

HANMATEK SD1

HANMATEK SD1 60W Soldering Station User Manual

Model: SD1

1. INTRODUCTION

This manual provides detailed instructions for the safe and efficient operation, maintenance, and troubleshooting of your HANMATEK SD1 60W Soldering Station. Please read this manual thoroughly before using the product and retain it for future reference.

2. SAFETY INSTRUCTIONS

Always observe the following safety precautions to prevent injury or damage to the product:

- Ensure proper ventilation in your workspace to avoid inhaling solder fumes.
- Wear appropriate personal protective equipment, including safety glasses.
- The soldering iron tip reaches very high temperatures. Avoid direct contact with skin or flammable materials.
- Always place the soldering iron in its designated holder when not in use.
- Disconnect the power cord before cleaning or performing maintenance.
- Do not use the soldering station near water or in damp conditions.
- Keep out of reach of children.
- Use only original or approved replacement parts.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x HANMATEK SD1 Soldering Station
- 1 x Soldering Iron Handle
- 1 x Solder Spool Holder (side-mounted, removable)
- 1 x High-Temperature Resistant Cleaning Sponge
- 1 x Power Cord
- 1 x User Manual

- *Note: Solder wire is not included.*



Image: All components included in the HANMATEK SD1 Soldering Station package.

4. PRODUCT FEATURES

- **Fast Heating:** Reaches solder wire melting point (200°C) in 6 seconds, and 300°C in 15 seconds.
- **Adjustable Temperature:** Range from 200°C to 480°C (392°F to 896°F) with $\pm 2.0^\circ\text{C}$ stability.
- **LCD Display:** Clear digital display for temperature monitoring.
- **Ergonomic Soldering Iron:** Comfortable handle for extended use.
- **Durable Heating Element:** Internal ceramic heating element for powerful soldering and long lifespan.
- **Stainless Steel Casing:** Enhances heat dissipation and extends heater life.
- **Integrated Solder Roll Holder:** Side-mounted and removable for convenience.
- **Soldering Iron Stand:** Built-in for safe storage during and after use.
- **Antistatic Design:** Helps maintain a constant temperature and protects sensitive components.

Antistatic thermostat soldering station

This unit built-in PID (Proportional-Integral-Derivative) technology program, it can help keep soldering iron at a constant temperature

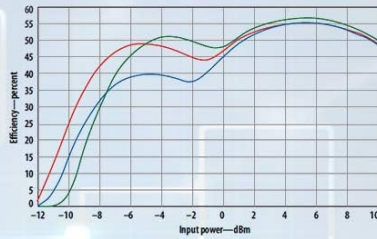


Image: The HANMATEK SD1 Soldering Station highlighting its antistatic thermostat and PID technology for stable temperature.

