ALIENTEK T80P+C2C+4 type tips

ALIENTEK T80/T80P Smart Soldering Iron User Manual

Model: T80P+C2C+4 type tips
Brand: ALIENTEK

INTRODUCTION

The ALIENTEK T80 and T80P Smart Soldering Irons are advanced, portable soldering tools designed for precision work. Featuring a Type-C interface for power supply, support for PD/QC fast charging protocols, and an OLED display, these soldering irons offer adjustable heating power from 18W to 100W, rapid heating capabilities (tin melting in as fast as 2 seconds for T80 at 100W), and intelligent induction for energy saving. This manual provides detailed instructions for the safe and effective use of your ALIENTEK Smart Soldering Iron.

Image: The ALIENTEK T80/T80P Smart Soldering Iron kit, including the iron, various tips, a stand, and Type-C cables.

SAFETY INFORMATION

Please read and understand all safety warnings and instructions before using this product. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Always use the soldering iron in a well-ventilated area to avoid inhaling fumes.
- The soldering iron tip can reach very high temperatures (up to 450°C). Avoid direct contact with skin or flammable materials.
- Always place the soldering iron in its stand when not in use.
- Ensure the power supply is compatible with the soldering iron's voltage and wattage requirements (9-20V, 18-100W). A 100W+ charger is recommended for optimal performance.
- Do not use the soldering iron if the cable or plug is damaged.
- Keep out of reach of children.
- Unplug the soldering iron when not in use or before cleaning/maintenance.
- Note: The host does not contain a battery and requires an external power supply for use.
- Note: It is normal for fast charging heads to have induced electricity. If you are sensitive to induced electricity, it is recommended to use it with a power bank.

PACKAGE CONTENTS

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

- ALIENTEK T80/T80P Smart Soldering Iron
- Soldering Iron Tips (various types, e.g., 4 type tips for T80P+C2C+4 type tips model)
- Type-C to Type-C Cable (C2C)
- Soldering Iron Stand
- User Manual (this document)

Image: Contents of the ALIENTEK Smart Soldering Iron package, showing the iron, tips, cable, and stand.
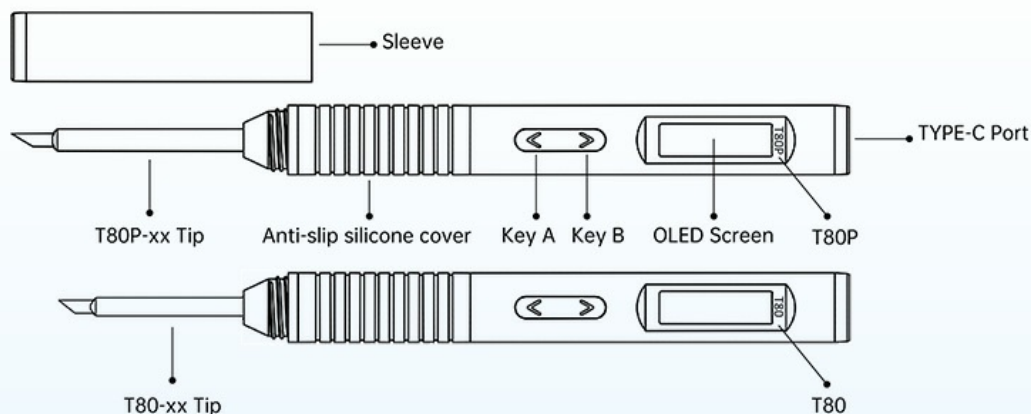
PRODUCT OVERVIEW

The ALIENTEK T80/T80P Smart Soldering Iron features a compact design with an OLED display for clear status indication. It is built with a CNC aluminum alloy body for durability and an ergonomic handle for comfortable grip.

Image: Overview of the ALIENTEK T80/T80P Smart Soldering Iron highlighting 100W power, PD/QC protocol support, CNC Aluminum Alloy body, and 2S Molten Tin capability.

