

# **INSTRUCTION MANUAL**



# 4 Tools DME Station with Electric Pump

Ref. DMPSE-QA

# **Packing List**

The following items are included:

DME Control Unit ......... 1 unit Ref. DME-1A (120V) DME-2A (230V) DME-9A (100V)

**Electric Desoldering** Module ..... 1 unit Ref. MSE-A

ESD Tip Cleaner ...... 1 unit Ref. CL8499





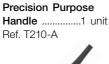


Stand .....2 units Ref. AD-SE

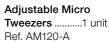
Stand ..... 1 unit Ref. DR-SE



















Brass Wool ..... 1 unit Ref. CL6210



Sponge ..... 1 unit

Ref. S0354

Metal Brush .... 1 unit Ref. CL6217



Cotton Filter .....1 unit

Ref. 0781046





#### **DR560 Accessories**

Ref. 0022819

Long Tip Cleaning set ..... 1 unit Tip cleaning set ...... 1 unit Ref. 0965970 Ref. 0965760 Glass solder collector ...... 1 unit Ref. 0812620 Ref. 0780550



Filter Box ..... 1 unit

Internal gasket ...... 1 unit



Ref. 0780840 It contains 10 filters

Ref. 0019208 It contains 2 gaskets



Metal solder collector ...... 1 unit Ref. 0812630



Suction Filter.....1 unit Ref. 0821830



Filter Box .....1 unit Ref. 0005966 It contains 50 filters



Cartridge holder ...... 1 unit Ref. SCH-A



Cleaning stick .....1 unit Ref. 0786640

Module Cable .....1 unit Ref. 0014874



Pedal..... 1 unit Ref. P-405





Stand Cable .....4 units Ref. 0011283



Power cord .....1 unit Ref. 0010569 (230V) 0013671 (100/120V)

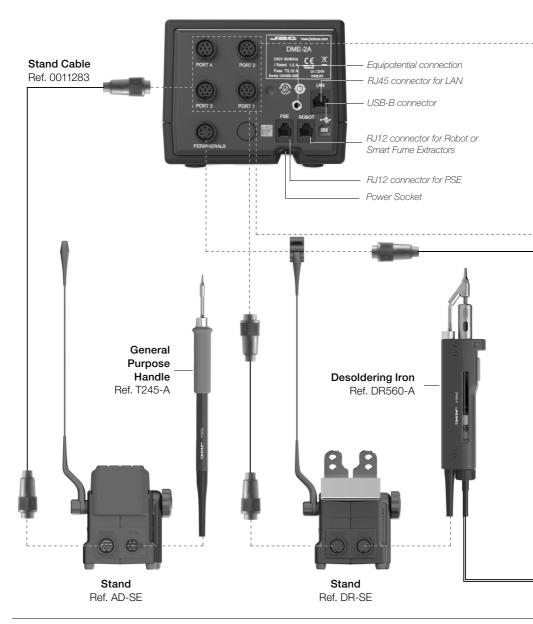


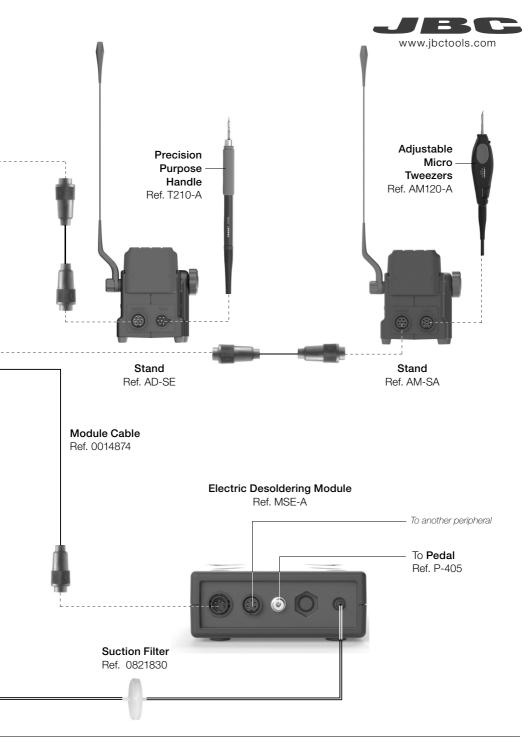


Manual .....1 unit Ref. 0025136



## Connections



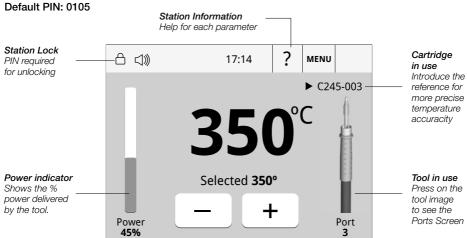


#### **Features**



## **Work Screen**

The DME-A offers an intuitive user interface which provides quick access to the station parameters.



