



User's Manual

SOLDERING STATION

ASE-1111



Thank you for choosing AKTAKOM soldering station.

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Please note the following safety notes to avoid malfunctions, damage or physical injury:

- Please read user manual carefully before using the device.
- Do not use the device if there is visible damage.
- Repair and maintenance of the device can be done only by a qualified specialist of the service center.
- Before connecting the instrument to the electrical network, observe all known precautions, and make sure that the grounding system is to avoid electric shock.
- Use only those accessories that are intended for use with this device.
- While working, do not touch the metal parts near the tip of the soldering iron.
- After completion of the work, it is necessary to install the soldering gun in the regular holder of the soldering gun.
- Persons with limited physical, sensorial or mental abilities are not allowed to use the unit, unless they are supervised for their safety by a qualified person or are briefed by the responsible person how to use the unit.
- Do not leave packaging materials in the range of children, they may become dangerous toys.
- Do not leave the unit unsupervised while it is turned on. Keep children away while the unit is in use. Do not allow children or people in need of supervision to use the unit.
- Do not continue using the unit after it, or the power cord, have been damaged.
- Do not run the power cord around sharp edges or over hot surfaces.
- Do not touch any hot surfaces. The soldering tip becomes very hot during operation.
- Be extra careful when using the soldering iron around combustible materials.
- Place the soldering station on a solid, level surface.

- During soldering harmful fumes may escape. Work only in well aired spaces or under a suitable air extraction system.
- Protect your eyes and body from splashing hot solder by wearing suitable protective equipment.
- Turn off the unit and pull the power plug while you are not using the unit or before cleaning. Do not pull on the power cord, always grasp the plug itself.
- Allow the unit to cool down before cleaning or storing.
- Do not use the unit outdoors.
- Do not immerse the unit in liquids of any kind. Do not use the unit to heat plastic or liquids.
- Do not disassemble the unit and do not try to repair it yourself. It does not contain parts serviceable by you.

General Notes

Soldering is a process in which two pieces of metal are joined with a molten solder. Metals which can be soldered are, among others, copper, brass, iron etc. Further, soft soldering and hard soldering (brazing) are distinguished.

Hard Soldering takes place at temperatures of over 450 °C. This soldering station is for soft soldering.

First Steps

- Take the unit out of the package and dispose of the packaging materials (plastic bags) or store out of the reach of children. There is a danger of suffocation!
- Place the soldering station on a solid, level surface.
- Place the stand for the soldering iron to the right of the soldering station.
- Now place the soldering iron in the stand and plug its cable into the socket on the soldering station. Make sure the notch in the plug faces up when you plug it in. Tighten the retaining ring by turning clockwise.

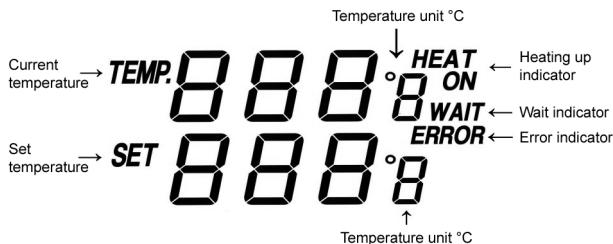
- Before use make sure the mains voltage in your area corresponds to the operating voltage stated on the type label (230 V~ 50 Hz). Plug the unit into a protected socket. Do not use the soldering iron without a soldering tip, this might damage the heating element and the temperature sensor.
- Before the first use the soldering tip must be tinned. To do so, allow some solder to melt on the tip and let it flow around the tip until an even film has formed around the entire tip.
- Integrated in the stand for the soldering iron is a drawer with a cleaning sponge, which you should make wet before use.

Soldering Station Description

1. Power switch
2. Display
3. Temperature setting buttons
4. Soldering iron holder
5. Drawer with cleaning sponge
6. Socket to connect soldering iron



Display



Operation

1. On the front of the housing you will find the LC-Display, the $\triangle+$ / $\nabla-$ - button, and the ON /OFF switch.
2. After the power plug and the soldering iron have been plugged in and the soldering iron has been placed in the stand, turn on the soldering station with the ON /OFF switch.
3. For the first use, in the display, you will see 330°C in the lower line as factory default and 25°C in the upper line.
4. With the malfunction display, temperatures from 150°C to 450°C can easily be set and confirm.
5. With the $\triangle+$ / $\nabla-$ - button, you can set the temperature with a resolution of rc . To do so, briefly press the respective button. If you hold the button, the display will change in steps of 10°C. When the desired temperature is reached, just release the button.
6. After you have set the desired temperature, “HEAT ON” and “WAIT” will be displayed.
7. For second use, the station will memory the temperature set for the last use.
8. Select the right temperature for every job to avoid cold soldering joints or damaging delicate components or burning flux with excessive heat. Burnt flux will cause weak joints.