Key Components:

- **OLED Display Screen:** Shows current temperature, set temperature, power level, and status.
- **Key A & Key B:** Used for navigation and adjustments.
- **Type-C Power Interface:** For connecting the power supply.
- **Soldering Iron Tip:** Interchangeable tips for various soldering tasks.
- **Non-slip Silicone Sleeve:** Provides a secure grip.

DIFFERENT	T80	T80P
Heating core type	T80-xx	T80P-xx
Heating core size	T80-KU (L80mm Ø3.5mm)	T80P-KU(L98mm Ø4.5mm)
Resistance value	2.1Ω	2.5Ω
Machine weight	38.5g	42.8g
Tinning time	2S (@100W)	5S (@100W)

Image: Detailed diagram comparing the T80 and T80P models, showing their heating core types, sizes, resistance values, machine weights, and tinning times.

SETUP

1. Attaching the Soldering Tip:

1. Ensure the soldering iron is powered off and cool.
2. Carefully insert the desired soldering tip into the front end of the iron. Ensure it is fully seated.

Video: Demonstrates the easy installation of the soldering iron tip by simply inserting it into the device.

Your browser does not support the video tag.

Description: This video, titled "T80/T80P soldering iron Usage scenario, function" from ALIENTEK Store, illustrates the physical appearance of the soldering iron, how to easily install the tip, and demonstrates its intelligent induction and power adjustment features. It also shows the rapid heating capability, melting tin in approximately 2 seconds.

2. Connecting Power:

Connect the Type-C cable to the soldering iron's Type-C port and to a compatible PD/QC fast charging power adapter or power bank. The OLED screen will illuminate upon successful connection.

OPERATING INSTRUCTIONS

Temperature Adjustment:

Use Key A and Key B to adjust the target temperature displayed on the OLED screen. The temperature range is 80°C to 450°C. The iron will rapidly heat up to the set temperature.
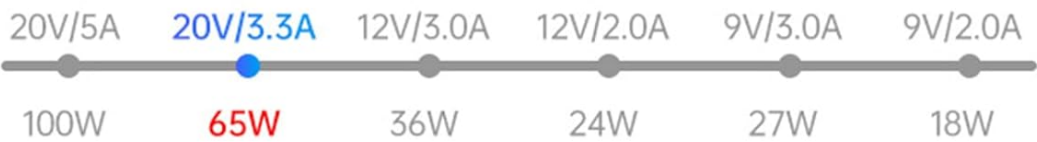
Power Adjustment (18W-100W):

The soldering iron supports adjustable power from 18W to 100W. This allows you to fine-tune the power output to match your adapter's potential and specific soldering needs.

1. Enter the power fine-tuning interface.

2. Press Key A or Key B to select the adjustment item (e.g., voltage/current combination).

3. Long press Key B to select, short press to adjust the value.

4. Long press Key A to exit.

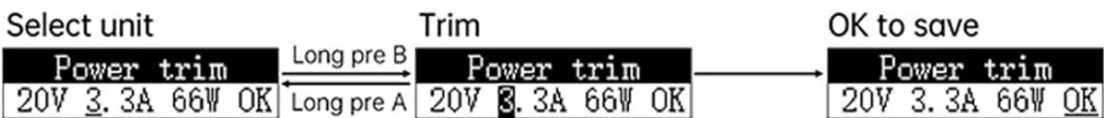5. Select OK and press and hold Key B to save your settings.