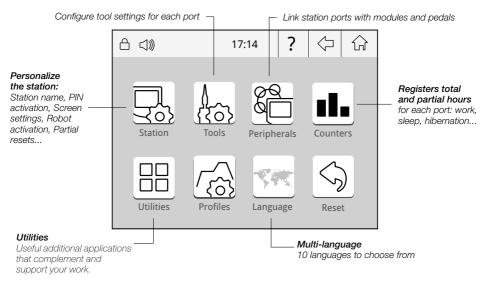
#### **Troubleshooting**

Station troubleshooting available on the product page at www.jbctools.com



#### Menu Screen

Press the station information button (?) to get information of the different features being displayed.



#### Advanced functionalities



It provides detailed graphics of tip temperature and power delivery in real time during solder joint formation for analysis purposes. This helps you decide how to adjust your process or which tip to use to obtain the best quality soldering.



#### The first system to optimize traceability in soldering

- Get greater quality and control in your production
- Manage your whole soldering process remotely in real time



#### **Export graphics**

Insert a USB flash drive into the USB-A connector to save your soldering process in csv format.

#### Files



#### Station update

Download the JBC Update File from

www.jbctools.com/software.html

Insert the USB flash drive with the file downloaded to the station.

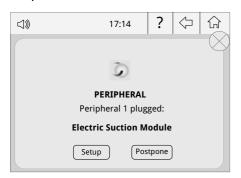
Update

## MSE / Pedal Initial Setup

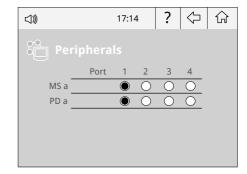


After connecting the electric desoldering module (MSE-A), a popup window is opened.

#### Peripherals



**1.** To configure your Electric Suction Module press Setup in the popup window.



- 2. Select the module from the list of peripheral connections.Remember your first connection is denoted as "a", the second being "b", etc. (e.g. MS\_a, MS\_b,...). Do the same with the pedal (e.g. PD\_a,...)
- **3.** Select the port of the tool you want to link to the peripheral.
- **4.** Press Menu or Back to save changes. Once set up, you can change the module settings by entering the **Peripherals** Menu.

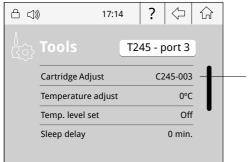
# Simultaneous control of ports

See the information for all ports in real time when pressing the tool image on the Work screen.





# Cartridge Adjustment



Insert the cartridge model and the station will recognize its characteristics (size and shape) to provide better temperature precission.

After inserting the cartridge, introduce the last 3 numbers of its reference.

## System notifications

The following icons will be displayed on the screen's status bar.



USB flash drive is connected.



Station is controlled by a PC.



Station is controlled by a robot.



Station software update.
Press INFO to start the process.



Warning.
Press INFO for failure description.



Error.

Press INFO for failure description, the type of error and how to proceed.



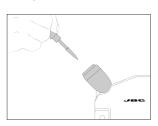
Indicates there is a peripheral to be installed.

# Operation

## The JBC Most Efficient Soldering System

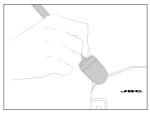
Our revolutionary technology is able to recover tip temperature extremely quickly. It means the user can work at a lower temperature and improve the quality of soldering. The tip temperature is further reduced thanks to the Sleep and Hibernation modes which increase up to 5 times the life of the tip.

#### 1. Work



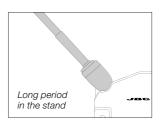
When the tool is lifted from the stand the tip will heat up to the selected temperature.

# 2. Sleep



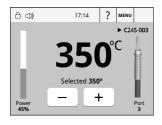
When the tool is in the stand, the temperature falls to the preset Sleep temperature.

#### 3. Hibernation



After longer periods of inactivity, the power is cut off and the tool cools down to room temperature.





Tools Menu:

- · Adjust temperature limits and cartridge.
- · Set temperature levels.



Tools Menu:

- · Set Sleep temperature.
- · Set Sleep delay. (from 0 to 9 min or no Sleep)



Tools Menu:

 Set Hibernation delay. (from 0 to 60 min or no hibernation)



# **Desoldering process**

Use a tip with a larger diameter than the pad to achieve maximum aspiration and thermal efficiency.

