JBC

INSTRUCTION MANUAL

Four-Tool Control Unit

Ref. DME-A

Packing List

The following items should be included:

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

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

Manual .... 1 unit
Ref. 0012837

Features

3.5" Color **TFT Touch screen**

USB-A connector

Tilt the display for easy reading

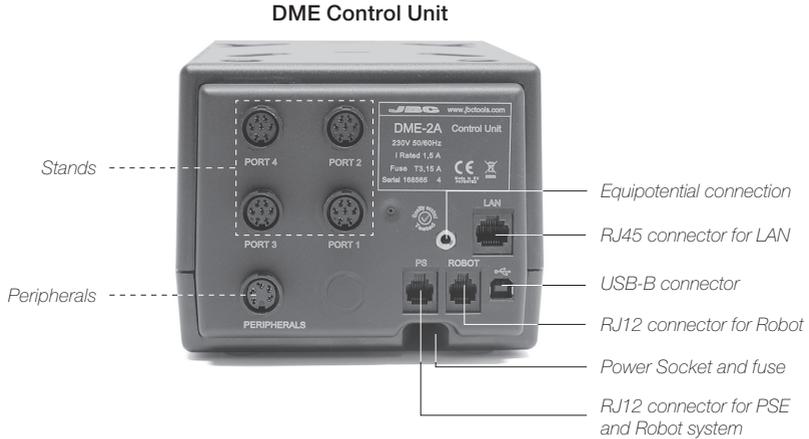*Speaker*

Connections

Work simultaneously with **up to 4** tools and 1 module + 1 pedal for each tool (Peripherals).

DME Control Unit

Stands - - - - - - - -

PORT 4   PORT 2

DME-2A Control Unit
230V 50/60Hz
I Rated 1,6 A
Fuse T3,15 A
Serial 168565   4

LAN

PORT 3   PORT 1

Peripherals - - - - - - - -

PS   ROBOT

PERIPHERALS

Equipotential connection

RJ45 connector for LAN

USB-B connector

RJ12 connector for Robot

Power Socket and fuse

RJ12 connector for PSE and Robot system

Compatibility

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

Basic working system				Peripherals**			
Control Unit	Tool	Cartridge Range	Stand	MSE-A / MVE-A	MNE-A	FSE-A	P-005
DME-A	T210-A	C210	AD-SD			●	●
	T245-A	C245				●	●
	T470-A	C245				●	●
	T210-NA*	C210	DN-SE	●			●
	T245-NA*	C245					
	T470-NA*						
	AP250-A	C250	AP-SD			●	●
	PA120-A	C120	PA-SD			●	●
	HT420-A	C420	HT-SD			●	●
	DS360-A	C360	DS-SD	●			●
	DR560-A	C560	DR-SD	●			●

* The **MNE** Nitrogen Flow Regulator is required.
If you need to connect the **MS, **MV**, **MN** or **FS** modules, an adapter is required (Ref. IM2496).

Operation

The JBC Exclusive Heating 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 a tip life by 5.
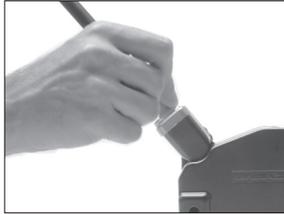
1. Work

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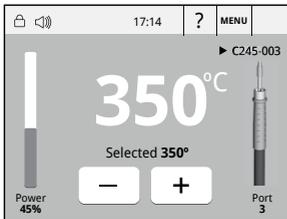
2. Sleep

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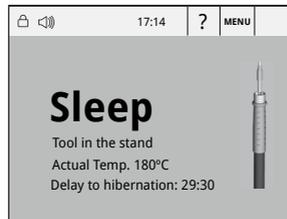
3. Hibernation

