

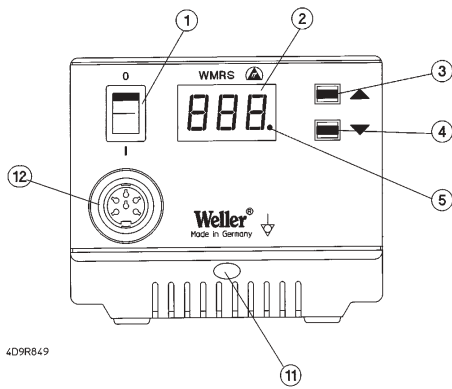
Weller®

WMRS

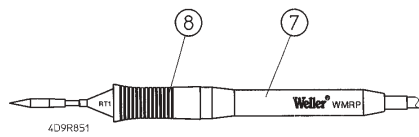
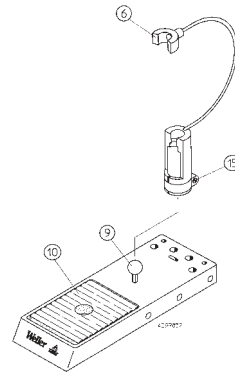


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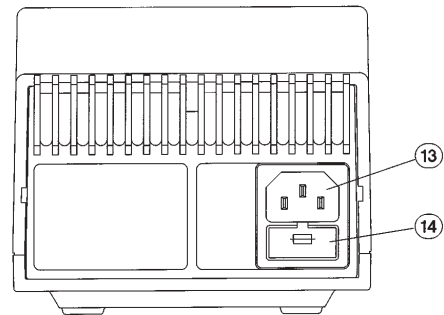
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4D9R849



4D9R851



4D9R850

1. Mains switch
2. Display
3. UP button
4. DOWN button
5. Visual control check
6. Switching holder WMRH
7. Soldering iron handle
8. Soldering iron tip
9. Ball joint
10. Cleaning sponge
11. Potential balance
12. Connection bush for soldering iron
13. Power supply connector
14. Fuse
15. Thumbscrew Ball joint

- WTA 50:** The desoldering tweezers WTA 50 were designed specially for unsoldering SMD components. Two heating elements (2 x 25 W), each with its own temperature sensor, guarantee the same temperature on both legs.
- LR 82:** Powerful 80 W soldering iron for soldering tasks with high heat requirements. The soldering tip is secured by means of a bayonet catch, which ensures that tips are always in the correct position after a change.
- WMP:** The Weller Micro Soldering Iron WMP is suitable for processing SMD electronics due to its manageable design. The short distance between grip and soldering tip makes ergonomic handling of the 65 W soldering iron possible when carrying out very fine soldering tasks.

See Accessories for a list of other tools that can be connected.

3. Commissioning

Assemble soldering iron holder, place the soldering tool in the safety rest. Insert the soldering iron plug in the connection socket (12) of the control unit and lock by turning slightly to the right. Check that the mains voltage matches the specification on the identification plate and that the mains switch (1) is switched off. Connect the control unit to the mains. Switch on the unit at the mains switch (1). The unit performs a self-test when it is switched on, whereby all display elements (2) are in operation. Following this, the set temperature (specified value) and the temperature version (°C/°F) are displayed for a short time. After this, the electronics system switches automatically to the actual value display. The red dot (5) in the display (2) lights up. This dot is used as a visual control check. When lit up permanently, this indicates that the system is heating up. Flashing indicates that service temperature has been reached.

Temperature setting

As a rule, the digital display (2) shows the temperature actual value. By actuating the UP or DOWN button (3) (4), the digital display (2) switches to the currently set specified value. The specified value (flashing display) can now be changed by tapping or holding in the UP or DOWN button (3) (4) in the corresponding direction. If the button is pressed permanently, the specified value changes in fast mode. Approx. 2 s after the button is released, the digital display (2) switches automatically back to the actual value.

Temperature decrease WMRP

Standard setback OFF setting (ex-works setting)

If the soldering iron has been placed in the safety rest, the heating is switched off automatically. When the soldering iron is then removed, the heating switches back on again. The set temperature is reached again after a short time thanks to the fast heating-up time of the soldering tip.

