WSD 121

海洋儀器

致力于电子测试、维护领域！

Table of contents　　　　Page

Thank you for placing your trust in our company by purchasing the Weller Soldering Station WSD 121. 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 121 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 (RoHS).

2. Description
2.1 Control unit
The soldering station WSD 121 was specially developed for soldering tasks with an extremely high heat requirement. The 120 W heater power combined with the optimal transfer of heat to the soldering iron bit guarantees the high performance capability of the WP 120 soldering iron. As an alternative to the WP 120, 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 WP 120 soldering iron can be set over the range from 50°C - 450°C via 2 buttons (Up/Down). The setpoint and actual value are displayed digitally. A blinking red LED in the display signals that the preset temperaturehas been reached – this serves as a optical regulator. Constant illumination means that the system is heating up.

2.2 Soldering irons
WP 120: The WP 120 soldering iron is characterised by fast and precise achievement of the soldering tip temperature. A particularly powerful 120 W heating element guarantees excellent dynamic behaviour. The combination of slim design and distance from handle to soldering tip means that universal application is possible, from extremely fine soldering tasks to those which require high temperatures.

See "Accessories" for additional tools.

3. Starting
Assemble soldering iron rest. 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). 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.

Technical Data

Dimensions in mm:	166 x 115 x 101 (l x w x h)
Supply voltage (8):	230 V / 50 Hz
Power input:	150 W
Class:	1 (control unit) and 3 (soldering iron)
Fuse (9):	230 V; T800 mA
Temp. control:	50°C - 450°C
Precision:	± 11°C
Equipotential bonding (6):	Via a 3.5 mm jack bush (initial state-hard-grounded)

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.
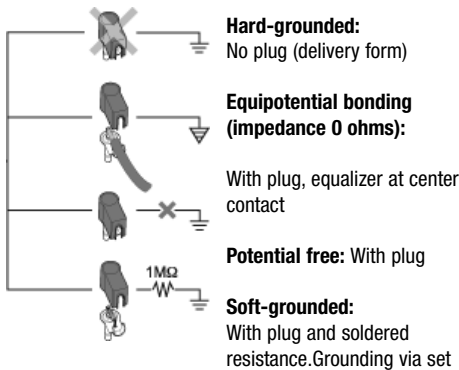The soldering tool is switched off (blinking line on the display). Setting: When switching on, hold the "UP" key (3) until ON or OFF appears in the display. Repeat this step to change.

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:

Hard-grounded:
No plug (delivery form)

Equipotential bonding (impedance 0 ohms):

With plug, equalizer at center contact

Potential free: With plug

Soft-grounded:
With plug and soldered resistance.Grounding via set resistance value.

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.

6. 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 ± 40°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. ± 99°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).

7. Accessories

T005 29 193 99   Soldering Iron WP 120
T005 29 161 99   Soldering iron set WSP 80
T005 29 180 99   Soldering Iron WP 80
T005 29 216 99   Soldering Iron WP 65
T005 33 131 99   Soldering iron set MPR 80
T005 29 187 99   Soldering iron set LR 21, antistatic
T005 29 188 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 25 032 99   Thermal insulating unit WST 82KIT1
T005 25 031 99   Thermal insulating unit WST 82KIT2
T005 31 180 99   External input unit WCB 2
T005 29 179 99   Soldering iron set WMP

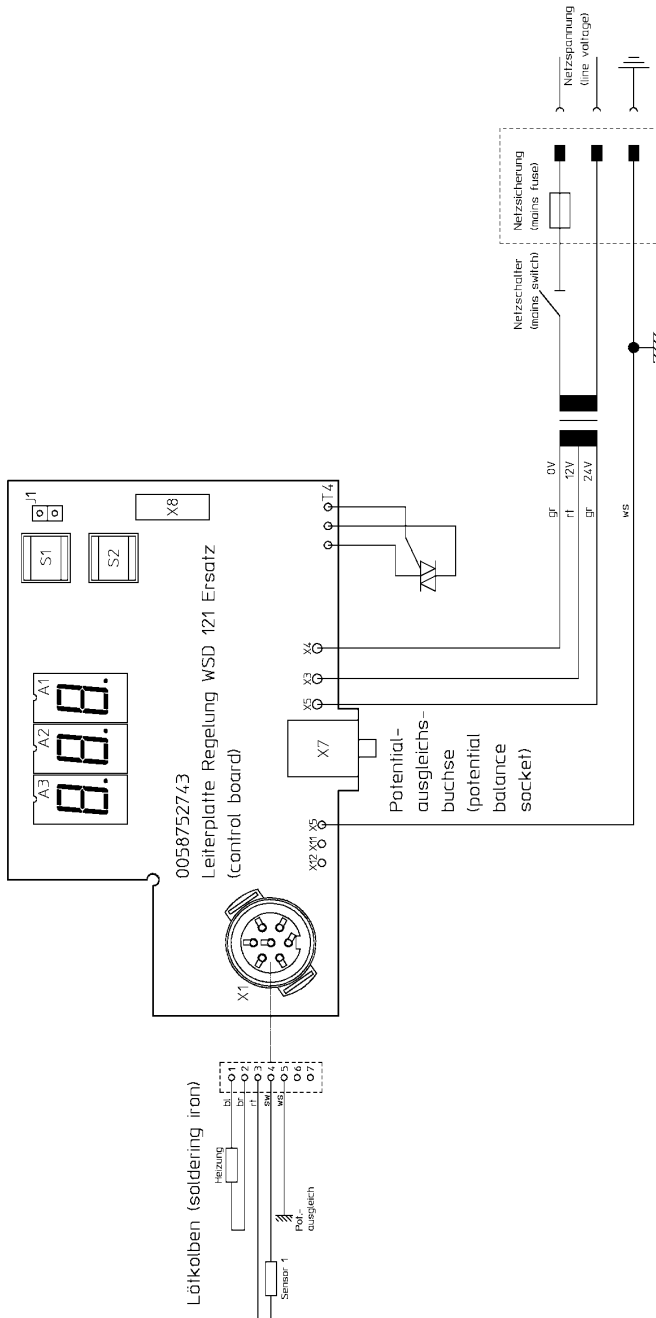# 8. Scope of supply

WSD 121
Control unit
Soldering iron WP 120
Power cable
Soldering iron rest
Jack
Operating instructions
Safety Information

Illustration: Circuit diagram, see Page 70
Illustration: Exploded view, see Page 71

Subject to technical alterations and amendments!

See the updated operating instructions at

WSD 121
4D9R960

Netzspannung
(line voltage)

Netzsicherung
(mains fuse)

Netzschalter
(mains switch)

0V 12V 24V

Potential-
ausgleichs-
buchse
(potential
balance
socket)

0058752743
Leiterplatte Regelung WSD 121 Ersatz
(control board)

Lötkolben (soldering iron)

Heizung

Pot.-
ausgleich

Sensor 1

010- 62176775

DK 5 70 073 99
CH 5 70 072 99
GB 5 70 070 99
F D 5 70 040 99

5 87 488 05

5 21 417 99 T800mA
(5 Stck)

5 87 489 34

5 87 488 04

5 87 487 32

5 87 527 23

5 87 488 07

5 87 527 54

5 87 487 74

5 87 449 07

5 87 489 41

5 15 125 99

5 87 489 02

5 13 841 99

5 87 038 92

5 87 487 28
(4 Stck)

5 87 637 07

XT—Serie

5 87 447 13

5 87 447 30

5 87 637 09

5 87 448 56

5 87 637 08

WSD 121
4D9R961/4

839145 www. hyxyyq. con