



# JBC DME 4 Tool Control Unit Flexible Assembly Systems Instruction Manual

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# JBC

[www.jbctools.com](http://www.jbctools.com)  
INSTRUCTION MANUAL



**DME**  
**4-Tool Control Unit**

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## DME 4 Tool Control Unit Flexible Assembly Systems

This manual corresponds to the following references:

**DME-9A** (100V)

**DME-1A** (120V )

**DME-2A** (230V)

## Packing List

The following items are included:



**4-Tool  
Control Unit** ..... 1 unit



**Power Cord** ..... 1 unit  
Ref. 0024077 (100V)  
0023717 (120V)  
0024080 (230V)



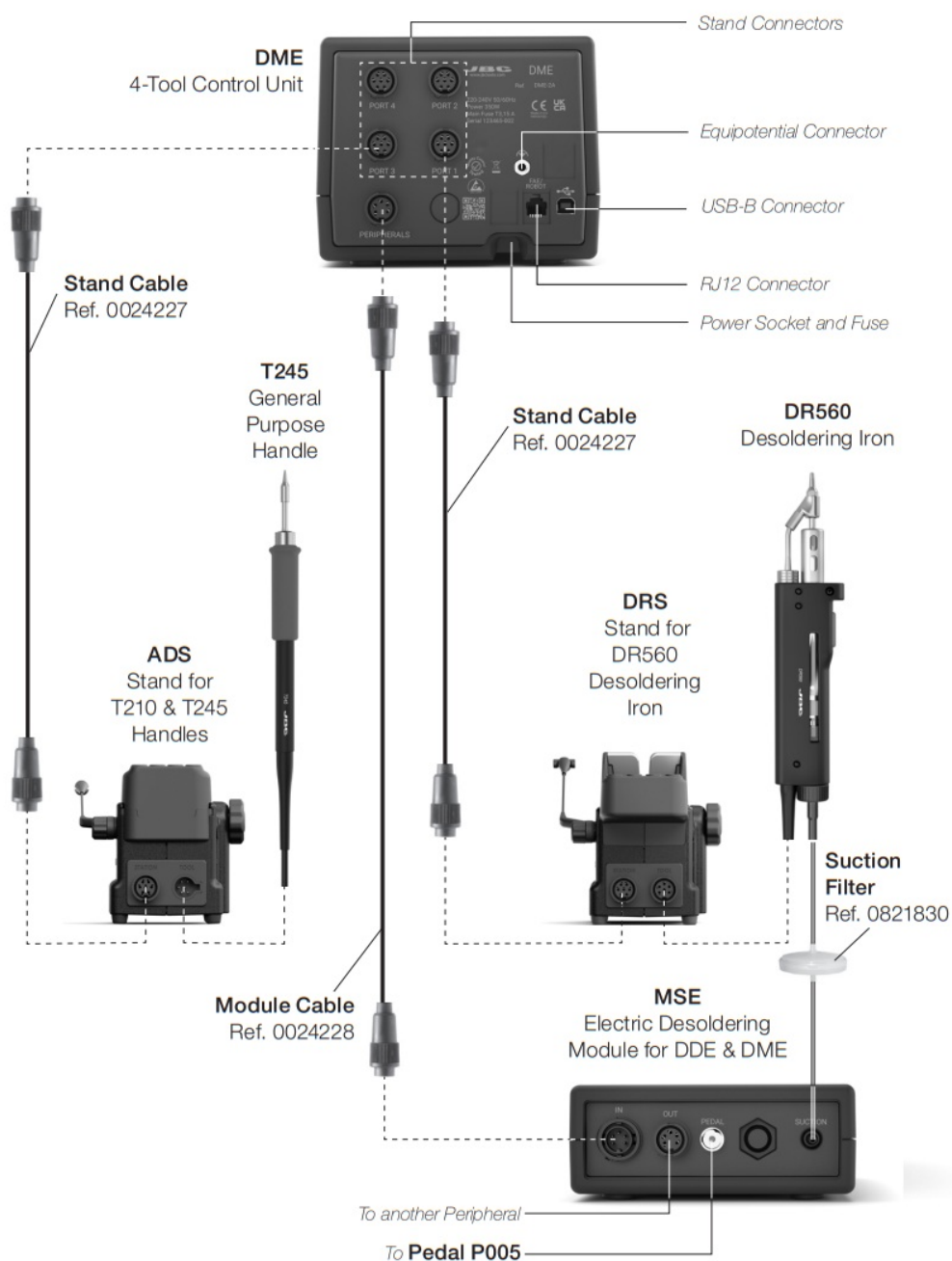
**Manual** ..... 1 unit  
Ref. 0031931

## Features

DME works simultaneously with up to 4 tools and 1 module + 1 pedal for each tool (peripheral module for each tool needed).