Standard setback setting ON

If the soldering iron has been placed in the safety rest, the temperature is decreased automatically to 150 °C. After 20 mins. (setback time), the heating is shut down completely (flashing line in the display). When the soldering iron is removed, the soldering station regulates back to the specified value. The set temperature is reached again after a very short time thanks to the fast heating-up time of the soldering tip.

Activating/deactivating the standard setback ON/OFF

When switching on the unit, press and hold in the "UP" button (3) until "ON" appears in the display. When the "UP" button is released, the setting is saved. Same procedure for switching off. "OFF" appears in the display (ex-works setting).

Standard setback (function with optional tool, no WMRP)

Standard setback setting OFF (ex-works setting)

No temperature decrease active.

Standard setback setting ON

If the soldering tool is not being used, the temperature is decreased automatically after 20 mins. to the standby value 150 °C (300 °F). After 3 x setback time (60 mins.), the "AUTO OFF" function is activated. The soldering iron is switched off (flashing line in the display). If very fine soldering tips are being used, the setback function may be impaired. In this case, the use of the WPHT switching holder is recommended (see accessories).

Note:

The setback time can be set with the external input device WCB2 from 0 to 99 mins.

4. Potential balance

Due to the different circuits in the 3.5 mm switch jack socket (11), 4 variations are possible:

Hard-earthed:	without plug (delivery status)
Potential balance (impedance or Ohm):	with plug, balance line at middle contact
Potential-free:	with plug
Soft-earthed:	with plug and soldered resistor. Earthing via selected resistance value.

5. Operating guidelines

Soldering tip change

Caution! Risk of injury through burning.

The soldering tip must only be changed when it is cold. Tools are not required to change the soldering tip. The soldering tip is inserted in the rear section of the grip and can be removed by simply pulling the soft grip of the soldering tip (8).

Important:

Always ensure that the soldering tip is properly seated.

When fitting the new soldering tip, ensure that the soldering tip is inserted completely up to the stop in a single operation. Operation with a soldering tip that is not completely inserted can lead to malfunctions.

During the first heating-up period, coat the selected tinnable soldering tip with solder. This removes oxide layers and contamination on the soldering tip caused by storage. During soldering pauses and before setting down the soldering iron, always ensure that the soldering tip is well tinned. Never use an aggressive flux.

Always keep the cleaning sponge (9) damp. Use only distilled water.

The soldering units have been calibrated for a medium soldering tip. Deviations may result through tip changing or the use of other tip shapes.

External input device WCB 2 (option)

The following functions are available if an external input device is used:

Offset:

The actual soldering tip temperature can be changed by ± 40 °C through the input of a temperature offset.

Setback:

Adjustable temperature decrease, as described in Section 3. The setback times after which a temperature decrease is effected can be set from 0-99 minutes.

Lock:

Locking of specified temperature. After locking, no more setting changes at the soldering station are possible.

°C/°F:

Switching the temperature display from °C to °F and vice versa. Pressing the "Down" button when switching on displays the current temperature version.

Window:

Limitation of the temperature range to max. ± 99 °C, starting from a temperature locked by the "LOCK" function. The locked temperature thus represents the middle of the adjustable temperature range. In the case of units with potential-free contact (optoelectronic coupler output), the "WINDOW" function is used to set a temperature window. If the actual temperature is within the temperature window, the potential-free contact (optoelectronic coupler output) is connected through.

Cal: (function cannot be used for WMRS)

Recalibration of the soldering station and factory setting (FSE). Reset all setting values to 0, temperature 350 °C 660 °F.

PC interface: RS232

Temperature measuring device:

Integrated temperature measuring device for thermocouple model K

6. Fault messages

Display	Fault	Correction
- - -	No tip inserted or defective (WMPR), No tool inserted.	insert soldering tip or tool
tip	Soldering tip not completely inserted (WMPR)	Remove soldering tip and insert completely
F01	Sensor calibration Pt missing	Recalibrate soldering station with WCB2
F11	Thermocouple 1 calibration (WMPR)	Contact manufacturer
F12	Thermocouple 2 calibration (WMPR)	Contact manufacturer

7. Soldering tips WMPR

005 44 601 99	RT1 Needle tip
005 44 602 99	RT2 Point tip R02
005 44 603 99	RT3 Chisel tip 1.1 X 0.2
005 44 604 99	RT4 Chisel tip 1.3 X 0.8
005 44 605 99	RT5 Chisel tip 0.8 X 0.2 bent 30°
005 44 606 99	RT6 Round shape dia. 1.2 chamfered 45°
005 44 607 99	RT7 Knife tip 2.8, 45°

