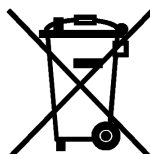
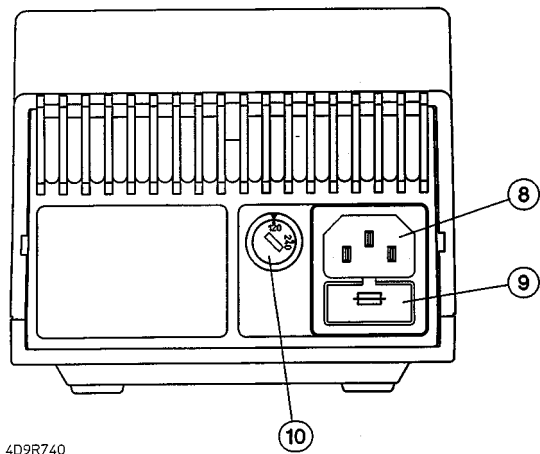
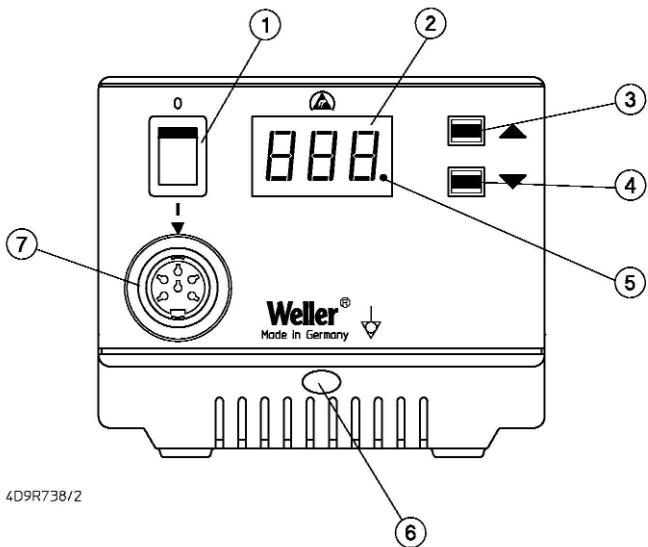




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Thank you for placing your trust in our company by purchasing the Weller Soldering Station WSD 151. Production was based on stringent quality requirements which guarantee the perfect operation of the device.



1. Caution!

Please read these Operating Instructions and the attached safety information carefully prior to initial operation. Failure to observe the safety regulations results in a risk to life and limb.

The manufacturer shall not be liable for damage resulting from misuse of the machine or unauthorised alterations.

The Weller Soldering Station WSD 151 corresponds to the EC Declaration of Conformity in accordance with the basic safety requirements of Directives 2004/108/EC, 2006/95/EC and 2011/65/EU.

2. Description

2.1 Control unit

The soldering station WSD 151 was specially developed for soldering tasks with an extremely high heat requirement. The 150 W heater power combined with the optimal transfer of heat to the soldering iron bit guarantees the high performance capability of the WSP 150 soldering iron. As an alternative to the WSP 150, all the soldering tools listed in the list of accessories can be connected to the unit. A microprocessor makes operation simple and comfortable. The digital electronic control system guarantees the best possible control performance for various soldering tools. The soldering tools themselves are recognized automatically by the soldering station and assigned the corresponding control parameters. The high-powered 24 V heating elements make excellent dynamic performance possible, so that the soldering tools can be used universally.

Various equipotential bonding possibilities for the soldering

iron tip, zero power switch and antistatic design of control unit and iron complete the high quality standard. The possibility of connecting an external input unit further increases the variety of functions of this soldering station. With the optional input units WCB 1 and WCB 2 it is possible to implement time functions, locking functions, etc. Integrated temperature gauge and PC interface are included in the extended scope of the input unit WCB 2.

The temperature for the WSP 150 soldering iron can be set over the range from 50°C - 550°C via 2 buttons (Up/Down). The adjustment range is automatically limited to 450°C if a different soldering tool is connected. The setpoint and actual value are displayed digitally. A blinking red LED in the display signals that the preset temperature has been reached – this serves as a optical regulator. Constant illumination means that the system is heating up.

2.2 Soldering irons

LR 21: Our "standard" soldering iron. With a power of 50 watts and a wide spectrum of soldering tips (ET series) this soldering iron can be used anywhere in the electronics sector.

LR 82: High-performance 80 watt soldering iron for soldering work with high heat requirements. The soldering tip is attached by a bayonet catch to ensure correct position when using different tips.

WP 80: The soldering iron WP 80 / WSP 80 is characterized by its capacity for reaching the soldering temperature quickly and precisely. Its slim design and heating power of 80 watts makes universal usage possible from extremely fine to high-temperature soldering work. Work can be continued immediately after switching soldering tips since the temperature is reached again quickly.

Technical Data

Dimensions in mm:	166 x 115 x 101 (l x w x h)
Supply voltage (8):	230 V / 50/60 Hz 240 V/120 V / 50/60 Hz (dual version) 100 V / 50/60 Hz
Power input:	150 W
Class:	1 (control unit) and 3 (soldering iron)
Fuse (9):	230 V; T800mA 240 V/120 V; T1,6A 100 V; T1,6A
Temp. control:	50°C - 550°C
Precision:	± 11°C
Equipotential bonding (6):	Via a 3.5 mm jack bush (initial state-hard-grounded)

WSP 150: Special 150 W soldering iron for soldering tasks with an extremely high heat requirement. Easy to use shape combined with high performance capability. Fast warm-up time and precise temperature regulation characterise the soldering irons in this power range.

