Weller®

WR 2, WR 3M

DE Originalbetriebsanleitung
GB Translation of the original instructions
ES Traducción del manual original
FR Traduction de la notice originale
IT Traduzione delle istruzioni originali
PT Tradução do manual original
NL Vertaling van de oorspronkelijke gebruiksaanwijzing
SV Översättning av bruksanvisning i original
DK Oversættelse af den originale brugsanvisning
FI Alkuperäisten ohjeiden käännös
GR Μετάφραση του πρωτοτύπου των οδηγιών χρήσης
TR Orijinal işletme talimatı çevirisi
CZ Překlad původního návodu k používání
PL Tłumaczeniem instrukcji oryginalnej
HU Eredeti használati utasítás fordítása
SK Preklad pôvodného návodu na použitie
SL Prevod izvirnih navodil
EE algupärase kasutusjuhendi tõlge
LV Instrukciju tulkojumam no oriģinālvalodas
LT Originalios instrukcijos vertimas
BG Превод на оригиналната инструкция
RO Traducere a instructiunilor originale
HR Prijevod originalnih uputa
RU Оригинальное руководство по эксплуатации

For your safety

EN

Thank you for the confidence you have shown in buying this device.

The device has been manufactured in accordance with the most rigorous quality standards which ensure that it operates perfectly.

Read these instructions and the accompanying safety information carefully before starting up the device and starting work with the device.

Keep these instructions in a place that is accessible to all users.

These instructions contain important information which will help you to start up, operate and service the device safely and correctly as well as to eliminate simple faults and malfunctions yourselves.

The device has been manufactured in accordance with state-of-the-art technology and acknowledged regulations concerning safety.

There is nevertheless the risk of personal injury and damage to property if you fail to observe the safety information set out in the accompanying booklet and the warnings given in these instructions.

Warning! Fire and explosion hazard!
Hot tools represent a fire hazard

- Always place the soldering tool in the safety rest while not in use.
- Do not direct hot air soldering tools at people or inflammable objects.
- Keep explosive and flammable objects well away from the device.
- Do not cover the device.

Warning! Danger of injury

The device or parts of the device may fall off during transportation.

Specified Conditions Of Use

Supply unit for WELLER soldering tools.
Use the repair station only for the purpose indicated in the operating instructions of soldering and desoldering under the conditions specified herein.

Flammable gases and liquids may not be extracted.

The device may only be used with correctly fitted and suitable filter cartridges.

Replace filter cartridges when full.

Only use the device indoors. Protect against moisture and direct sunlight.

Intended use of the soldering station/ desoldering station also includes the requirement that you

- adhere to these instructions,
- observe all other accompanying documents,
- comply with national accident prevention guidelines applicable at the place of use.

The manufacturer will not be liable for unauthorised modifications to the device.

For your safety

User groups

Due to differing degrees of risk and potential hazards, several work steps may only be performed by trained experts.

Work step	User groups
Default soldering parameters	Specialist personnel with technical training
Replacing electrical replacement parts	Electricians
Default maintenance intervals	Safety expert
Operation Filter change	Non-specialists
Operation Filter change Replacing electrical replacement parts	Technical trainees under the guidance and supervision of a trained expert

Starting up the device

Caution!

Please adhere to the operating instructions of the connected devices.

Put the tool into operation as described in the chapter „Placing into operation“.

Check to see if the mains voltage matches the ratings on the nameplate.

Make sure the machine is switched off before plugging in.

After the device has been switched on, the microprocessor carries out a self-test in which all the segments are briefly in operation.

Soldering and desoldering

Carry out soldering work as directed in the operating instructions of your connected soldering tool.