## Connection Example



## Compatibility

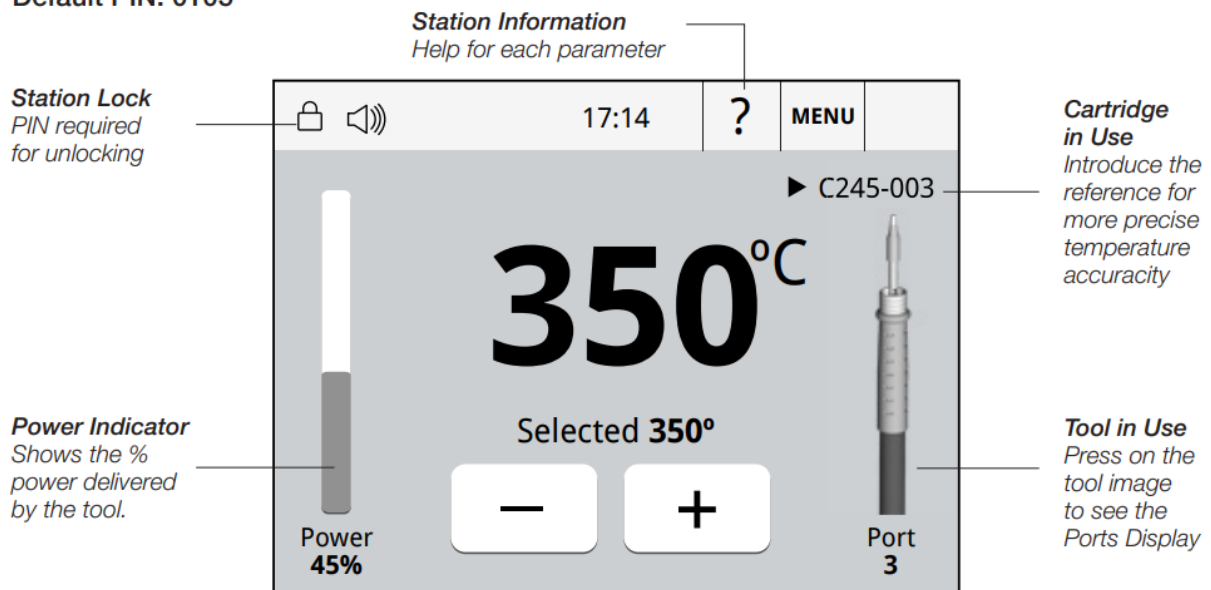
Select the equipment that best suit your soldering or disordering needs.

Modular System				Peripherals		
Control Unit	Stand	Tool	Cartridge Ran 9a g	MSE / MVE	MNE	P405
DME	ADS	T210	C210			
		T245	C245			●
		T470				
	DNS	T210N	C210		●	
		T245N	C245		●	●
	APS	AP250	C250			●
	AMS	AM120	C120			●
		PAI20				●
	ATS	AT420	C420			●
	HTS	HT420				●
	DSS	DS360	C360	●		●
	DRS	DR560	C560	●		●

