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› UY CHAN TS80P Soldering Iron User Manual

UY CHAN TS80-MO-D25

UY CHAN TS80P Soldering Iron User Manual

Model: TS80-MO-D25

Introduction	Package Contents	Features	Setup	Operation	Maintenance	Troubleshooting
		Specifications		Warranty & Support		

1. INTRODUCTION

This manual provides detailed instructions for the safe and efficient use of your UY CHAN TS80P Soldering Iron. The TS80P is a portable, digital, and programmable soldering iron designed for various soldering tasks, including field repairs and computer component work. Please read this manual thoroughly before operating the device.

2. PACKAGE CONTENTS

Verify that all items listed below are present in your package:

- TS80P Soldering Iron Controller
- TS-B02 Soldering Iron Tip
- 45W US Standard PD Power Supply
- Type C-C Silicone Cable
- Earth Clamps
- Soldering Iron Stand
- Hex Key
- User Manual (this document)

Package List

- TS80P Soldering Iron Handle ×1
- B02 Tip ×1
- 45W US PD Power Supply Adapter ×1
- Type-C Cable ×1
- Earth Clamps ×1
- Soldering Iron Stand ×1
- Hex Key ×1
- User Manual ×1



Image: The package contents including the TS80P soldering iron, power supply, cable, tip, stand, earth clamps, and hex key.

3. KEY FEATURES

- **Portable Design:** Compact and lightweight, ideal for both home use and field repairs.
- **Fast Heating:** Reaches operating temperature in seconds.
- **Digital OLED Display:** Clearly shows the current temperature and settings.
- **Adjustable Temperature:** Temperature can be precisely adjusted from 100°C to 400°C (212°F to 752°F).
- **Smart & Safe:** Equipped with dual-temperature sensors and accelerated sensors with an STM32 chip. Features include sleep mode and automatic over-heating warning.
- **Reprogrammable:** Connect to a computer to customize temperature rising curves and other functions.
- **USB Type-C Power Input:** Compatible with PD2.0 or QC3.0 adapters (for home use) and 12V/3A or 9V/2.0A power banks (for field repairs).
- **Push-in Style Tip:** Convenient and easy to change soldering tips.

Mini Pocket Size

Handy for field repair

156mm/6.1in

OLED Screen

**Fast Temperature
Adjust Buttons**

Aluminum Alloy Casing

Image: Close-up view of the TS80P soldering iron, highlighting its OLED screen and temperature adjustment buttons. The overall length is approximately 156mm (6.1 inches).

Push-in Style Tip

More Convenient



Image: Demonstrates the push-in style soldering tip, showing how it is inserted into the iron for easy installation and removal.

4. SETUP

1. **Unpack Components:** Carefully remove all items from the packaging and verify against the "Package Contents" list.
2. **Install Soldering Tip:** Insert the TS-B02 soldering tip into the front end of the TS80P controller. Ensure it is fully seated.
3. **Connect Power Supply:**
 - For home use, connect the provided 45W US Standard PD Power Supply to a wall outlet using the Type C-C Silicone Cable.
 - For field repairs, connect a compatible 12V/3A or 9V/2.0A power bank (not included) to the TS80P using the Type C-C Silicone Cable.
4. **Place on Stand:** Position the soldering iron on the included soldering iron stand when not in active use to prevent accidental burns or damage.



USB TYPE-C Input **PD2.0/QC3.0**

Powered Up by
12V/3A Power Supply (included in the package)
45W/65W/100W PD Power Bank (NOT included in the package)

Image: The USB Type-C input port on the TS80P soldering iron, shown connected to a power adapter. This port supports PD2.0/QC3.0 for power delivery.



Image: The included 45W US Standard PD Power Supply and the Type C-C Silicone Cable, used to power the TS80P soldering iron.

