

KSGER T12 Soldering Station

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1. Operation

Select the proper tip

Use the tip type that is best suited for the kind of soldering job at hand. [Link to tip specifications.](#)

Grip without screw: Simply pull the current tip out, then push the new tip in till it can't go further, both ribs disappeared, 3-4 cm sticks out.

Grip with screw: Unscrew, exchange the tip, then place and tighten the screw again.

Power on/off

The power switch is located on the back of the unit.

Heat up is very fast: in 6 seconds it's at 300 C and you can start soldering!

Don't forget to 'wet' (= put solder on) a new tip immediately after the very first start. Also don't forget to 'wet' the tip before switching the unit off. This prevents oxidation and prolongs tip life.

Tip Setup

What it is: The unit uses PID control, with different settings depending on tip type. For stable and accurate temperature control, the tip type in use needs to be manually selected.

How to get there: press and at the same time rotate right; then rotate to select the tip currently in use.

Return: press.

Temperature adjust

What it is: Tip temperature can be adjusted (150 – 480 C) to cater for lighter or heavier soldering jobs.

How to get there: press; then rotate to change the temperature.

Return: press.

What temperature to use? (These are just indications, it also depends on the type of tip in use.)

- 260 for SMD
- 300 for PCB electronics
- 340 for components with thicker leads
- 380 for heavier work with more mass or heat conduction

Temperature preset 1 - 5

What it is: Five different temperature presets can be stored and can quickly be selected.

How to get there: press (to enter temperature adjust mode); now press and at the same time rotate to select preset 1 – 5; rotate to change the temperature for this preset.

Return: press.

Standby

What it is: The tip temperature is decreased to preserve tip life.

How to get there: automatic when the grip has not moved for x minutes OR manually by fast rotating left several clicks.

Return: press OR rotate right one click OR shake the grip.

Sleep

What it is: The tip cools down to room temperature to preserve tip life.

How to get there: from standby mode: automatic when the grip has not moved for x minutes OR manually by fast rotating left several clicks.

Return: press.

Boost

What it is: Quickly increase the tip temperature and after a preset time automatically return to normal.

How to get there: fast rotate right several clicks.

Return: automatic when the boost time has passed OR press OR rotate left one click.

2. The menu

What it is: Settings of the unit can be modified to your liking via the menu.

How to get there: long press

Select a menu item: rotate

Enter a menu item: press

Select a sub item: rotate

Change the value: press > rotate to change the value > press again to return

Back to menu: long press OR fast rotate left several clicks

Return to normal: long press OR select '19 Exit' OR automatic after a few minutes

01. Standby Setup

- Mode: Manual / Shake / Switch (how to return to normal mode)
- Time: 1 – 60 minutes (enter standby if no grip movement for x minutes)
- Temp: 40 – 300 C (the temperature to cool down to)

02. Sleep Setup

- Time: 0 – 60 minutes (enter sleep if no grip movement for x minutes)

03. Boost Setup

- Temp: 10 – 100 C (degrees temperature increase)
- Time: 1 – 30 minutes (return to normal temperature after x minutes)

04. Cold End Adj (tip temperature measurement correction)

- Mode: NTC / MCU
- Temp: 0 – 100 C

05. Tip Setup

- Find the tips that you own; rotate to select; then press to enable it, shown by tick mark.
- Disable the ones you do not own: rotate to select; then press to remove tick mark.
- The shortlist of enabled tips is used with the operation 'Tip Setup'. (See chapter 1.)

06. Temp Stepping

- Temp: 1 – 50 (increment / decrement per click when changing tip temperature)

07. Password Set (used to lock the unit so others can not change settings)

- Switch: On / Off (use the password, or not)
- Lock: 1 – 60 minutes (password becomes active after x minutes)
- Password: 4 digit number

08. Screen Saver

- Switch: On / Off (use the screen saver, or not)
- DlyTime: 1 – 60 (screen saver starts after x minutes of no grip movement)

09. PowerOn State

- Sleep / Standby / Running (after power on, the unit will be in this state, with the temperature that goes with it)

10. Language

- English / Chinese

11. Date and Time

- Date: yyyy-mm-dd
- Time: hh:mm:ss
- Yes / No (yes means store the new data, no means ignore changes)

12. System Info (nothing to set, info only)

- HW Ver
- SW Ver

13. Restore Defaults

- Yes / No (yes means restore to factory settings)

14. Buzzer Setup

- On / Off (buzzes when set temperature is reached, when going to standby, when going to sleep)

15. Knob Setup

- Opposite / Channel

16. Voltage Display

- On / Off (when on, power supply output voltage is displayed in stead of date & time)

17. Low Voltage Protect

- Switch: On / Off (use the low voltage protection, or not)
- Alarm Voltage: ##.# V (unit buzzes to warn)
- Down Voltage: ##.# V (unit shuts down for safety)

18. Temp Adjust. (used to calibrate the NTC tip temperature measurement)

- Start Adjust: consecutive presses start three tests:
 - 1 Controller goes to 250 C. After stabilization enter the measured value and press
 - 2 Controller goes to 350 C. After stabilization enter the measured value and press
 - 3 Controller goes to 430 C. After stabilization enter the measured value and press ... all done
- Init Adjust: press to restore calibration measurements to default
- Exit Adjust: press to return to menu. A long press does the same.

19. Exit

- Press to exit the menu and return to normal operation. A long press in any menu OR wait a few minutes does the same.