Long period in the stand

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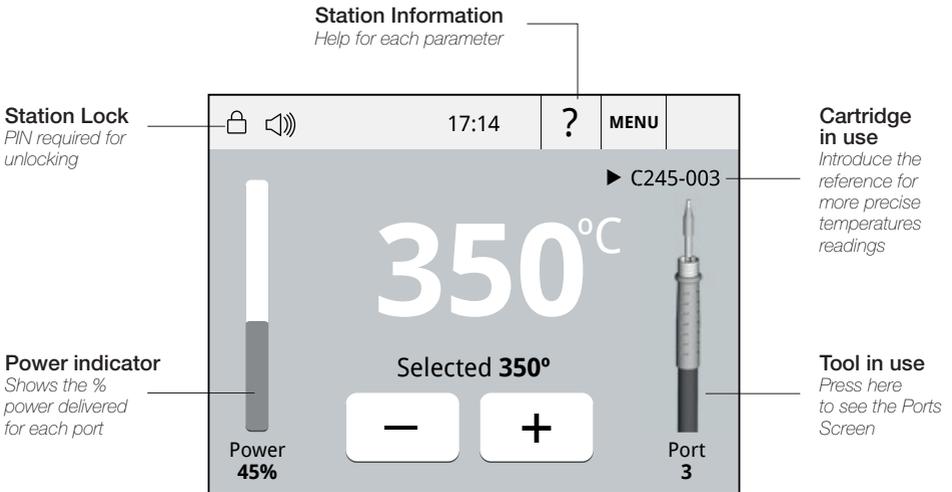· Set Sleep delay.
  (from 0 to 9 min or no Sleep)

Tools Menu:

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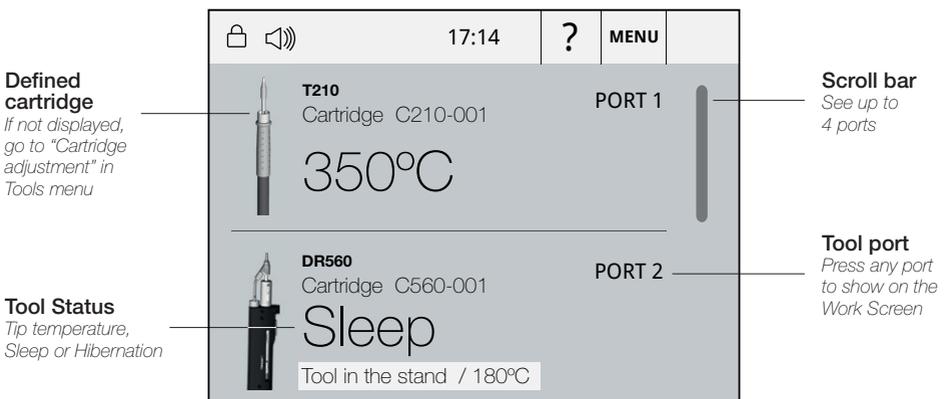 (from 0 to 60 min or no hibernation)

Work Screen

The DME-A offers an intuitive user interface which provides quick access to the station parameters.
Original PIN: 0105

Station Information
Help for each parameter

Station Lock
PIN required for unlocking

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▶ C245-003

350°C

Selected **350°**

—   +

Power **45%**

Port **3**

Power indicator
Shows the % power delivered for each port

Cartridge in use
Introduce the reference for more precise temperatures readings

Tool in use
Press here to see the Ports Screen

Simultaneous control of ports

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

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T210
Cartridge C210-001
350ºC

PORT 1

DR560
Cartridge C560-001
Sleep
Tool in the stand / 180ºC

PORT 2

Defined cartridge
If not displayed, go to "Cartridge adjustment" in Tools menu

Tool Status
Tip temperature, Sleep or Hibernation

Scroll bar
See up to 4 ports

Tool port
Press any port to show on the Work Screen

Menu Screen

Select any option and press the station information button to display the data of each parameter.

Adjust tool settings for each port

Join station ports with modules and pedals

Personalize the station:
Station name, PIN activation, Screen settings, Robot activation, Partial resets...

Station	Tools	Peripherals	Counters
Utilities	Info	Language	Reset

Registers total and partial hours
for each port: work, sleep, hibernation...

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Multi-language
Up to 8 languages to choose from

Utilities

Useful additional applications that complement and support your work.