## Work Display

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

**Default PIN: 0105**

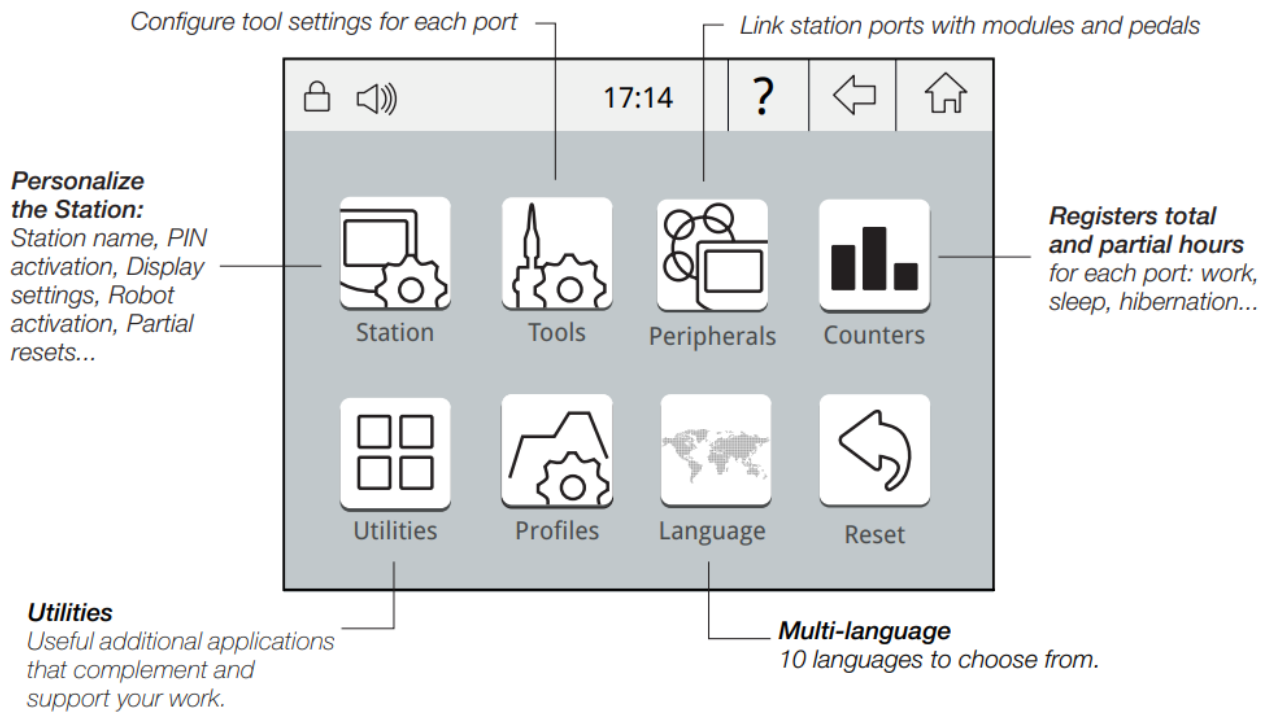


## Troubleshooting

Station troubleshooting available on the product page at [www.jbctools.com](http://www.jbctools.com)

### Menu Display

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



## Utilities Submenu

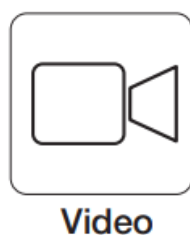


It provides detailed graphics of tip temperature and power delivery in real-time during solder joint formation for analysis purposes. This helps you decide how to adjust your process or which tip to use to obtain the best quality soldering.



### Export graphics

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



### Play videos

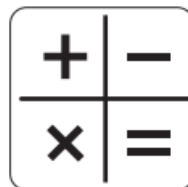
Enables to play video files from a USB device as long as it is in AVI format and 320x240px.



**Microscope**

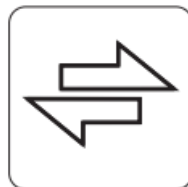
Provides the possibility to connect a microscope\* by USB connection to the station. The image will be shown on the station display.

\* compatible with: Dino Lite AM2111 and AM2011



**Calculator**

Provides calculator environment and function.



**Convert**

Enables to convert, for example, °C values into °F values.

## System notifications

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



USB flash drive is connected.



Station is controlled by a PC.



Station is controlled by a robot. downloaded loaded to the station.



Station software update. Press INFO to start the process.



Warning. Press INFO for failure description.



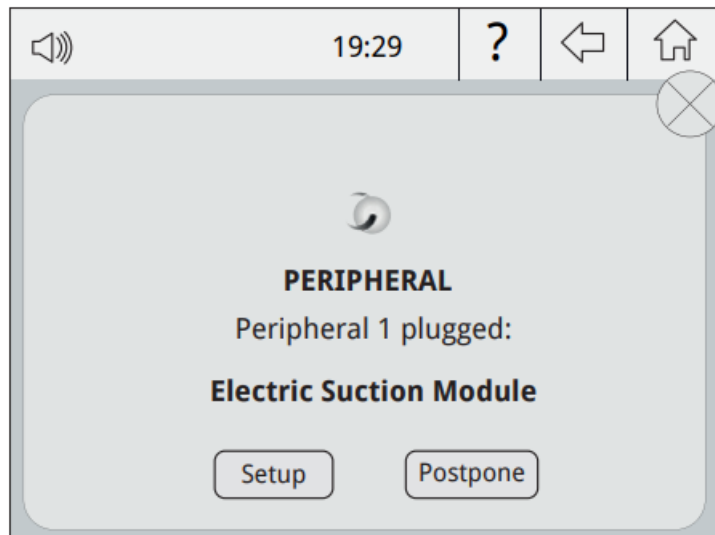
Error. Press INFO for failure description, the type of error and how to proceed.

