www.jbctools.com

Product website

INSTRUCTION MANUAL

DME

4-Tool Control Unit

This manual corresponds to the following references:

DME-9A (100V)
DME-1A (120V)
DME-2A (230V)

Packing List

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

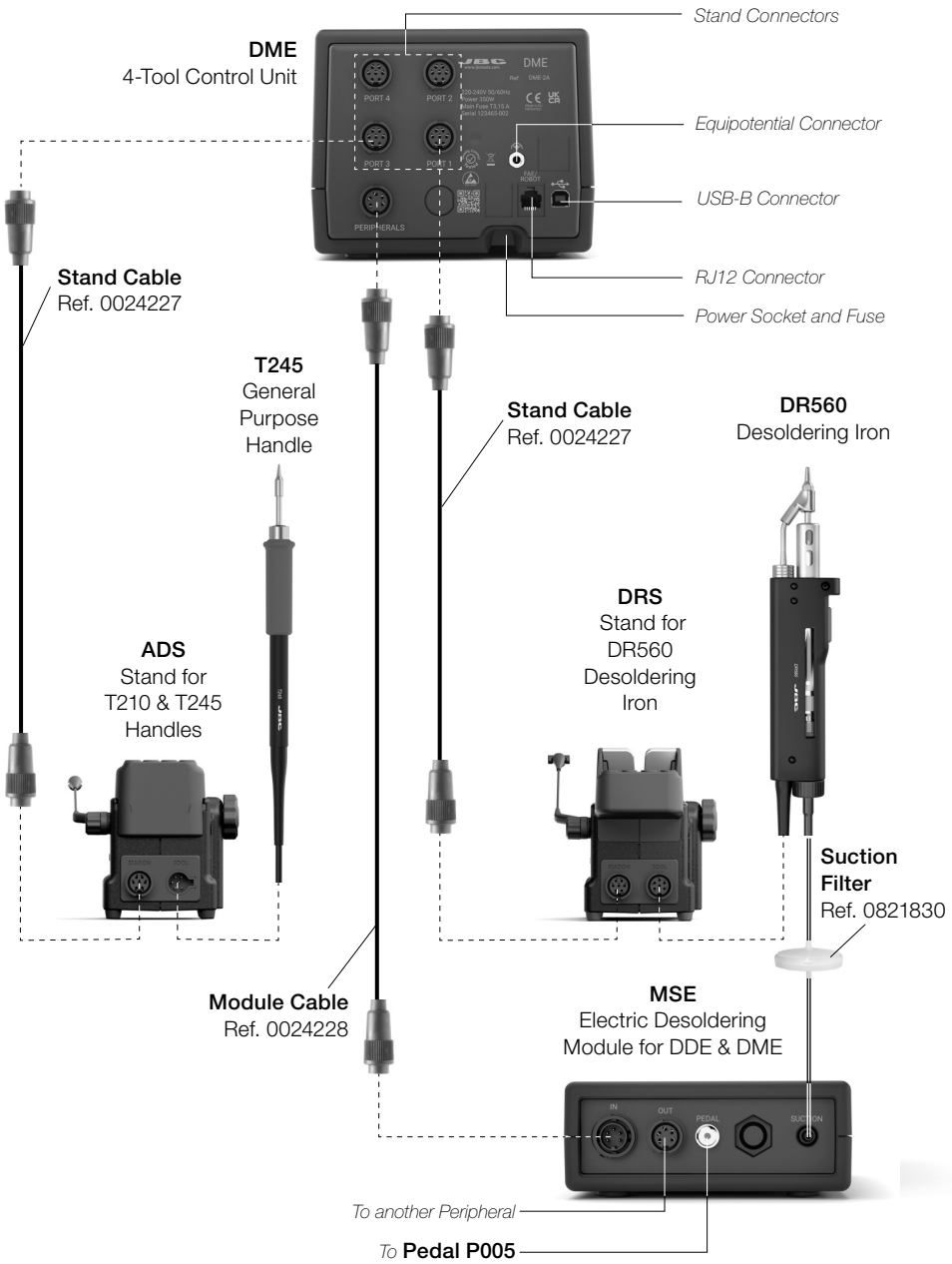
Power Cord ..... 1 unit
Ref. 0024077 (100V)
0023717 (120V)
0024080 (230V)

Manual ..... 1 unit
Ref. 0031931

Features

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

Connection Example



Compatibility

Combine the equipment that best suit your soldering or desoldering needs.

Marked with ○ means pedals P405 and P005 cannot be connected directly to JBCs control units DDE and DME. A module must be used and the pedals are connected to the module.