#### 1. Placing



Place the tip over the lead.

#### 2. Rotating



When the solder melts, gently move the tip in a circular motion.

#### 3. Aspirating



Press and hold the tool button to start the suction and continue the movement completing 3 o 4 circles.

#### 4. Removing



Remove the tip while maintaining the suction to make sure all the solder is removed from the joint.

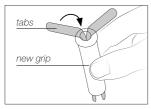
If any solder remains are left on a terminal after desoldering it, resolder it with fresh solder and repeat the desoldering operation.

If desoldering tips does not provide enough heat to desolder leads from ground planes, consider using a preheater PCB.

# **Changing the Grips**

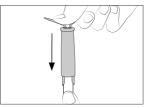
Easily replace the Grips for T245-A and T245-C using the slip-on tabs (Ref. 0016057)

#### 1. Inserting tabs



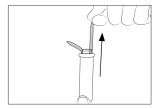
Put the slide-on tabs into the new grip.

#### 2. Inserting handle



Push the grip with the tabs onto the handle.

#### 3. Removing tabs



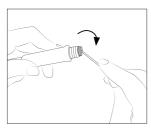
To remove the tabs, hold the grip and pull. Use a pliers if necessary.

# Sealing Plug Replacement

The Sealing Plug is meant to prevent undesirable flux vapors or particles from entering inside the tool. Its usage is highly recommended for intensive applications when soldering in exposed to FOD environments or for applications where the soldering iron works close to vertical position.

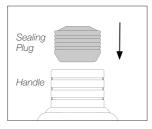
⚠ Before replacing the sealing plug, unplug the power supply and make sure the device is not hot.

# 1. Removing the Sealing Plug



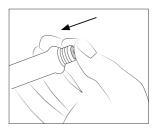
Enter a small shaft or screwdriver in order to gently lift and pull the Sealin Plug. Do not insert the tool more than 8 mm deep. Never use a cartridge to do this operation.

# 2. Mounting position



Note the Sealing Plug mounting position. The chamfered side has to be positioned towards the Handle.

# 3. Inserting the Sealing Plug



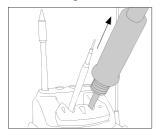
Gently push the Sealing Plug inside the handle until it is completely into the Handle. Handle and Sealing Plug edges have to be aligned.



# **Quick Tip Changer**

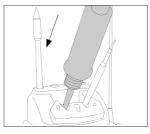
Save time and change cartridges safely without switching the station off. Be careful, the cartridges may be hot, when placing them in the storage rack.

#### 1. Removing



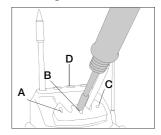
Place the cartridge in the extractor and pull the handle to remove it.

#### 2. Inserting



Place the handle on top of the new cartridge and press down.

#### 3. Fixing



Use the holes to fix the cartridge as follows:

- A. For curved C210
- **B.** For C245
- C. For straight C210
- D. cartridge Storage rack

**Important:** It is essential to insert the cartridge as far as the mark for a proper connection.



# **DR560 Changing Tips**

#### 1. Removing

Unscrew the tip using the spanner supplied.

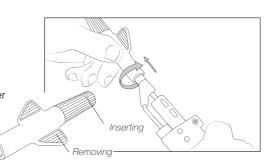
#### 2. Inserting

to make sure it is air tight.

Fit the new tip and tighten with the spanner

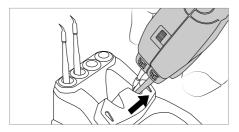
The DR560 uses C560 tips.

Find the model that best suits your soldering needs in www.jbctools.com



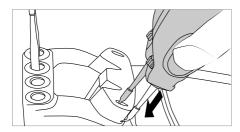
# AM120 Changing cartridges

#### 1. Removing



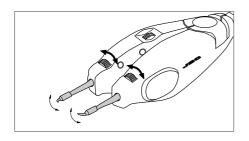
Place the cartridges in the extractor and pull the tweezers to remove them.

#### 3. Inserting



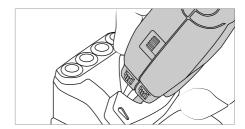
Use the grooves to insert the cartridges as far as the mark\*.

# 4. Rotational Cartridge Alignment



Slightly turn the wheels to align the cartridges as required.

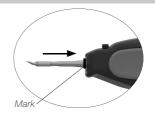
#### 2. Positioning



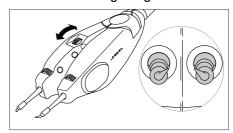
Place the tweezers on top of the new cartridge and slightly press down.