HANMATEK SD1 DURABLE SOLDERING STATION

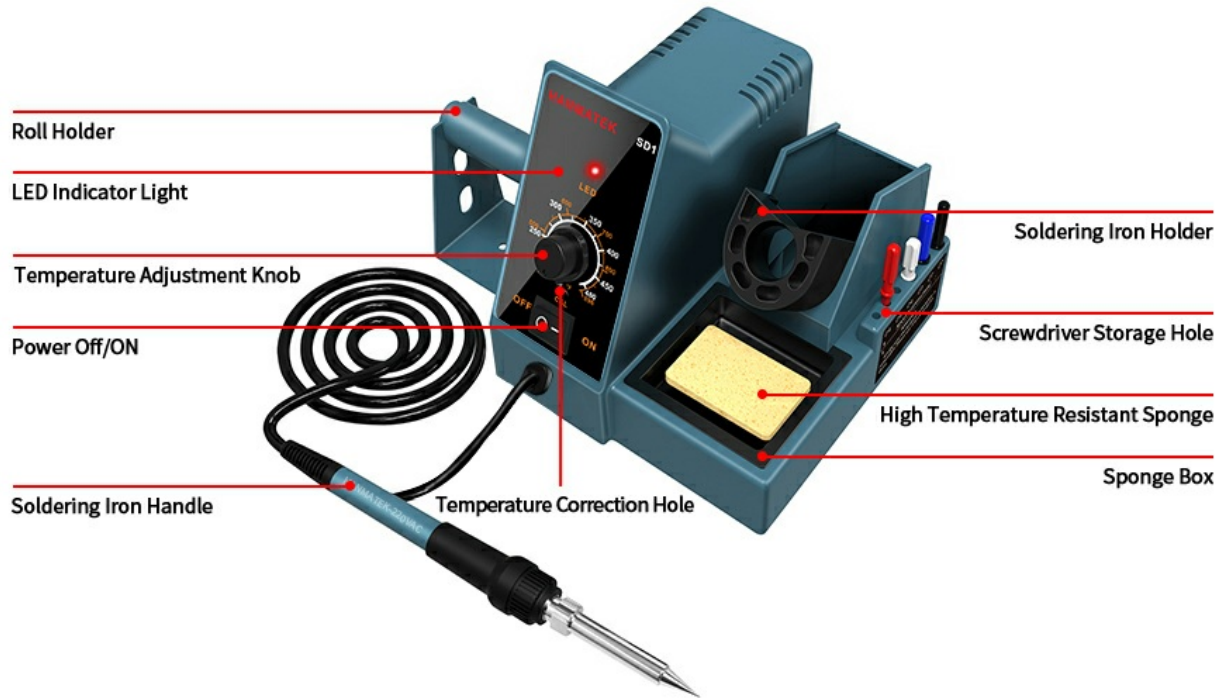


Image: Detailed diagram labeling the main components of the HANMATEK SD1 Soldering Station, including the roll holder, LED indicator, temperature adjustment knob, power switch, soldering iron handle, temperature correction hole, soldering iron holder, screwdriver storage hole, high-temperature resistant sponge, and sponge box.

5. SETUP

1. **Unpack Components:** Carefully remove all items from the packaging. Inspect for any damage.
2. **Position the Station:** Place the soldering station on a stable, heat-resistant surface in a well-ventilated area.
3. **Install Solder Spool Holder:** If desired, attach the side-mounted solder spool holder to the station using the provided screws.



Side Mount Solder Roll Holder

Side mount solder roll holder design, easy to remove and install



Image: Illustration of how to install the side-mounted solder roll holder onto the soldering station.

4. **Connect Soldering Iron:** Plug the soldering iron handle cable securely into the corresponding port on the soldering station.
5. **Place Cleaning Sponge:** Moisten the high-temperature resistant cleaning sponge with water and place it in the sponge box.
6. **Connect Power:** Plug the power cord into the soldering station and then into a suitable power outlet.

6. OPERATING INSTRUCTIONS

1. **Power On:** Turn on the soldering station using the ON/OFF switch. The LCD display will illuminate.
2. **Set Temperature:** Use the temperature adjustment knob to set the desired temperature. The LCD will show the set temperature and the actual tip temperature.

Temperature adjustable
392°F-896°F
200°F is the lowest melting point of solder wire

Fast heating up
It takes only 6 seconds to reach the melting point of solder wire (392 °F), reach 600°F in 15 seconds.