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View your video* from the station or via USB

Connect a microscope** via USB and see your work on the screen

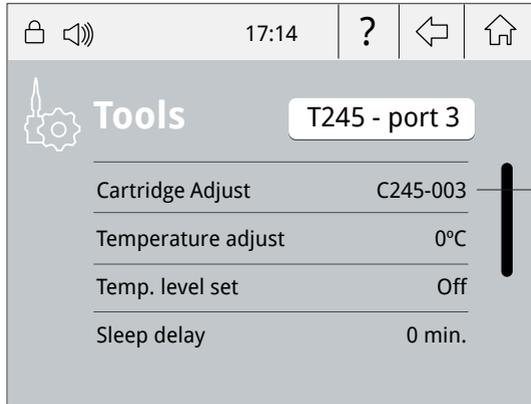|			
Video	Catalog	Calculator	Convert
Microscope	Files	Graphs	

Unit Converter °C - °F - K

Monitor and save your soldering process to optimize production

* Format file video: AVI and MP4 / Resolution: 320x240 / Aspect ratio: 16:9 / Frame rate: 18 FPS

**Recommended model: Dino-Lite AM2011 and equivalent.

Cartridge Adjustment

Insert the cartridge and the station will recognize its characteristics (size and shape) to provide more accurate temperature readings.

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Tools T245 - port 3

Cartridge Adjust	C245-003
Temperature adjust	0ºC
Temp. level set	Off
Sleep delay	0 min.

After connecting the tool, introduce the last 3 reference numbers of the cartridge.

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.

Process analysis

Optimize your production after analysing the information provided by the graphics.

Graphics

By pressing **Graphics** in the Utilities MENU, temperature and power figures in real time are displayed for each port. This helps you decide how to adjust your process or which tip to use to obtain the best quality soldering.

Change port

Power (%)

Temperature
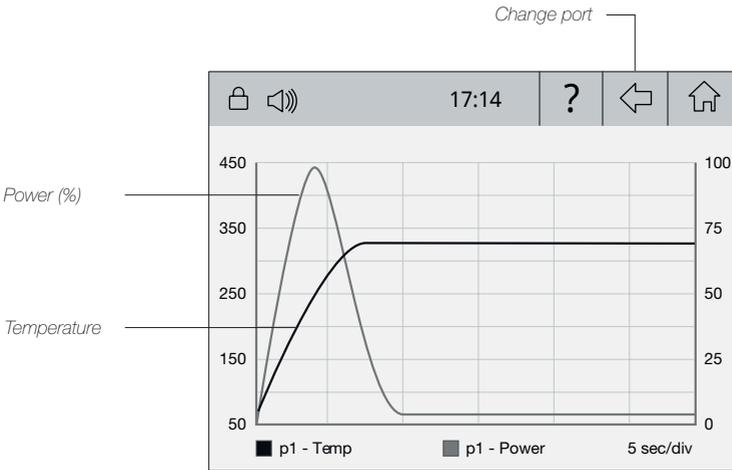
Export graphics

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

Soldering Network

Remotely manage and monitor your stations from a PC.

1. Download the **JBC Manager software** and the user manual from
www.jbctools.com/manager.html

2. Connect the stations via USB-B or LAN (RJ45) and the PC will automatically detect them.

3. The notification will be displayed on the station.

Functions:
- Set all the station parameters from your PC.
- Organize groups of stations and set all their parameters at the same time.
- Store specific configurations for later use.
- Analyze a station's soldering graphics on your PC and export them.