5. OPERATING INSTRUCTIONS

1. **Power On:** Once connected to a power source, the OLED screen will illuminate, and the iron will begin heating to its last set temperature or default.
2. **Adjust Temperature:** Use the temperature adjustment buttons (usually '+' and '-' or similar markings) located on the handle to set the desired temperature. The OLED screen will display the current and target temperatures.
3. **Heating:** The iron heats up rapidly. Wait for the temperature to stabilize before beginning soldering.
4. **Soldering:** Apply solder to the joint, ensuring proper heat transfer from the tip.
5. **Sleep Mode:** The TS80P features an intelligent sleep mode. If left idle for a set period, it will automatically reduce its temperature to a safe standby level (e.g., 200°C) to conserve energy and prolong tip life.
6. **Wake Up from Sleep:** Simply pick up the iron or press any button to wake it from sleep mode, and it will quickly return to the previously set operating temperature.
7. **Power Off:** Disconnect the power cable from the soldering iron or the power source to turn it off. Allow the tip to cool completely before storing.



Image: The TS80P soldering iron being used for a field repair on a circuit board, demonstrating its portability and fast heating capabilities when powered by a PD

power bank.

Your browser does not support the video tag.

Video: This video demonstrates the installation of the soldering tip, powering the TS80P with a PD 3.0 charger, its rapid heating, and the automatic sleep mode feature. It also shows the iron being powered by a 12V power bank for portable use.

6. MAINTENANCE

- **Tip Cleaning:** Regularly clean the soldering tip using a damp sponge or brass wool to remove excess solder and oxidation. A clean tip ensures efficient heat transfer.
- **Tip Tinning:** After cleaning and before storage, tin the tip with a small amount of fresh solder to prevent oxidation and prolong its lifespan.
- **Storage:** Store the soldering iron in a dry, safe place when not in use. Ensure the tip has cooled completely before storing.
- **Firmware Updates:** The TS80P is reprogrammable. Periodically check the manufacturer's website for firmware updates to enhance functionality or fix issues. Connect the iron to a computer via the USB-C cable for updates.
- **Inspection:** Periodically inspect the power cable and the iron for any signs of damage. Do not use if damaged.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Iron does not power on.	No power, faulty cable, or power supply issue.	Ensure the power cable is securely connected to both the iron and a working power source. Verify the power supply is functional.
Iron not heating or heating slowly.	Incorrect power supply, loose tip, or oxidized tip.	Ensure you are using a compatible PD2.0/QC3.0 adapter or a 12V/3A (or 9V/2.0A) power bank. Check if the tip is fully inserted. Clean and tin the soldering tip.
OLED screen flickers or temperature jumps randomly.	Loose connection, faulty tip, or internal issue.	Ensure the soldering tip is securely installed. Try a different, known-good tip if available. If the issue persists, contact customer support.
Iron enters sleep mode too quickly or not at all.	Sleep settings need adjustment.	Connect the iron to a computer and adjust the sleep mode settings via firmware configuration.
Cannot update firmware.	Driver issues or incorrect update procedure.	Ensure correct drivers are installed on your computer. Follow the specific firmware update instructions provided by UY CHAN. If the iron appears as a "Nova device" in Windows, manually change the driver to USB mass storage.

8. SPECIFICATIONS

Feature	Detail
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Feature	Detail
Brand	UY CHAN
Model Number	TS80-MO-D25
Power Source	Corded Electric (USB Type-C)
Wattage	18 watts (up to 30W with PD2.0/QC3.0)
Temperature Range	100°C to 400°C (212°F to 752°F)
Special Feature	Portable, Digital OLED Display, Programmable
Item Length	6.1 Inches (156mm)
Item Weight	200 Grams (7.1 ounces)
Material	Stainless Steel (tip), Aluminum Alloy (casing)
Included Components	TS80P Soldering Iron Controller, TS-B02 Soldering Iron Tip, 45W US Standard PD Power Supply, Type C-C Silicone Cable, Earth Clamps, Stand, Hex Key, User Manual

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the official UY CHAN website or contact their customer service department directly. Keep your purchase receipt as proof of purchase for warranty claims.

Manufacturer: UY CHAN

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Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question