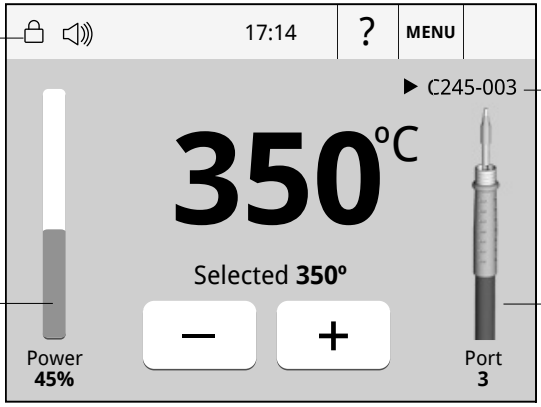
Modular System				Moduls		Pedals		
Control Unit	**Stand**	**Tool**	**Cartridge Range**	**MSE MVE**	**MNE**	**P005**	**P305**	**P405**
DDE DME	ADS	T210	C210				●	
		T245	C245				●	
		T470					●	
	DNS	T210N	C210		●	○	●	○
		T245N	C245		●	○	●	○
	APS	AP250	C250				●	
	AMS	AM120	C120				●	
		PA120					●	
	ATS	AT420	C420				●	
	HTS	HT420					●	
	DSS	DS360	C360	●		○	●	○
	DRS	DR560	C560	●		○	●	○
	DTS	DT530	D530	●		○	●	○

Work Screen

DME offers an intuitive user interface which provides quick access to the station parameters.
Default PIN: 0105

Station parameters locked: *PIN required for unlocking*

Cartridge in use: *Enter the cartridge reference for higher temperature accuracy (main menu > tools)*



Power indicator: *Displays the power supplied to the tool in percent.*

Tool in use: *Tap the tool icon to view information about the connected tools.*

Troubleshooting

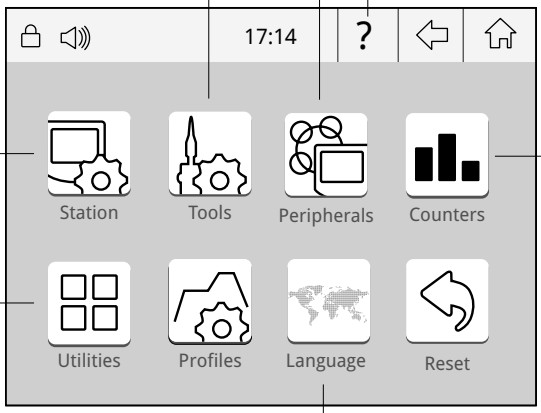
Station troubleshooting available on JBC's web page:
www.jbctools.com/troubleshooting-soldering-station.html

Main Menu Screen

Peripheral devices: *Tap to link station ports with modules and pedals*

Settings: *Configure tool and cartridge settings for each port*

Help function: *For the parameters displayed on the screen*



Station personalization: *Station name, PIN activation, Display settings, Robot activation, Partial resets...*

Utilities: *Additional applications that can be useful for your work.*

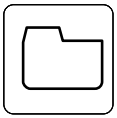
Register of total and partial hours: *Tap to get information for each port: working hours, hours in sleep mode, hours in hibernation mode...*

Menu language: *10 languages to choose from.*

Utilities Submenu

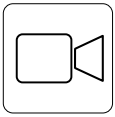
Graphics

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.



Files

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



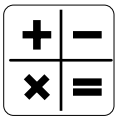
Video

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

Microscope

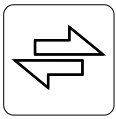
Provides the possibility to connect a microscope* by USB connection to the station. The image will be shown on the station display.

** compatible with: Dino Lite AM2111 and AM2011*



Calculator

Provides calculator environment and function.



Convert

Enables to convert, for example, ºC values into ºF 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 to the station.

Station software update. Press INFO to start the process.

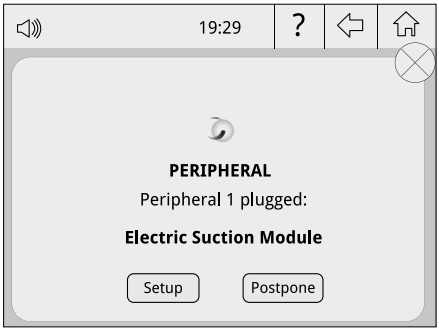
Warning. Press INFO for failure description.

