Circuit Specialists

Soldering Equipment

CSI-STATION-3DLF

- Thermo Control
- Digital Display
- Compatible with lead free solder and leaded solder

User's Manual

Circuit Specialists, Inc, Mesa, AZ. USA www.CircuitSpecialists.com

Circuit Specialists Europe, Ltd., Cheshire, U.K. www.CircuitSpecialists.eu

Description

Thank you for purchasing your new CSI Station-3DLF soldering station. This unit is a 60 watt system that is capable of soldering leaded solder or lead free solder without changing tips or soldering handles. It is a versatile system featuring microprocessor controls and 3 pre-set temperature settings.

Features

- New compact casing with large LCD screen for clear & convenient temperature readings
- PID power control loop with constant temperature set by MCU for more precise temperature control
- Three programmable preset temperature settings for easier temperature changes
- Temperature may be displayed in Fahrenheit or Celsius scale
- Computerized temperature calibration feature can compensate the difference between the displayed temperature and the actual temperature
- Heating element malfunction alert

General Specifications

Input Voltage	220VAC +/-10% 50Hz for units sold from Europe/ 110 VAC +/- 10% 60Hz for units sold from the U.S.A.
Power Consumption	60 Watt (max)
Temperature Range	150 deg C- 450 deg C (302 deg F – 842deg F)
Output Voltage to iron	28VDC
Temperature Stability	+/- 1% in static mode
Display	Liquid Crystal
Calibration method	Digital Calibration
Temperature Range for Calibration	50 deg C to -50 deg C (122 deg F to - 58 frg F)
Ground Impedance	<2 ohm
Ground Voltage	<2mV
Heating Element	2 core ceramic
Grounded tip to prevent ESD	

Operation

- Plug the soldering iron handle into the front panel socket
- · Place the soldering iron holder in a convenient location close to the main unit
- Turn the power switch to "on" position
- Adjust the temperature per the instructions below

Adjusting the temperature

- Temperature may be adjusted by using the UP (1) and DOWN (2) keys to raise and lower the temperature.
- Press and hold the corresponding key until the display indicates the desired temperature. You may fine tune the temperature value by using short press/release actions.
- Release all keys to save the temperature setting

Operation of the programmable PRE_SET buttons

- HotKey button 1 comes pre-programmed at 200 degrees C
- HotKey button 2 comes pre-programmed at 300 degrees C
- HotKey button 3 comes pre-programmed at 380 degrees C

To use these pre-set HotKeys, just press and release the desired button and the iron will adjust to the corresponding temperature.

To reset and store your own temperature(s) into these Preset HotKeys, simply use the 1(up) and 2(down) keys to set the station to the desired temperature. Then press and hold the # key & simultaneously press and release the 1, 2, or 3 key. Then RELEASE the # key to store this new temperature into the desired HotKey position

Temperature calibration

The CSI-Station-3DF allows the user to calibrate the temperature of the tip after tip replacement to a new tip style.

- Enter calibration mode by pressing knob 3/* and hold it down for more than 3 seconds
- Use the UP (1) and DOWN (2) keys to change the temperature offset value so that the temperature displayed matches the actual iron temperature.
- Press the "*"(3) key to store the offset calibration value



Note:

In order to use this feature, user would need a contact thermometer at the tip surface to measure actual tip temperature and use the offset procedure above to calibrate the display reading to correspond to the temperature shown on the external thermometer device. Calibration after tip change is not required. The station reads a temperature from the heating element core which is normally sufficient for most applications.

Change Between Celsius & Fahrenheit Scales

In the power off position, press & hold knob #. Then turn the power on. This procedure toggles the station between C & F. The station will hold the new setting until the process is repeated.

Failure of Soldering Iron Alarm

When the system display shows ${\bf H}$ - ${\bf E}$ or ${\bf S}$ - ${\bf E}$, this indicates a failure within the soldering wand.

Replacement soldering wands are available from Circuit Specialists USA (www.CircuitSpecialists.com) and from Circuit Specialists Europe (www.CircuitSpecialists.eu)

Accessories

In the power off position, press & hold knob #. Then turn the power on. This procedure toggles the station between C & F. The station will hold the new setting until the process is repeated.

A full range of tips are available for the CSI-STATION-3LF. The selection may be viewed at CircuitSpecialists.com or for European customers, CircuitSpecialists.eu. Also replacement soldering wands for this station are available.