## MSE / Pedal Initial Setup

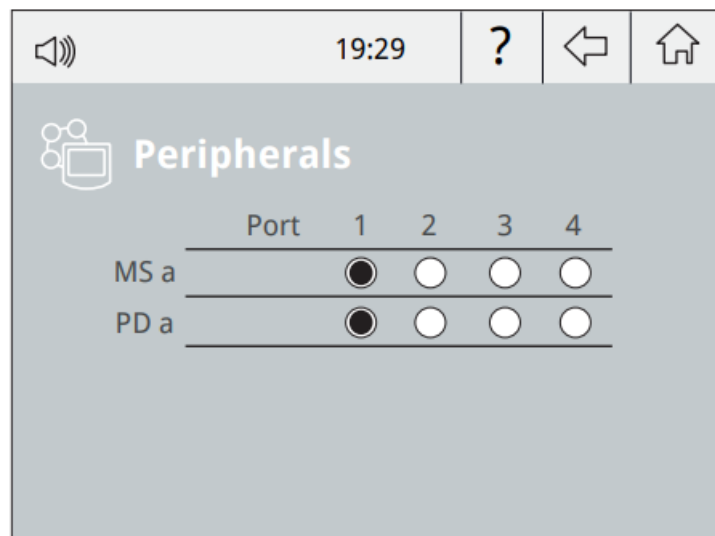


After connecting the electric disordering module (MSE-A), a popup window is opened.



## Peripherals



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

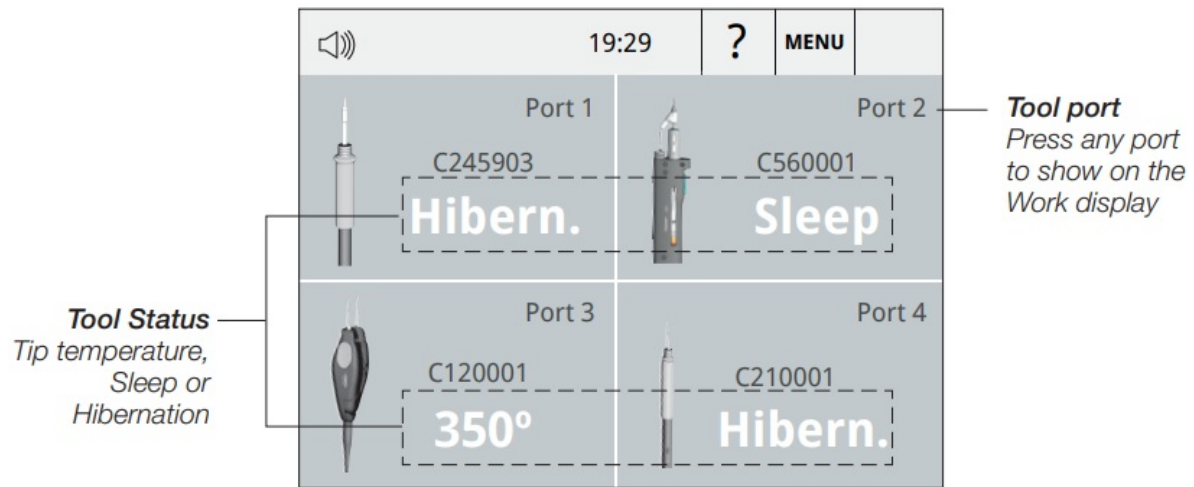


2. Select the module from the list of peripheral connections. Remember your first connection is denoted as “a”, the second being “b”, etc. (e.g. MS\_a, MS\_b,...). Do the same with the pedal (e.g. PD\_a,...)
3. Select the port of the tool you want to link to the peripheral.

4. Press Menu  or Back  to save changes. Once set up, the module settings can be changed by entering the **Peripherals** Menu.