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

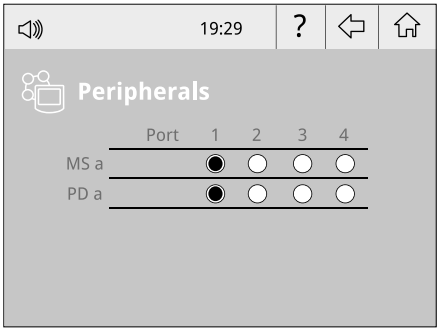
MSE / Pedal Initial Setup

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

Peripherals



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



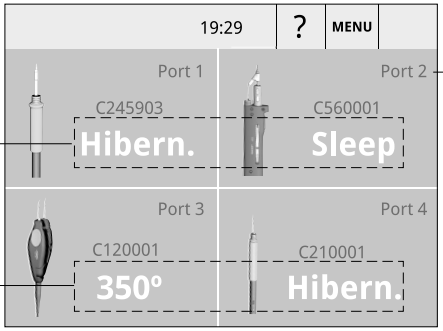
2. Select the module from the list of peripheral connections. Remember your first connection is denoted as “a”, the second being “b”, etc. (e.g. MS_a, MS_b,...). Do the same with the pedal (e.g. PD_a,...)

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, 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.



Tool port
Press any port to show on the Work display

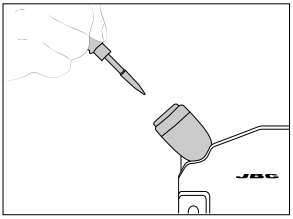
Tool Status
Tip temperature, Sleep or Hibernation

Operation

JBC's Most Efficient Soldering System

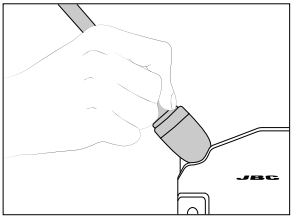
Our revolutionary technology is able to recover tip temperature extremely quickly. It means the user can work at a lower temperature and improve the soldering quality. The tip temperature is further reduced thanks to the Sleep and Hibernation modes which increase up to 5 times the life of the tip.

1. Work



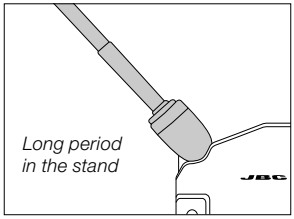
When the tool is lifted from the stand the tip will heat up to the selected temperature.

2. Sleep

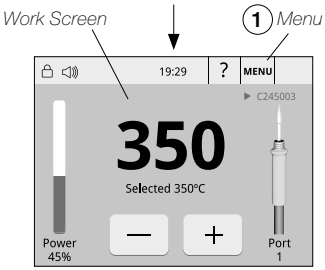


When the tool is in the stand, the temperature falls to the present sleep temperature.

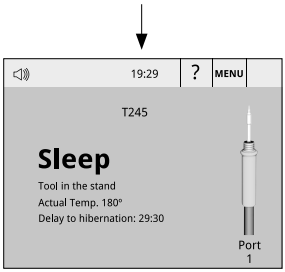
3. Hibernation



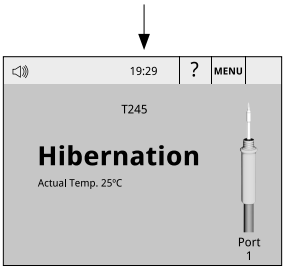
After longer periods of inactivity, the power is cut off and the tool cools down to room temperature.



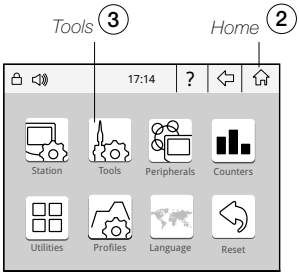
Work Temperature:
Change from 90 to 450 ºC by tapping + or − on the screen.
Temperature Levels:
Tap *Menu > Tools > Temperature levels* and set them *"ON"*. The levels can be modified tapping *Menu > Tools > Set temperature levels.*



Sleep Delay:
Tab *Menu > Tools* and select *Sleep Delay* to set the delay between 0 and 60 min or *No Sleep.*
Sleep Temperature:
Tab *Menu > Tools* and select *Sleep Temperature* to modify its value.



Hibernation Delay:
Tab *Menu > Tools* and select *Hibernation Delay* to change from 0 to 60 min or *No Hibernation.*



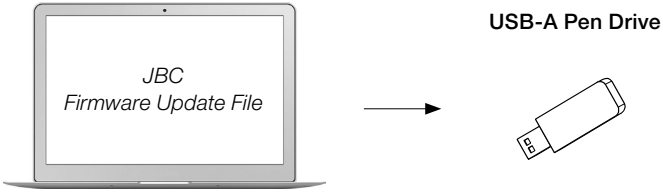
Main Menu

- Tap "Menu" (1) on the work screen to access to the main menu.
- Tap "Home" (2) to go back to work screen.
- Tap "Tools" (3) to access to configurations.