Handling the soldering tips

- Coat the selective and tinnable soldering tip with solder when heating it up for the first time. This removes oxide coatings which have formed during storage and impurities from the soldering tip.
- Make sure that the soldering tip is well coated with solder during breaks between soldering work and prior to storage of the device.
- Do not use aggressive fluxing agents.
- Always make sure that the soldering tips are fitted properly.
- Select as low a working temperature as possible.
- Select the largest possible soldering tip shape for the application.
  Rule of thumb: the soldering tip should be roughly as large as the soldering pad.
- Coat the soldering tip well with solder to ensure that there is efficient heat transfer between the soldering tip and the soldering area.
- Prior to extended breaks between soldering work, switch off the soldering system or use the Weller function to reduce the temperature when the soldering equipment is not in use.
- Coat the tip with solder prior to storage if you do not intend to use the soldering iron for an extended period of time.
- Apply solder directly to the soldering area, not to the soldering tip.
- Change the soldering tips using the designated tool.
- Do not apply mechanical force to the soldering tip.

Notice

The control units have been adapted to hold a medium-sized soldering tip. Discrepancies may occur if the tip is changed or a different shaped tip is used.

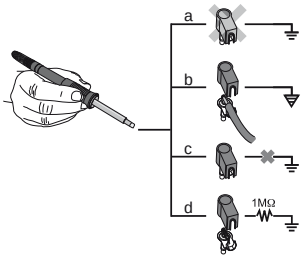
For your safety

Overload cut-out

EN

To avoid overloading the station, power output is automatically reduced in the event of an overload.

Equipotential bonding



Four variants are possible by connecting the 3.5 mm jack socket differently:

a	Hard-grounded	supplied without plug.
b	Equipotential bonding	with plug, equaliser at centre contact.
c	Floating	with plug
d	Soft-grounded	with plug and soldered resistor. Grounded through selected resistor.

Carrying out a firmware update (WR 3M)

Care and maintenance

Warning!

Before doing any work on the machine, pull the plug out of the socket.

Warning!

Use original replacement parts only.

Warning! Risk of burns

- Only replace solder tips when cold
- Replace and clean suction nozzles only when hot and using the suitable tool
- Only replace hot air nozzles using the suitable tool
- Only clean or replace solder collection tubes when cold

Clean the operator panel, if dirty, using a suitable cleaning cloth.

Filter change

Check the filter regularly for contamination, and replace it if necessary.

Warning!

Failure to use a filter will cause irreparable damage to the vacuum pump.

- Check before starting soldering whether a main filter is inserted.

Contaminated filters must be treated as special waste.
Dispose of replaced equipment parts, filters or old devices in accordance with the rules and regulations applicable in your country.
Wear suitable protective gear.

Standby Temp. (STANDBY)

Menu access ▶ - 1 -

After activating the Setback function or after pushing the ECO button (WR 2), the temperature is automatically reduced to Standby temperature. The display flashes the actual temperature. STANDBY appears on the display.

Setback time (SETBACK)

Menu access ▶ - 1 -

If the soldering tool is not in use, the temperature is reduced to Standby temperature on expiration of the preset Setback time.
SETBACK appears on the display.

To exit Standby mode, push the „UP / DOWN“ buttons or ECO (WR 2).

Depending on the tool in use, the finger switch or the safety rest deactivates Standby mode.

The on-time of the hot air flow of the HAP 200 can be limited in increments of 1 to between 0 and 60 sec. The set time is then identical for all 3 channels.

The factory default is 0 s („OFF“), i.e. air flows only as long as the button on the hot air tool or the optional footswitch is pressed.

Option	Description
OFF	No duration defined (factory setting)
1-60 s	Individually adjustable

Vacuum pre-feed (VAC On)

Menu access ▶ - 1 -

In order to prevent the pump from starting prematurely or to ensure a defined soldering-joint preheating time, it is possible to set an ON delay.