## Simultaneous Ports Control

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

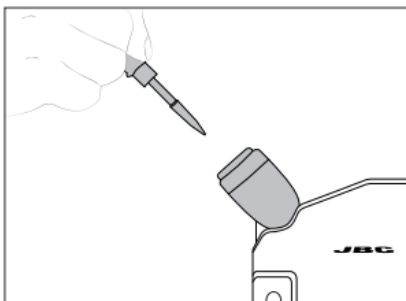


## Operation

### JBC's Most Efficient Soldering System

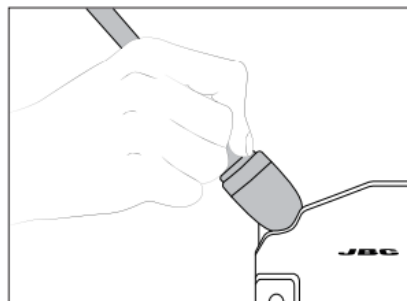
Our revolutionary technology is able to recover tip temperature extremely quickly. It means the user can work at a lower temperature and improve the soldering quality. The tip temperature is further reduced thanks to the Sleep and Hibernation modes which increase up to 5 times the life of the tip.

#### 1. Work



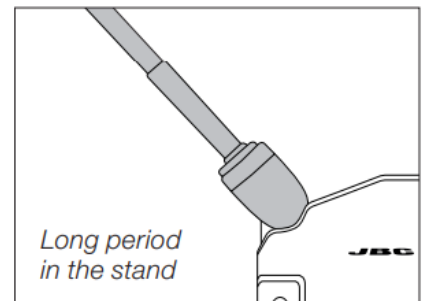
When the tool is lifted from the stand the tip will heat up to the selected temperature.

#### 2. Sleep

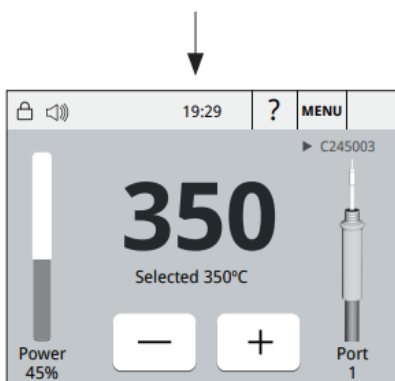


When the tool is in the stand, the temperature falls to the preset Sleep temperature.

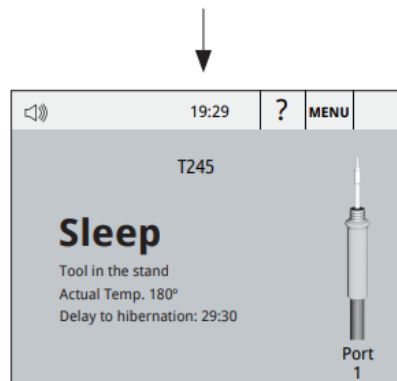
#### 3. Hibernation



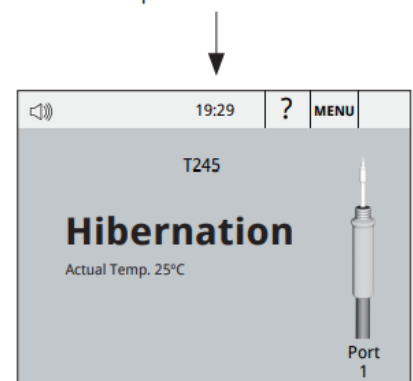
After longer periods of inactivity, the power is cut off and the tool cools down to room temperature.



Tool Settings:  
· Operating Temp.



Tool Settings:  
· Sleep



Tool Settings:  
· Hibernation

Change Work temperature from 90 to 450 °C.

Change Sleep temperature and set Sleep delay from 0 to 9 min or no Sleep.


Change Hibernation delay from 0 to 60 min or no Hibernation.

⬆ or ⬇ steps of  $\pm 5$  °C / °F

⬆ or ⬇ steps of  $\pm 50$  °C / °F

Tool Settings:

· Temp. Levels

Press , select Tool Settings and activate the Temp. Levels option.

⬆ or ⬇ steps of  $\pm 5$  °C / °F.

## USB Connector

Download the latest software from our website to improve your soldering station at [www.jbctools.com/software.html](http://www.jbctools.com/software.html).