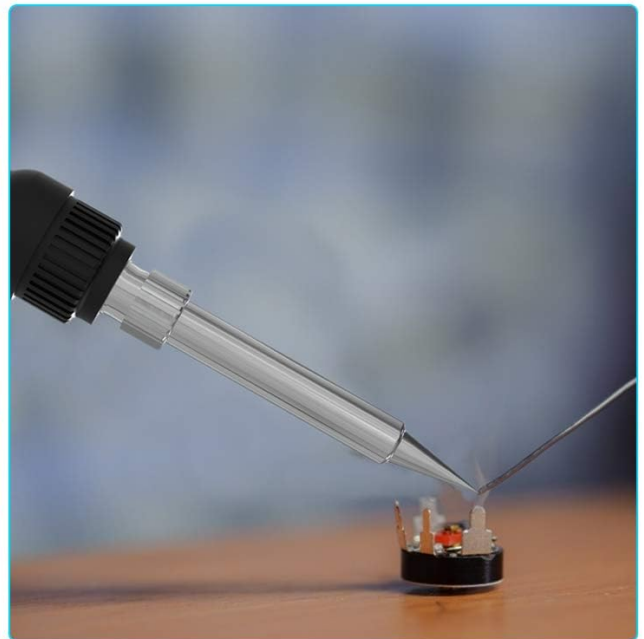



Image: The soldering iron heating up, demonstrating its fast heating capability and adjustable temperature range.

3. **Wait for Heating:** Allow the soldering iron to reach the set temperature. The station heats rapidly, typically reaching 200°C in 6 seconds and 300°C in 15 seconds.
4. **Tin the Tip:** Before first use and periodically during operation, tin the soldering iron tip by applying a small amount of solder. This helps prevent oxidation and ensures efficient heat transfer.
5. **Soldering:**
 - Clean the component leads and PCB pads.
 - Place the soldering iron tip on the joint to heat both the component lead and the pad simultaneously.
 - Apply solder to the heated joint, not directly to the iron tip. The solder should flow smoothly and evenly.
 - Remove the solder, then remove the iron. Allow the joint to cool naturally without disturbance.
6. **Clean the Tip:** Regularly clean the soldering iron tip on the wet sponge to remove excess solder and flux residue.
7. **Power Off:** When finished, turn off the soldering station and allow the iron to cool completely in its holder before storing.

7. MAINTENANCE

- **Tip Cleaning:** Always keep the soldering tip clean and tinned. Use the wet sponge for cleaning. For stubborn residue, use a brass wire cleaner.
- **Tip Replacement:** If the tip becomes excessively worn or damaged, replace it with a new one. Ensure the station is off and cooled before changing tips.
- **Heater Replacement:** The internal ceramic heating element is replaceable. Refer to a qualified technician or the manufacturer's guidelines for replacement procedures.
- **General Cleaning:** Wipe the station and iron handle with a damp cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the soldering station in a dry, dust-free environment when not in use.



Image: Close-up view of the soldering iron's ceramic heating element and the stainless steel casing, designed for durability and efficient heat dissipation.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Station does not power on.	No power supply; faulty power cord.	Check power connection and outlet. Ensure power cord is securely plugged in.
Soldering iron not heating up.	Iron not connected properly; faulty heating element.	Ensure soldering iron cable is fully inserted. If problem persists, the heating element may need replacement.
Temperature display is inaccurate.	Temperature sensor issue; calibration needed.	Refer to the temperature correction hole (if available) or contact customer support for calibration guidance.
Solder does not melt or flow well.	Insufficient temperature; oxidized tip; incorrect solder type.	Increase temperature. Clean and re-tin the tip. Ensure you are using appropriate solder for your application.

9. SPECIFICATIONS

Specification	Value
Brand	HANMATEK
Model Number	SD1
Power	60 Watts
Voltage	275 Volts (Input voltage may vary by region, typically 220-240V for EU)
Display Type	LCD
Temperature Range	200°C - 480°C (392°F - 896°F)
Temperature Stability	± 2.0°C
Number of Channels	1
Included Components	Soldering Iron
UPC	778862082501
ASIN	B07Y1MHPDY

10. WARRANTY AND SUPPORT

HANMATEK products are designed for quality and durability. This product comes with a 30-day unconditional money-back guarantee as stated in the product description.

For technical support, warranty claims, or any questions regarding your HANMATEK SD1 Soldering Station, please contact HANMATEK customer service through the retailer where you purchased the product or visit the official HANMATEK website for contact information.

Please retain your proof of purchase for warranty purposes.



