

# TENMA®



**Model: 21-21310**  
**80W Soldering Station**

**Please read these instructions carefully before use and retain for future reference.**

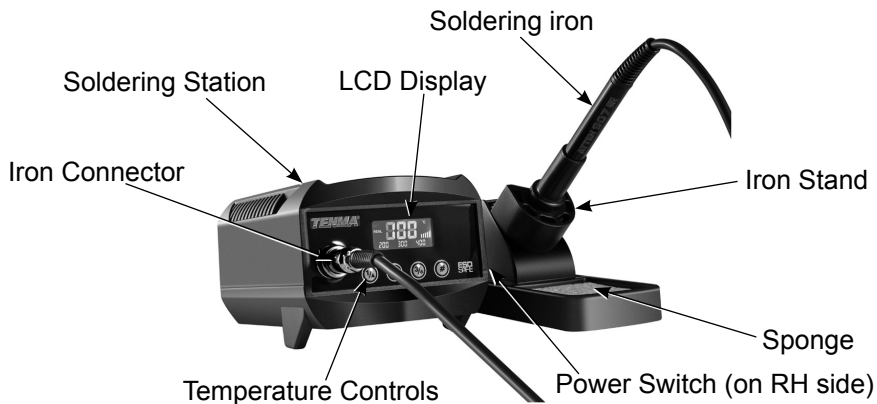
## **IMPORTANT SAFETY INFORMATION**

- When using electrical appliances basic safety precautions should always be followed.
- Check that the voltage indicated on the rating plate corresponds with that of the local network before connecting the appliance to the mains power supply.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Do not leave the soldering station unattended, while it is powered on.
- Never touch the soldering tip or the surrounding metallic parts before the soldering tip has cooled down completely.
- Do not use the product near flammable items.
- Turn the power off when this product is not in use.
- The soldering iron must be placed on its stand when not in use.
- Before storage, turn the power off and allow the product to cool down to room temperature.
- Do not use this product for anything else other than that for which it is designed.
- Do not use this appliance with wet hands.
- Do not expose the soldering station to rain or moisture.
- Ensure there is sufficient space and ventilation around the appliance to allow the escape of heat and/or fumes.
- This appliance must be earthed.

## **WHAT'S INCLUDED?**

- 1 Iron holder with tip cleaning sponge
- 1 Soldering iron
- 1 Control station
- 1 User manual

## **OVERVIEW**

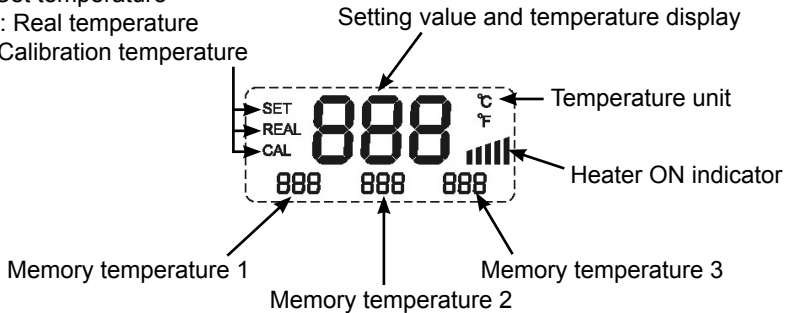


### Display of status:

SET: Set temperature

REAL: Real temperature

CAL: Calibration temperature



## OPERATION

- Before using the soldering iron for the first time, wet the cleaning sponge and place it in the iron holder tray. Keep it damp during use.

**WARNING:** switch off the mains power before connecting or disconnecting the iron or the control station may be damaged.

- Connect the soldering iron to the control station by inserting the connector and tightening the locking ring finger tight.
- Place the iron in the holder and turn on the mains power.

### Setting the temperature:

- The digital display will initially display the current set temperature (the value from the last usage) for three seconds.
- After a few seconds it will display the actual temperature in °C or °F.
- Pressing and holding the “up” or “down” button, you can quickly either increase or decrease the temperature.
- The display screen shows the set temperature value followed by the actual tip temperature.

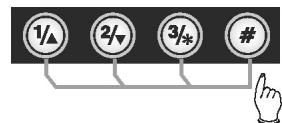


### Temperature unit exchange:

- In the power-off condition, press and hold the “#” button, then turn on the station. The temperature unit will change between “°C” and “°F” and will store the setting automatically.

### Storing and recalling 3 preset temperatures:

- The three preset buttons can be used to store quick access temperatures for instant recall.
- Press and hold the “#” key followed by buttons 1, 2 or 3, you can store the current temperature into memory.
- Press buttons 1, 2 or 3 once to use the set temperature stored as displayed at the bottom of the LCD screen.



### Temperature Lock Function:

- Temperature lock and unlock functions can be entered by pressing and holding “#” for three seconds.
- “Loc”, located in the bottom right of the LCD screen shows when the temperature lock is active.
- Whenever the machine is locked the function keys can no longer be used.



### CALIBRATION

**Note:** calibration may be needed after changing the tip for one of a different shape.

- Enter into the calibrating mode by pressing and holding the “\*” key for three seconds.
- Set the temperature to 300°C and use a tip thermometer to verify the actual tip temperature.
- Adjust the tip temperature by pressing the “up” or “down” buttons until the displayed temperature matches the measured temperature.
- Press the “\*” button again to save and exit calibration mode.

### REPLACING SOLDERING TIPS

- Always turn the power off when removing or inserting a tip.
- Allow the soldering tip to cool down to room temperature.
- Unscrew the retaining nut and remove the outer sleeve.
- Pull off the tip and replace with a new soldering tip.
- Reassemble in reverse sequence.

### INTERCHANGEABLE SOLDERING TIPS

- A range of varying diameter and shaped replacement tips are available.
- See our website or printed catalogue for part numbers.

### TROUBLESHOOTING

- |  |  |
|--|--|
| • Tip heats intermittently -                   | Mains cord damaged or a loose connection.<br>Defective heating element.      |
| • Tip will not reach set temperature-          | Temperature requires calibration.<br>Defective heating element               |
| • Solder will not wet the tip-                 | Tip temperature is too high.<br>Tip is badly oxidized and requires cleaning. |
| • Increased resistance between tip and ground- | Check the tip sleeve nut is tightened.                                       |

## SPECIFICATIONS

Power Consumption	80W
Input Voltage	220-240V~50Hz
Temperature Range	150-480°C (302-896°F)
Temperature Stability	+/-2°C (still air and no load)
Temperature Accuracy	+/-10°C
Setting Mode	3 presets and variable 2 button adjustment
Tip to ground impedance	$\leq 2\Omega$
Tip to ground voltage	$\leq 2\text{mV}$
Box Dimensions (L x W x H)	250 x 210 x 134mm
Weight	2.0kg



**INFORMATION ON WASTE DISPOSAL FOR CONSUMERS OF ELECTRICAL & ELECTRONIC EQUIPMENT.**

When this product has reached the end of its life it must be treated as Waste Electrical & Electronics Equipment (WEEE). Any WEEE marked products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used. Contact your local authority for details of recycling schemes in your area.



Made in China. PR2 9PP  
Man Rev 1.0