USB Connector and Firmware Update

Download: JBC Firmware Update File

Download the **JBC firmware update file** from **www.jbctools.com/software.html,** which contains the latest update package. Extract the .jpu file to the root folder of a USB-A pen drive (FAT32), preferably with no other files.



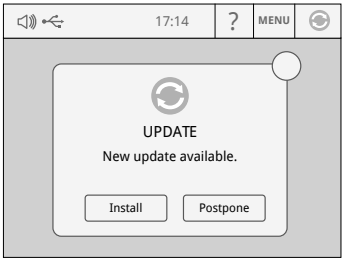
Connection: USB-A Pen Drive to Control Unit

Connect the USB-A pen drive which contains the latest update file and the update notification to the control unit.

This symbol will be displayed automatically.

If the DME control unit does not detect the USB pen drive, please use a pen drive partitioning software.

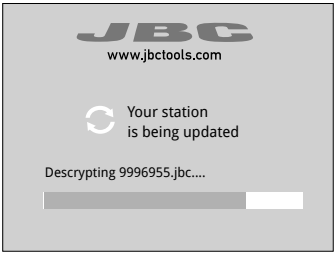
Installation: JBC Firmware Update File



Press “Install” on the pop-up window. If is not displayed, tap on the notification.

Updating Process

During the updating process do not turn off the control unit, it may turn on and off automatically. The installation finishes when the updating bar is completed and the work screen is displayed.

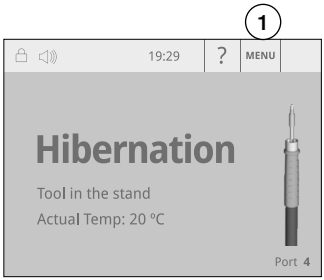


The work screen will be displayed after confirming the “Welcome” pop-up.

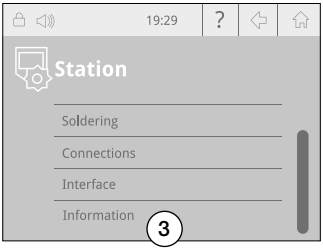
If the process stops for a long time (over 30 min), reset the station and wait until the installation is fully completed.

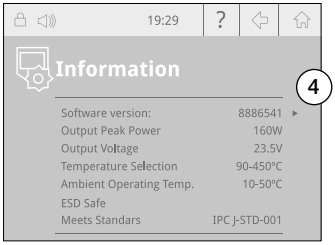
Checking Firmware Version

Check that the new firmware has been installed successfully by means of the following steps:



First select “Menu” (1) and then the “Station” icon (2) on the screen.





Select “Information” (3) and then press ▶ (4) to check the firmware version.

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.

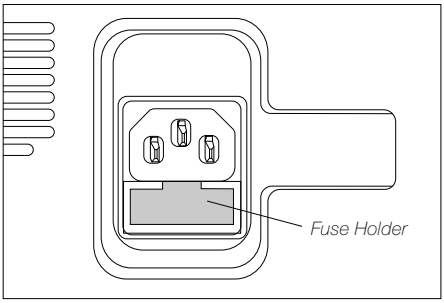
- Use a damp cloth to clean the casing and the tool. Alcohol can only be used to clean the metal parts.

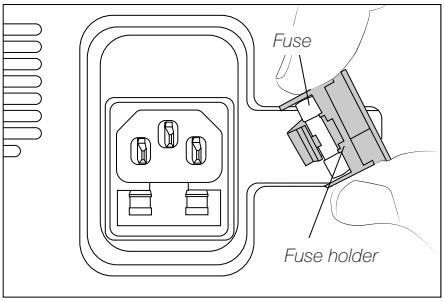
- Periodically check that the metal parts of the tool and stand are clean so that the station can detect the tool and establish its status.

- 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

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):	±1.5ºC / ±3ºF Meets and exceed IPC J-STD-001F
- Temp Accuracy:	±3% using reference cartridge
- Temp Adjustment:	±50ºC / ±90ºF Through station settings menu
- Tip to Ground Voltage/Resistance:	Meets and exceeds ANSI/ESD S20.20 and IPC J-STD-001F
- Ambient Operating Temp:	10 - 50 ºC / 50 - 122 ºF
- Connections:	USB-A: Firmware Update, Grafics and Profiles, Dino-Lite USB Microscope (models AM2011, AM2111) 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.
If you register, you will receive e-mail notifications about new software updates for your registered product.

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.

www.jbctools.com

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