18~100W Power Adjustable

Default Gear

20V/5A	20V/3.3A	12V/3.0A	12V/2.0A	9V/3.0A	9V/2.0A
100W	**65W**	36W	24W	27W	18W

6 power gears are available

the current can be fine-tuned to achieve power adjustment

Power Fine-Tuning

Select unit

Power trim
20V 3.3A 66W OK

Long pre B
Long pre A

Trim

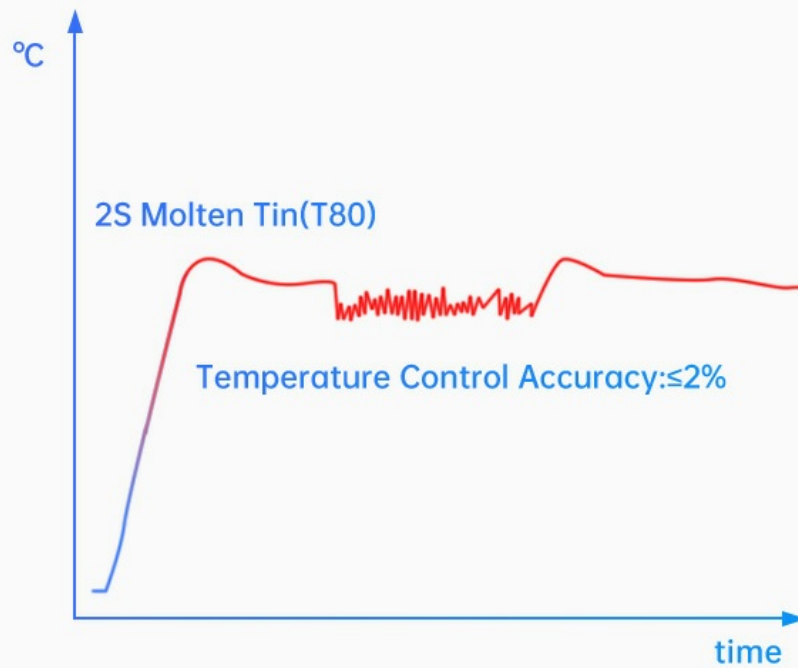Power trim
20V 3.3A 66W OK

OK to save

Power trim
20V 3.3A 66W OK

After entering the power fine-tuning interface:

1: Press A or B to select the adjustment item;

2: Long press B to select, short press to adjust, long press A to exit;

3: Select OK and press and hold B to save.

Note: The T80 will jump temperature when using the new heating core, and it will be stable after several uses

Image: Display showing the 18-100W power adjustment interface with various voltage/current settings and instructions for fine-tuning.

Note: The T80 may experience a temporary temperature jump when using a new heating core; it will stabilize after several uses.

Image: Graph illustrating the rapid heating (2 seconds to melt tin for T80) and temperature control accuracy (≤2%) of the soldering iron.

Intelligent Induction & Auto Sleep:

The soldering iron features a built-in handheld detector. When you put the iron down, it will automatically enter hibernation mode to prolong the life of the heating core and save energy. Picking up the iron will wake it up instantly.

Image: Display showing the "Induced Dormancy" feature, where the iron enters sleep mode (200°C) when put down and wakes up when picked up.

Language Selection:

The OLED display allows for language selection. Navigate through the menu options using Key A and Key B to find the language settings and select English.

Image: Various OLED display screens, including temperature display, volume info, temp step, sleep mode, standby mode, upgrade option, and language selection (Simplified Chinese and English).

MAINTENANCE

Cleaning the Soldering Tip:

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 and better soldering results.

Replacing Tips:

When a tip becomes worn or damaged, replace it with a new, compatible ALIENTEK soldering tip. Ensure the iron is cool before attempting to remove or install a tip.

General Care:

- Store the soldering iron in a dry, safe place when not in use.
- Avoid dropping the device or exposing it to excessive force.
- Do not attempt to disassemble the main body of the soldering iron beyond tip replacement.

TROUBLESHOOTING

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Soldering iron not heating up.	No power supply. Incompatible power adapter. Loose tip connection.	Ensure Type-C cable is securely connected to a power source. Use a PD/QC compatible power adapter (9-20V, 18-100W). A 100W+ adapter is recommended. Check if the soldering tip is fully inserted.
Temperature unstable or fluctuating.	New heating core (T80 model). Insufficient power supply.	Allow for several uses for the new heating core to stabilize. Ensure your power adapter provides sufficient wattage (e.g., 65W or 100W).
Iron enters sleep mode too quickly.	Intelligent induction activated.	This is a normal energy-saving feature. Pick up the iron to wake it up. Adjust sleep settings if available in the menu.
OLED screen not displaying.	No power or device malfunction.	Check power connection. If still no display, contact customer support.