#### \*Important

It is essential to insert the cartridges as far as the mark for a proper connection.



#### 5. Vertical Cartridge Alignment



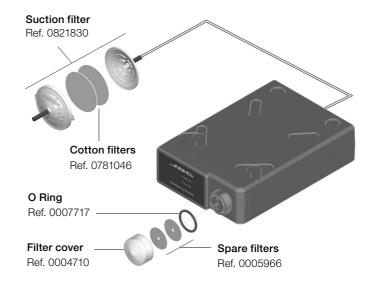
The rear wheel allows the cartritges to be equally aligned when you close the tweezers.



# MSE Changing the pump filters

- Keep the casing clean by using a damp cloth. Periodically check all cable and tube connections.
- Keep filters clean to ensure proper solder suction and replace them when necessary.

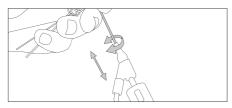
# Important Do not use sharp pointed objects to open the suction filter.

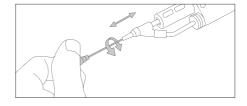


### **DR560 Maintenance**

# **Tip Care**

The intake tube should be periodically cleaned with the largest rod possible.



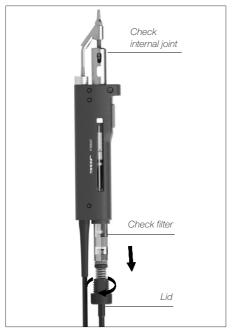


#### Important

DO NOT press the vacuum pump button while tinning the desoldering tip, as the fumes given off by the flux would quickly block the ducts and the air filter.

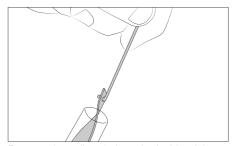
# **Glass Solder Collector Cleaning**

#### 1. Removing the lid

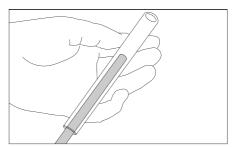


The lid must be unscrewed with the DR560 in a vertical position.

#### 2. Cleaning



Remove the coil and clean the inside of the glass solder collector with the cleaning stick.



Check the filter and replace it if it is dirty or damaged.

## 3. Inserting the glass solder collector

The glass solder collector must be inserted with coil filter in place, positioned between the 2 lines marked.

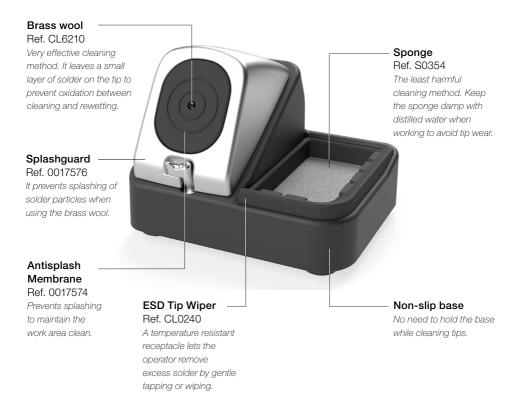
Then the whole unit must be closed by screwing the lid.



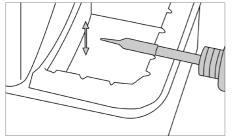


# **Tip Cleaner**

Improve thermal transfer by cleaning the tip after each solder joint.

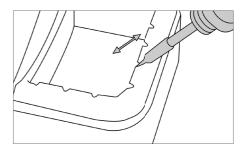


#### Tapping:



Tap to remove excess solder.

#### Wiping:

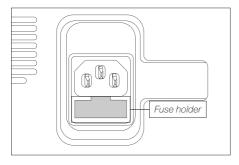


Use the slots to remove remaining particles.

### Maintenance

Before carrying out maintenance or storage, always allow the equipment to cool.

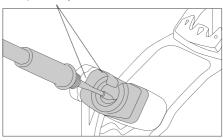
- Clean the station screen with a glass cleaner or a damp cloth.
- Use a damp cloth to clean the casing and the tool. Alcohol can only be used to clean the metal parts.
- Periodically check that the metal parts of the tool and stand are clean so that the station can detect the tool status.
- Maintain tip surface clean and tinned prior to storage in order to avoid tip oxidation. Rusty and dirty surfaces reduce heat transfer to the solder joint.
- Periodically check all cables and tubes.
- Replace a blown fuse as follows:

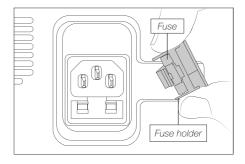


**1.** Pull off the fuse holder and remove the fuse. If necessary use a tool to lever it off.



Clean periodically





- **2.** Press the new fuse into the fuse holder and replace it in the station.
- Replace any defective or damaged pieces. Use original JBC spare parts only.
- Repairs should only be performed by a JBC authorized technical service.