See "Accessories" for additional tools.

3. Starting

Assemble soldering iron rest (see exploded drawing). Place the soldering iron in the safety rest. Insert the soldering iron plug into the connection bush (6) of the control unit and lock by turning to the right. Check that the power supply corresponds to the specifications on the name plate and that the power switch (1) is in the OFF position. On version that can be switched, set the voltage on the selection switch (set in the factory to 240 V). On version that can be switched, set the voltage on switch (10) and insert the appropriate fuse (9). Connect the control unit to the power supply. Switch on the unit at the power switch (1). When switching on the unit, a self-test is carried out in which all display elements (2) are switched on briefly. The electronic system then switches automatically to the actual temperature and displays this value. LED (5) illuminates. These light emitting diodes are optical regulator monitors. Constant illumination means that the system is heating up. The blinking light signals that the operating temperature has been reached.

Setting the temperature

The digital display (2) shows the actual value temperature. By pressing the UP or DOWN key (3, 4) the digital display (2) switches to the setpoint. The setpoint can be changed by tapping or by firmly pressing the UP or DOWN button (3, 4) in the desired direction. Pressing the button will change the setpoint quickly. The digital display (2) returns automatically to the actual value approximately 2 seconds after releasing the button.

Standard setback:

Setting back the set temperature to 150°C. The setback time, which follows the switching of the soldering station to standby mode, is 20 minutes. After three setback times (60 minutes) the "Auto-off" function is activated. The soldering tool is switched off (blinking line on the display).

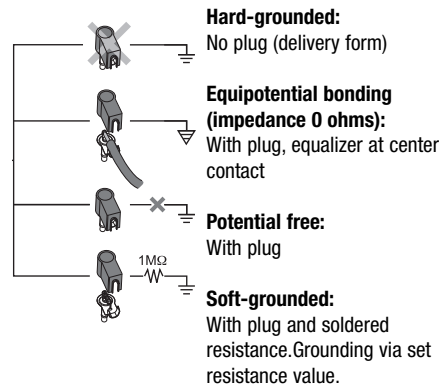
Setting: When switching on, hold the "UP" key (3) until ON or OFF appears in the display. Repeat this step to change.

Maintenance

The transition between the heating element / sensor and the tip of the soldering iron may not come in contact with dirt, foreign particles or become damaged, since this affects the precision of the temperature control.

4. Equipotential bonding

The various circuit elements of the 3.5 mm jack bush (6) make 4 variations possible:



5. Instructions for use

For initial heating, coat the selective tinnable tip with solder. This removes any oxidation or dirt on the tip which may have occurred during storage. During pauses between soldering and before storing the soldering iron, ensure that the tip of the soldering iron is well coated. Do not use aggressive fluxing agents.

Note: Always ensure the proper position of the soldering iron tip.

These soldering irons have been adjusted for an average-size tip. Deviations can occur due to exchanging of the tip or using other tip designs.

External input unit WCB 2 (optional)

The following functions are possible when using an external input unit.

Offset:

The real temperature of the soldering iron can be changed by $\pm 40^\circ\text{C}$ by input of a temperature offset.

Setback:

Reduction of the setpoint temperature to 150°C (standby). The setback time can be set at 0-99 minutes after the soldering station has switched to standby mode. After a period equal to three times the set-back time, the "Auto Off" function is activated. The soldering iron is switched off (flashing dash on the display).

Lock:

Locking the setpoint temperature. Settings cannot be changed after the soldering station has been locked.

°C/°F:

Switching the temperature display from °C to °F, and vice versa.

Window:

Limitation of the temperature range to max. $\pm 99^{\circ}\text{C}$ based on a locked temperature resulting from the "LOCK" function. The locked temperature represents the median point of the adjustable temperature range.

Cal:

Re-adjustment of the soldering station (WCB 2 only).

PC interface:

RS232 (WCB 2 only).

Temp. gauge:

Integrated temperature gauge for thermal element Type K (WCB 2 only).

6. Accessories

T005 29 170 98	Soldering Iron WSP 150
T005 29 161 99	Soldering iron set WSP 80
T005 29 180 99	Soldering Iron WP 80
T005 33 131 99	Soldering iron set MPR 80
T005 33 112 99	Soldering iron set LR 21, antistatic
T005 33 113 99	Soldering iron set LR 82
T005 33 133 99	Soldering iron set WTA 50
T005 27 028 99	Preheating plate WHP 80
T005 27 040 99	Soldering bath WSB 80
T005 25 030 99	Thermal insulating unit WST 20
T005 31 180 99	External input unit WCB 2
T005 33 155 99	Soldering iron set WMP
WPHT	Stop and go iron stand (WMP)

7. Scope of supply

WSD 151

Control unit
Soldering iron WSP 150
Power cable
Operating instructions
Soldering iron rest
Jack
Safety Information

PUD 151

Control unit
Power cable
Operating instructions
Jack
Safety Information

Illustration: Circuit diagram, see Page 71

Illustration: Exploded view, see Page 72

Subject to technical alterations and amendments!

**See the updated operating instructions at
www.weller-tools.com.**