SPECIFICATIONS

Feature	Specification
Product Name	T80 / T80P Smart Soldering Iron
Power Supply	Type-C
Operating Voltage	DC 9~20V
Fast Charging Protocol	PD2.0/3.0, QC2.0/3.0
Temperature Range	80~450°C
Power (Adjustable)	18~100W
Screen	0.87" OLED (128*32 Pixel)
Item Length	3.15 Inches (approx. 175mm)
Item Weight	1.28 ounces (approx. 42.8g for T80P)
Material	Aluminium (handle)
Heating Core Type (T80)	T80-xx (L80mm Ø3.5mm)
Heating Core Type (T80P)	T80P-KU (L98mm Ø4.5mm)
Tinning Time (T80@100W)	2 seconds
Tinning Time (T80P@100W)	5 seconds

BASIC PARAMETERS

L175mm Ø14mm

Product name	T80 / T80P Smart Soldering Iron
Power supply	Type-C
Operating voltage	DC 9~20V
Fast charging protocol	PD2.0/3.0 QC2.0/3.0
Temperature range	80~450°C
Power (Adjustable)	18~100W
Screen	0.87' OLED (128*32 Pixel)

Image: Table detailing the basic parameters of the T80/T80P Smart Soldering Iron, including dimensions, power supply, operating voltage, charging protocol, temperature range, adjustable power, and screen type.
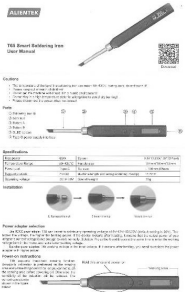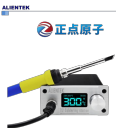
WARRANTY AND SUPPORT

For warranty information and customer support, please refer to the official ALIENTEK website or contact the seller directly through your purchase platform. Keep your proof of purchase for any warranty claims.
Seller: ALIENTEK Store
Amazon Store Link: Visit ALIENTEK Store on Amazon

Related Documents - T80P+C2C+4 type tips

[ALIENTEK T80/T80P Smart Soldering Iron User Manual](#)

User manual for the ALIENTEK T80/T80P Smart Soldering Iron, a pocket-sized, multi-functional soldering iron with Type-C power, OLED display, and adjustable heating power.

[ALIENTEK T65 Smart Soldering Iron User Manual](#)

Comprehensive user manual for the ALIENTEK T65 Smart Soldering Iron. Learn about its specifications, installation, power adapter selection, operation, temperature adjustment, firmware upgrades, maintenance, and after-sales service.

[ALIENTEK T100 Smart Soldering Station User Manual - Features, Specs, Operation](#)

Comprehensive user manual for the ALIENTEK T100 Smart Soldering Station. Covers specifications, parts, operation, settings, firmware upgrade, maintenance, precautions, and warranty information.

[ALIENTEK DM40 Multimeter User Manual: Features, Specifications, and Operation](#)

Comprehensive user manual for the ALIENTEK DM40 Touchable Multimeter 3-IN-1. Covers safety instructions, product introduction, quick start guide, measurement methods, technical specifications for multimeter, oscilloscope, and signal generator functions, system settings, firmware updates, and after-sales service.

[ALIENTEK DM40 Multimeter User Manual: Comprehensive Guide to Features and Operation](#)

Detailed user manual for the ALIENTEK DM40, a 3-in-1 digital multimeter, oscilloscope, and signal generator. Covers safety instructions, quick start guide, measurement methods, settings, system functions, and troubleshooting.

[DS100 Mini Digital Oscilloscope User Manual - Alientek](#)

Comprehensive user manual for the Alientek DS100 Mini Digital Oscilloscope. Learn about its features, operation, settings, and troubleshooting for effective use.