Option	Description
0 sec	OFF: vacuum pre-feed function is OFF (factory setting)
1- 9 sec	ON: vacuum pre-feed time, individually

Vacuum run-on (VAC Off)

Menu access ▶ - 1 -

To prevent the desoldering iron from becoming clogged, it is possible to set a vacuum run-on time.
(factory setting 2 s)

Option	Description
0 sec	OFF: vacuum run-on function is OFF (factory setting)
1- 5 sec	ON: vacuum run-on time, individually adjustable

Parameter menu

lock function

Menu access ▶ - 1 -

EN

After the lock has been activated, only the following buttons on the soldering station are enabled:

WR 2: ┌ 1 ┐ , ┌1·2┐ , ┌ 2 ┐ , ECO , AIR

WR 3M: ┌ 1 ┐ , ┌ 2 ┐ , ┌ 3 ┐ ┌1·2·3┐ , Pick Up , AIR

All other settings are disabled until the repair station is unlocked again.

Notice

If you want only one temperature value to be selectable, the control keys fixed temperature keys) must be set to the same temperature value.

Locking the soldering station

Select menu option. „OFF“ appears on the display. The key symbol is flashing.

Set the desired three-digit locking code (between 001 and 999) using the UP / DOWN buttons.

WR 2: Press button ┌ 2 ┐ for 5 seconds.

WR 3M: Press button ┌ 3 ┐ for 5 seconds.

The code is stored.

The key symbol is displayed. The lock is active. The display switches to the main menu.

Unlocking the soldering station

1. Select menu option. „ON“ appears on the display. The key symbol is displayed.
2. Set the three-digit locking code using the UP / DOWN buttons.
3. **WR 2:** Press button ┌ 2 ┐ .
   WR 3M: Press button ┌ 3 ┐ .
4. The station is now unlocked. The display switches to the main menu.

Forgotten code?

Please contact our Customer Service: technical-service@weller-tools.com

Pressure gauge threshold (LEVEL)

Menu access ▶ - 2 -

This function can be used to define the maintenance interval of the desoldering tool. This is done by setting the value in mbar at which the electric pressure gauge issues a warning signal when the intake system is contaminated (LED of the vacuum pump switches from green to red). The set value is dependent on the suction nozzles used.

Adjustable	-400 mbar to -800 mbar
factory setting	-600 mbar

1. The system (tips and filter) must be free.
2. Select the menu item „Pressure gauge threshold“ in the menu.
3. Set the „Pressure gauge threshold“ pressure value with the UP or DOWN button. The status LED switches back and forth between red and green. Use the UP button to increase vacuum by 50 to 80 mbar, then pinch the vacuum tube and check whether the LED switches from green to red.

Station code (Remote ID)

Menu access ▶ - 2 -

WR 3M

A station code (Remote ID) can be assigned to each station, allowing the station to be clearly identified via the USB port.

Option	Description
0-999	Individually adjustable

Parameter menu

Calibration (Factory Calibration Check FCC)

Menu access ▶ - 2 -

EN

You can use the FCC function to check the temperature precision of the repair station and even out possible deviations. For this purpose, the soldering-tip temperature must be measured with an external temperature meter and a temperature measuring tip assigned to the soldering tool. The corresponding channel must be selected prior to calibration.

1. Insert the temperature sensor (0.5 mm) of the external temperature meter into the temperature measuring tip.
2. Select the menu item FCC in Menu 2.
3. a) Press the DOWN button. -> Calibration point 100 °C / 210 °F is selected.
   b) Press the UP button. -> Calibration point 450 °C / 840 °F is selected.
   The soldering tip is now heated up. The control indicator flashes as soon as the temperature is constant.
4. Compare the temperatures indicated by the meter with the readings on the display.
5. **WR 2:** Push the ┌1·2 ┐ (Set) button to confirm the adjusted value.
   WR 3M: Push the ┌1·2 3 ┐ (Set) button to confirm the adjusted value.
   The temperature deviation is now reset to 0.
   Calibration at 100 °C / 210 °F / 450 °C / 840 °F is now complete.
6. Use the UP or DOWN button to set the difference between the value indicated on the external meter and the value indicated on the repair station.
   Maximum possible temperature adjustment ± 40 °C (± 70 °F).
   WR 2: Push button ┌ 2 ┐ to exit the menu option (EXIT).
   WR 3M: Push button ┌ 3 ┐ to exit the menu option (EXIT).
7. **WR 2:** Exit Menu 2 with button ┌ 2 ┐.
   WR 3M: Exit Menu 3 with button ┌ 2 ┐.