any DME station

*any JBC station*
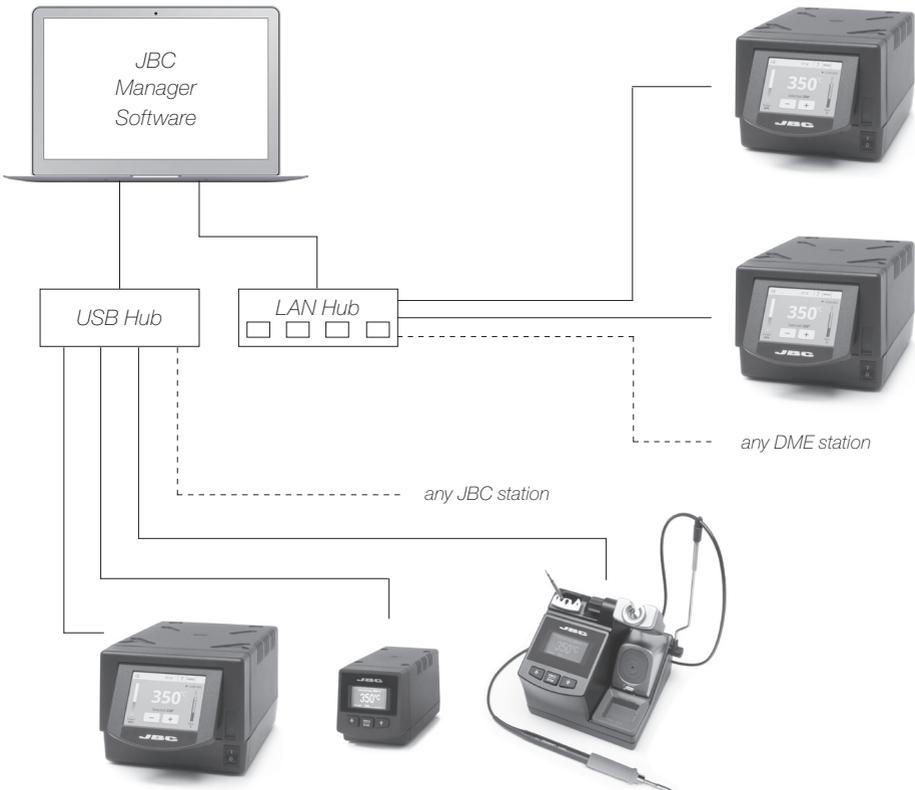
Multiply x6 the capacity of your DME

Centralize control of 5 PSE Power Supply Units in a single DME and work with as many as 24 tools simultaneously.

1. Connect the DME to the **PSE Power Supply Units** via the PS socket (RJ12).
2. Connect the other PSEs as follows:

Four-Tool Control Unit
Ref. DME-A

Four-Tool
Power Supply Unit
Ref. PSE-A

4 Tools

4 Tools

4 Tools

4 Tools

4 Tools
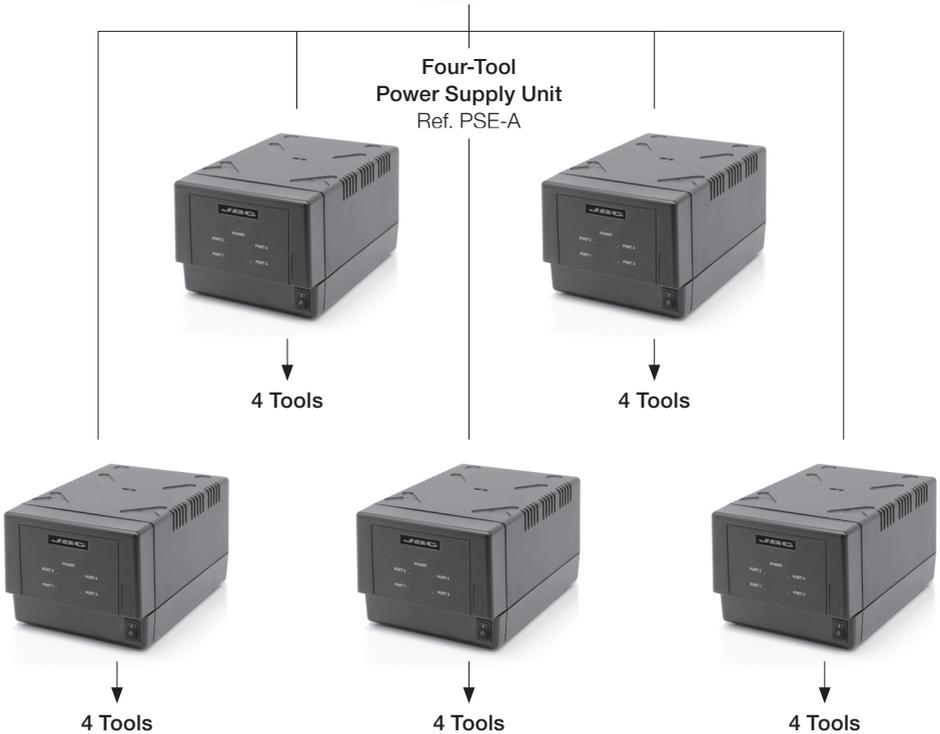
Working with Robots

Manage and monitor the station using a Robot system.

