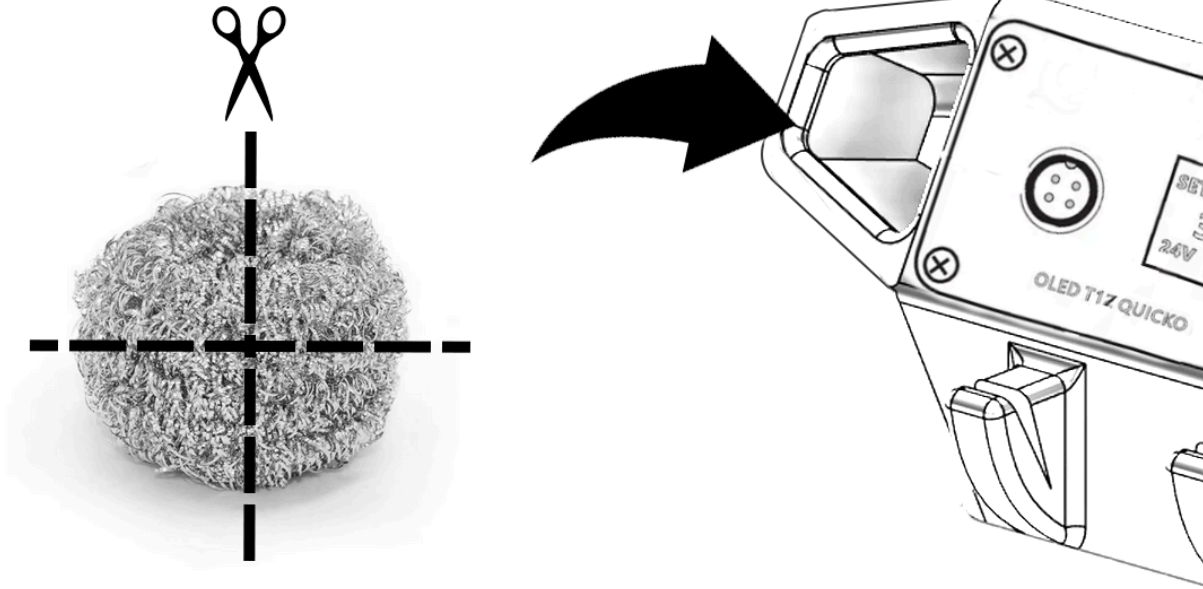


1. Remove locking nut and tube. Insert T12 tip into hand piece socket. Ensure tip is fully seated.
2. Slide locking tube and nut over tip and tighten firmly.

Note: If OLED display reads ERROR the tip may not be fitted correctly. Disassemble and reinstall.

A wide variety of T12 replacement tips are available at sgstoolsandparts.com.au

COPPER WOOL FOR TIP CLEANING



Included with the SGS Soldering Station is a Copper Wool ball used for cleaning the soldering tip and removing excess solder.

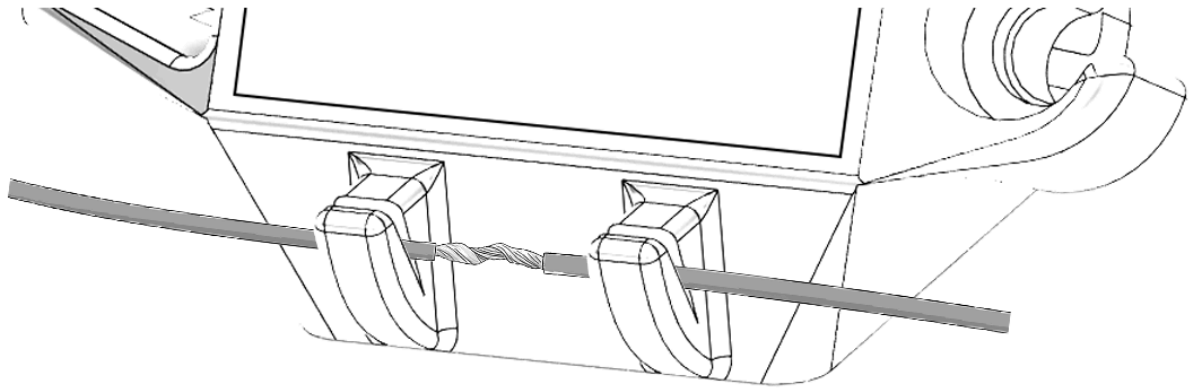
Using a sharp pair of scissors, the ball can be cut into quarters and one piece can be inserted into the housing as pictured.

Once the wool becomes clogged with solder, simply discard and fit a new piece.

Replacement Copper Wool balls can be found at sgstoolsandparts.com.au

SOLDERING WITH THE HELPING FINGERS

The SGS Soldering Station comes with a pair of 'helping fingers' to assist with holding wires while soldering.



Simply push the wires firmly down into the tapered slots as pictured. Solder the joint and then remove wires from fingers.