Resetting calibration to factory settings

1. Select the menu item FCC in Menu 2.
2. **WR 2:** Press and hold down button ┌ 2 ┐.
   WR 3M: Press and hold down button ┌ 3 ┐.
3. Then press the UP and DOWN buttons simultaneously. „FSE“ (Factory Setting Enabled) appears on the display.
   The repair station is now reset to the factory calibration.

Activation / Deactivating the special button (SP Button)

Menu access ▶ - 2 -

WR 2
After activating the special button, it can be used as a shortcut back to Menu 1. The function previously selected is saved when the menu is exited with the special button.

Option	Description
OFF	Deactivated (factory setting)
ON	Special button activated

Activation / Deactivating the ECO button (ECO) (ECO)

Menu access ▶ - 2 -

WR 2
After activating the ECO button, it can be used to set all channels to Standby mode. The green LED lights up and the channels are set to the set standby temperature. If a safety rest is in use, the function is reset when the tool is removed from the holder.

Option	Description
OFF	Deactivated (factory setting)
ON	ECO button activated

Parameter menu

Button lock HAP 200 (HAP LOC)

Menu access ► - 2 -

EN

WR 3M

This function can be used to adjust the factory button presets of the WXAHP tool.
The HAP 200 is switched on the first time the button is pressed and switched off the next time the button is pressed.

Option	Description
OFF	Deactivated (factory setting)
ON	HAP LOC activated

Perform. Mode

Menu access ► - 2 -

The function determines the heating characteristics of the soldering tool to achieve the set tool temperature.

Option	Description
LO	Slow heating
HI	rapid heating

Resetting to factory settings (FSE)

Select the menu option FSE in menu 1.

WR 2: Press and hold down button ┌ 2 ┐.

1. Open special functions menu „1“ (push UP & DOWN buttons simultaneously for 2sec.)
2. Press and hold down button ┌ 2 ┐.
3. Then press the UP and DOWN buttons simultaneously. „FSE“ appears on the display. (Factory Setting Enabled).

The repair station is now reset to the factory settings.

Reset the calibration values to the factory settings

1. Open special functions menu „2“ (push UP & DOWN buttons simultaneously for 4sec.)
2. Select menu option „FCC“.
2. Press and hold down button ┌ 2 ┐.
4. Then press the UP and DOWN buttons simultaneously. „FSE“ appears on the display. (Factory Setting Enabled).

The repair station is now reset to the factory settings.

WR 3M: Press and hold down button ┌ 3 ┐.

1. Open special functions menu „1“ (push UP & DOWN buttons simultaneously for 2sec.)
2. Push button ┌ 3 ┐ and hold it down.
3. Then press the UP and DOWN buttons simultaneously. „FSE“ appears on the display. (Factory Setting Enabled).

The repair station is now reset to the factory settings.

Reset the calibration values to the factory settings

1. Open special functions menu „2“ (push UP & DOWN buttons simultaneously for 4sec.)
2. Select menu option „FCC“.
2. Push button ┌ 3 ┐ and hold it down.
4. Then press the UP and DOWN buttons simultaneously. „FSE“ appears on the display. (Factory Setting Enabled).

The repair station is now reset to the factory settings.