## Maintenance

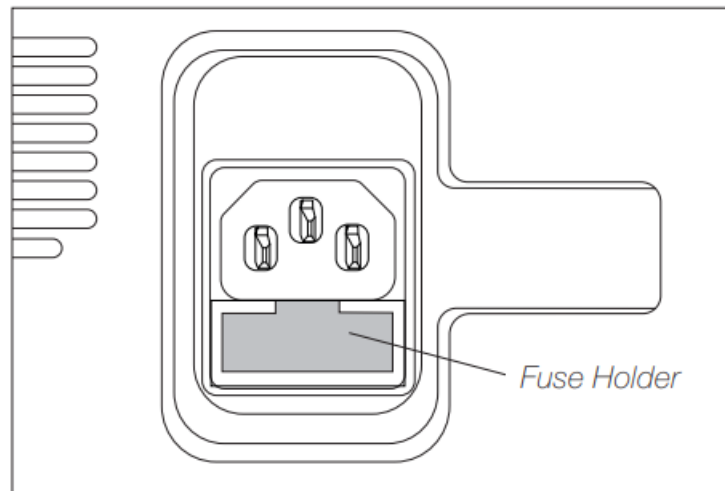
Before carrying out maintenance or storage, always allow the equipment to cool.

- Clean the station display 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.

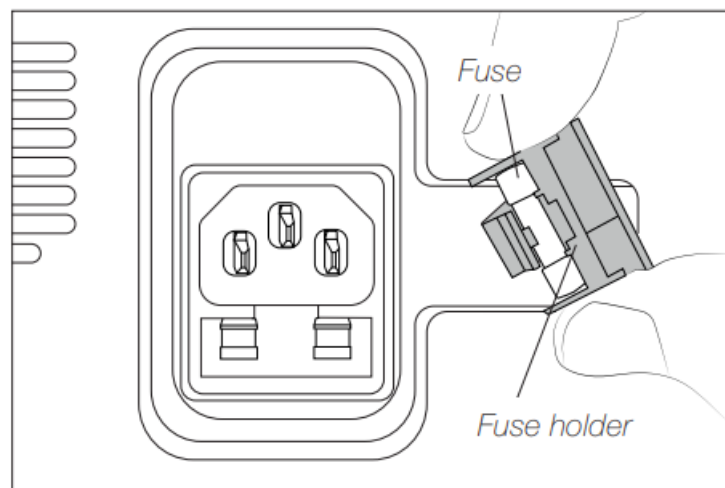


- Periodically check that the metal parts of the tool and stand are clean so that the station can detect the tool and establish its status.

- 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.



2. Insert the new fuse into the holder and return it to 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 a 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 or nozzle, 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 inflammable products to ignite.
- Avoid flux coming into contact 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 people with reduced physical, sensory or mental capabilities or lack of experience provided that they have been given adequate supervision or instruction concerning the 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.

## Notes

## Specifications

### DME

#### 4-Tool Control Unit

Ref. **DME-1A** 120V 50/60Hz. Input fuse: T-3.5A. Output: 23.5V

Ref. **DME-2A** 230V 50/60Hz. Input fuse: T-3.15A. Output: 23.5V

Ref. **DME-9A** 100V 50/60Hz. Input fuse: T-8A. Output: 23.5V

Peak Power ( Tool):	150W per tool
Selectable Temperature:	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 settings menu
Tip to Ground Voltage/Resistance:	Meets and exceeds ANSI/ESD S20.20-2014 IPC J-STD-001F
Ambient Operating Temp:	10 – 50 °C / 50 – 122 °F
Connections:	USB-A: Firmware Update, Graphics and Profiles, Dino-Lite USB Microscope (m o d e l s A M2011, A M2111) USB- B: PC Communication RJ12: Fume Extractor/Peripherals/Robot
Control Unit Dimensions / Weight: (L x W x H)	232 x 148 x 120 mm / 4.57 kg 9.13 x 5.83 x 4.72 in / 10.08 lb
Total Package Dimensions / Weight: (L x W x H)	258 x 328 x 208 mm / 4.97 kg 10.16 x 12.91 x 8.19 in / 10.96 lb

Complies with CE standards. ESD safe.



## Warranty

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

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.



## Documents / Resources

 <p>JBC www.jbctools.com INSTRUCTION MANUAL</p> <p>DME 4-Tool Control Unit</p>	<p><a href="#">JBC DME 4 Tool Control Unit Flexible Assembly Systems</a> [pdf] Instruction Manual DME 4 Tool Control Unit Flexible Assembly Systems, DME 4, Tool Control Unit Flexible Assembly Systems, Control Unit Flexible Assembly Systems, Flexible Assembly Systems, Assembly Systems</p>
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## References

- [JBC Soldering and Rework equipment for electronics](#)
- [JBC DOWNLOAD SOFTWARE](#)
- [JBC Warranty Extension](#)