# Safety



It is imperative to follow safety guidelines to prevent electric shock, injury, fire or explosion.

- Do not use the units for any purpose other than soldering or rework. Incorrect use may cause fire.
- The power cord must be plugged into approved bases. Be sure that it is properly grounded before use. When unplugging it, hold the plug, not the wire.
- Do not work on electrically live parts.
- The tool should be placed in the stand when not in use in order to activate the sleep mode.
   The soldering tip, the metal part of the tool and the stand may still be hot even when the station is turned off. Handle with care, including when adjusting the stand position.
- Do not leave the appliance unattended when it is on.
- Do not cover the ventilation grills. Heat can cause inflamable products to ignite.
- Avoid the contact of flux with skin or eyes to prevent irritation.
- Be careful with the fumes produced when soldering.
- Keep your workplace clean and tidy. Wear appropriate protection glasses and gloves when working to avoid personal harm.
- Utmost care must be taken with liquid tin waste which can cause burns.
- This appliance can be used by children over the age of eight and also persons with reduced physical, sensory or mental capabilities or lack of experience provided that they have been given adequate supervision or instruction concerning use of the appliance and understand the hazards involved. Children must not play with the appliance.
- Maintenance must not be carried out by children unless supervised.

# 有害物质含量表

#### 产品中有害物质的名称及含量

部件名称	有害物质						
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)	
烙铁头	0	0	0	0	0	0	
手柄	0	0	0	0	0	0	
电源线	0	0	0	0	0	0	
主机	0	0	0	0	0	0	
电源插座	0	0	0	0	0	0	
保险丝	0	0	0	0	0	0	
主开关	0	0	0	0	0	0	
电位连接	Х	0	0	0	0	0	
变压器	0	0	0	0	0	0	
线路板	х	0	0	0	0	0	

O 表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572 规定的限量要求以下。

X 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572 规定的限量要求。



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# **Specifications**

# 4 Tools DME Station with Electric Pump DMPSE-1QA / DMPSE-2QA / DMPSE-9QA

DME-1A 120V 50/60Hz. Input fuse: 6A. Output: 23.5V
DME-2A 230V 50/60Hz. Input fuse: 3.15A. Output: 23.5V
DME-9A 100V 50/60Hz. Input fuse: 8A. Output: 23.5V
- Output Peak Power: 160W per tool

- Temperature Range: 90 - 450 °C (190 - 840 °F)

- Idle Temp. Stability (still air): ±1.5°C (±3°F) / Meets and exceed IPC J-STD-001F

- Temp accuracy: ±3% (using reference cartridge)

- Temp adjustment: ±50°C (±90°F) Through station menu setting

- Tip to ground voltage/resistance: Meets and exceed

- Ambient operating temp: 10 - 50 °C (50 - 122 °F)

- Connections: USB-A / USB-B / Peripherals connectors

RJ12 connector for Robot

- Control Unit Weight: 4.6 kg (10 lb)

- Control Unit Dimensions: 148 x 232 x 120 mm (5.8 x 9.1 x 4.7 in)

MSE-A

- Ambient Operating Temperature:  $10 - 50 \, ^{\circ}\text{C} \, (50 - 122 \, ^{\circ}\text{F})$  - Vacuum:  $10 - 50 \, ^{\circ}\text{C} \, (50 - 122 \, ^{\circ}\text{F})$  -  $75\% / 570 \, \text{mmHg} / 22.4 \, \text{inHg}$ 

- Flow rate: 9 SLPM- Peripheral Weight: 1,2 kg (2.7 lb)

- Peripheral Dimensions: 145 x 55 x 225 mm (5.71 x 2.17 x 8.86 in)

- Total Package: 480 x 370 x 380 mm / 14,71 kg

18.9 x 14.6 x 15.0 in / 32.43 lb

Complies with CE standards.

ESD protected.



#### Warranty

JBC's 2 year warranty covers this equipment against all manufacturing defects, including the replacement of defective parts and labour.

Warranty does not cover product wear or misuse. In order for the warranty to be valid, equipment must be returned, postage paid, to the dealer where it was purchased.

Get 1 extra year JBC warranty by registering here: https://www.jbctools.com/productregistration/ within 30 days of purchase.



This product should not be thrown in the garbage.

In accordance with the European directive 2012/19/EU, electronic equipment at the end of its life must be collected and returned to an authorized recycling facility.