Technical Data

Repair station	WR 3M	WR 2
Dimensions L x W x H (mm) Dimensions L x W x H (Inch)	273 x 235 x 102 10.75 x 9.25 x 4.02	
Mains supply voltage	230 V ~ 50/60 Hz | 240/120 V ~ 50/60 Hz 120 V ~ 60 Hz | 100V ~ 50/60 Hz	
Power consumption	400 W	300 W
Safety class	I, antistatic housing III, Soldering tool	
Fuse	Overcurrent release 230 V; 2,0 A 120 V; 4,0 A	1,6 A
Temperature (Tool dependent) °C Temperature (Tool dependent) °F	50 - 450 (550) 150 - 850 (999)	
Temperature accuracy °C Temperature accuracy °F	± 9 ± 17	
Temperature accuracy Hot air °C Temperature accuracy Hot air °F	± 30 ± 54	
Temperature stability °C Temperature stability °F	± 2 ± 4	
Equipotential bonding	Via 3.5 mm pawl socket on back of unit (delivery form: hard grounded without jack plug)	
Display	LCD	
USB port	The control unit comes with a front-side USB port for installing firmware updates, configuration and monitoring.	-
Pump (Intermittent mode (30/30) s)	Max. vacuum 0,7 bar Max. delivery rate 18 l/min Max. hot air 15 l/min	
Additional vacuum pump	Max. vacuum 0,5 bar Max. delivery rate 1,7 l/min	-

EN

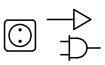
Error messages and error clearance

Message/symptom	Possible cause	Remedial measures
Display: „- - -	■ Tool has not been detected ■ Tool defective	■ Check connection of tool to device ■ Check connected tool
No display function (display OFF)	■ No mains supply voltage	■ Turn on mains power switch ■ Check mains supply voltage ■ Check device fuse
No vacuum at desoldering tool	■ Vacuum not connected ■ Desoldering nozzle clogged ■ Pump faulty	■ Connect vacuum hose to vacuum connection ■ Service desoldering nozzle using cleaning tool
Insufficient vacuum at desolde-ring tool	■ Filter cartridge on desoldering tool full ■ Main filter full	■ Change filter cartridge on desoldering tool full ■ Change the main filter element on the soldering station
Hot air tool has no air	■ Air hose not connected ■ Main filter full	■ Connect or check air hose ■ Change main filter cartridge on soldering station

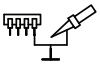
Symbols


Caution!


Read the operating instructions!


Before performing work of any kind on the unit, always disconnect the power plug from the socket.


ESD-compatible design and ESD-compatible workstation


Equipotential bonding


CE mark of conformity


Fuse


Safety transformer


Soldering


Desoldering


Hot air

Disposal

Do not dispose of electric tools together with household waste material! In observance of European Directive 2012/19/EU on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

Dispose of replaced equipment parts, filters or old devices in accordance with the rules and regulations applicable in your country.

Original declaration of conformity

Repair station **WR 2, WR 3M**

We hereby declare that the products described herein comply with the following guidelines:
2011/65/EU (RoHS), 2004/108/EG, 2006/42/EG

Applied harmonised standards:

DIN EN 55014-1: 2012-05	DIN EN 60335-1: 2012-10
DIN EN 55014-2: 2009-06	DIN EN 60335-2-45: 2012-08
DIN EN 61000-3-2: 2010-03 / 2011-06	DIN EN 62233: 2008-11 / 2009-04
DIN EN 61000-3-3: 2012-07	DIN EN 50581:2013-02

CE Besigheim, 2014-03-21

B. Frühwald — Managing director

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Authorised to compile technical documentation.

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Warranty

Claims by the buyer for physical defects are time-barred after a period of one year from delivery to the buyer. This does not apply to claims by the buyer for indemnification in accordance with §§ 478, 479 BGB (German Federal Law Gazette).

We shall only be liable for claims arising from a warranty furnished by us if the quality or durability warranty has been furnished by use in writing and using the term „Warranty“.

The warranty shall be void if damage is due to improper use and if the device has been tampered with by unauthorised persons.