8. Accessories

005 29 161 99	Soldering iron set WSP 80
005 33 131 99	Soldering iron set MPR 80
005 33 112 99	Soldering iron set LR 21 antistatic
005 33 113 99	Soldering iron set LR 82
005 33 155 99	Soldering iron set WMP
005 33 133 99	Desoldering set WTA 50
005 27 028 99	Pre-heating plate WHP 80
005 25 030 99	Thermal insulation stripping device WST 20
005 31 180 99	External input device WCB2
WPHT	Switching holder (WMP)
WPH80T	Switching holder (WSP 80)

9. Scope of delivery

WMRS
Control unit
Soldering iron WMPR
Mains cable
Soldering iron holder WMRH
Jack plug
Operating Instructions
Safety information

Circuit diagram, see page 86

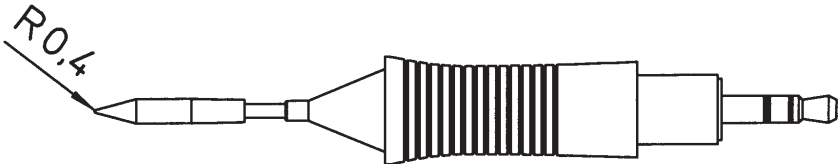
Exploded drawing, see page 85

Subject to technical alterations and amendments.

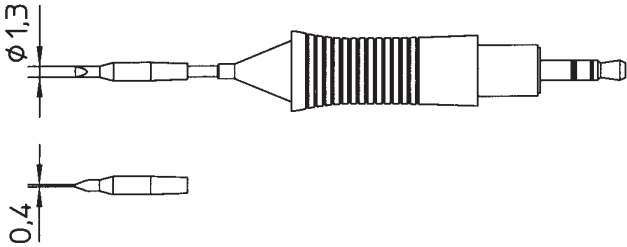
005 44 601 99 RT1 Needle Tip



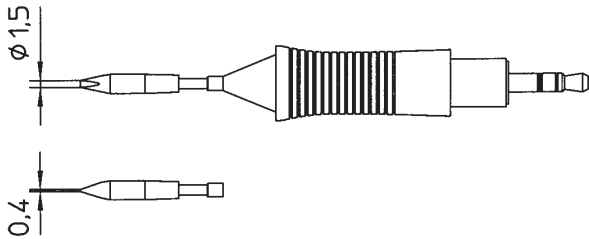
005 44 602 99 RT2 Point Tip R0,4



005 44 603 99 RT3 Chisel Tip 1,3x0,4

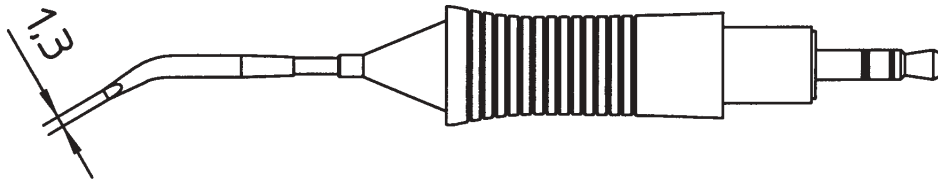


005 44 604 99 RT4 Chisel Tip 1,5x0,4

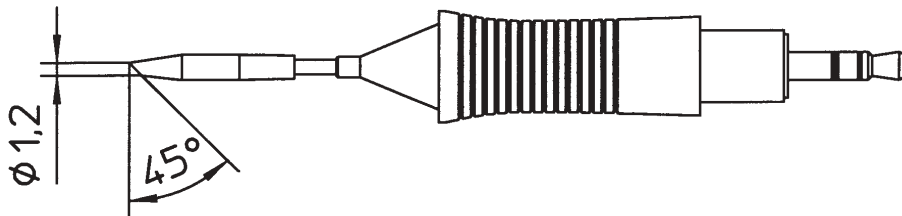


Soldering Tip

005 44 605 99 RT5 Chisel Tip 30° bent 1,3x0,4



005 44 606 99 RT6 Round Tip 1,2x45°



005 44 607 99 RT7 Knife Tip 2,2x45°