Technical Data

Rated Voltage: 110-130V/60HZ; 220-240V/50HZ

Operating Voltage: 24V

Nominated Power: 48W

Fuse: Micro Fuse 1A/250V (5X20mm)

Soldering Tip temperature: 150-450°C

Display Precision: 5%

Station Dimension: 120x104x137mm

Weight: 1400g

Please Note:

- In the maximum setting (450°C), do not use the soldering station longer than necessary to avoid excessive stress on the soldering tip.
- The temperature necessary for soldering has been reached when the solder melts on the soldering tip.
- Flux is used exclusively for less delicate work to remove oxides on the soldering joints and to prevent oxidation during the soldering process.
- If clots form, the temperature is too low.
- If pearls instead of layers form, the soldering tip is dirty. Clean it with fine emery paper.

Turning the Soldering Station OFF

After work, allow some solder to melt on the soldering tip. This is to protect the soldering tip during the period of non-use. Excess solder can be wiped off on the wet cleaning sponge after reheating for the next use.

- Place the soldering iron in the holder.
- Turn the soldering station OFF with the ON/OFF switch (position “O”).
- Allow the soldering iron and the soldering station to cool down fully before storing.

Please Note!

If the soldering station is operated without a soldering iron or with a defective soldering iron, a warning sound can be heard and the display will flash “ERROR”. Plug in or replace the soldering iron.

The soldering station will remember the last set temperature after turning off.

Replacing the Fuse

Before starting work on the unit, always pull the power plug!

On the back side of the unit is a delayed action micro fuse 1A 250 V / 0 5x20 mm. The fuse can be changed by unscrewing the fuse holder from the unit with a suitable screwdriver (turn counter clockwise). Replace the fuse with a new one and replace the fuse holder.

This table gives you some hints about the usual temperatures for different soldering tasks:

Task	Recommended Soldering Temperature
Melting Point	190°C
Standard Soldering	270 - 300 °C
Industrial use	320 - 380 °C
Desoldering (Small joints)	315 °C
Desoldering (Large joints)	400 °C

Cleaning and Maintenance

- For the best result and a long service life always keep the soldering tip tinned.
- Regularly clean dirty soldering tips with a wet soldering sponge.
- If the soldering tip has became passive and will not take to the solder easily, take it out of the soldering iron. Thoroughly clean it with 600 - 800 grid emery cloth. After that the tip must be tinned again. Roll some solder with a flux core around the tip and heat up the tip until the solder has molten around the tip. Using additional colophony may be helpful.
- If the tips are finally worn out, replace them to preserve the full performance of the soldering station.

- Please pull the power plug before cleaning and allow it to cool down fully!
- Avoid exerting excessive pressure on the LC display. Use only a stiff brush and a moist cloth to clean the unit and allow it to dry out before the next use.
- Do not use aggressive chemicals or abrasives to clean the unit.

Quick Celsius(°C) / Fahrenheit(°F) Conversion:

D.E.V.I.C.E. (Wiki)

Please see our online services for measuring and calculations help



$$100^{\circ}\text{C} = 212^{\circ}\text{F}$$

$$150^{\circ}\text{C} = 302^{\circ}\text{F}$$

$$185^{\circ}\text{C} = 365^{\circ}\text{F}$$

60(tin)/40(lead) blend

$$200^{\circ}\text{C} = 392^{\circ}\text{F}$$

70(tin)/30(lead) blend

$$250^{\circ}\text{C} = 482^{\circ}\text{F}$$

50(tin)/50(lead) blend

$$300^{\circ}\text{C} = 572^{\circ}\text{F}$$

$$350^{\circ}\text{C} = 662^{\circ}\text{F}$$

$$400^{\circ}\text{C} = 752^{\circ}\text{F}$$

$$450^{\circ}\text{C} = 842^{\circ}\text{F}$$

D.E.V.I.C.E. (Wiki)

Common electronic components repairs and hand soldering techniques