1. Connect the tool to the station port by means of the CHB-A Converter.

2. Connect your Robot system to the socket on the station (RJ12).
DB9-RJ12 Adapater available only if necessary (Ref: 0013772).

3. Enable the Robot option in the station settings and the notification will be displayed:

4. Set your Robot's commands according to the Robot Communication Protocol, available on the website **www.jbctools.com/jbcsoftware-menu-115.html**.

Robot

Converter
Ref. CHB-A

Control Unit

RS-232 connection
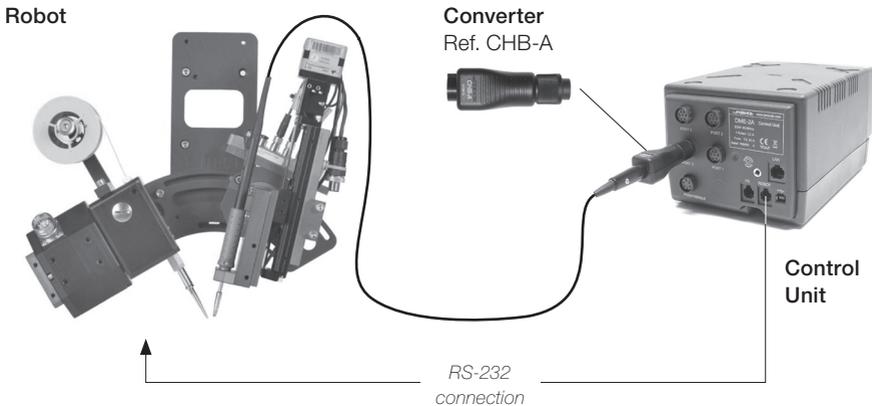
Update the station software

1. Download the JBC Update File from **www.jbctools.com/software.html** and save it on a USB flash drive. Preferably one with no other files.

JBC Update File

2. Insert the USB flash drive to the station. The icon is diplayed while updating.
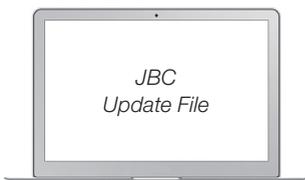
Maintenance

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 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.

Clean periodically

- Replace a blown fuse as follows:

Fuse holder
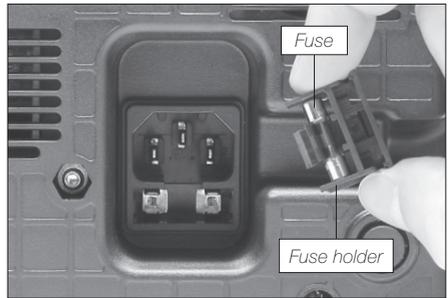
Fuse

Fuse holder

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 fire.

- The power cord must be plugged into approved bases. Make 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 after 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 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 as well as persons with reduced physical, sensory or mental capabilities or lacking 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.

Specifications

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

- Weight: 4,573 Kg (10.08 lb)
- Dimensions: 148 x 120 x 232 mm (5.83 x 4.72 x 9.13 in)
- Output Peak Power: 160W per tool
- Temperature Range: 90 - 450°C (190 - 840ºF)
- Idle Temp. Stability (still air):   ±1.5 ºC (±3 ºF)
- Ambient Operating Temperature: 10 - 40 ºC (50 - 104 ºF)
- Tip to ground resistance: <2 ohms
- Tip to ground voltage: <2mV RMS
- Connections: USB-A / USB-B / Peripherals connectors
- RJ12 connectors: 1 for Robot and 1 for PSE Power Supply Control Unit.
- RJ45 connector for LAN (Ethernet).

Complies with CE standards
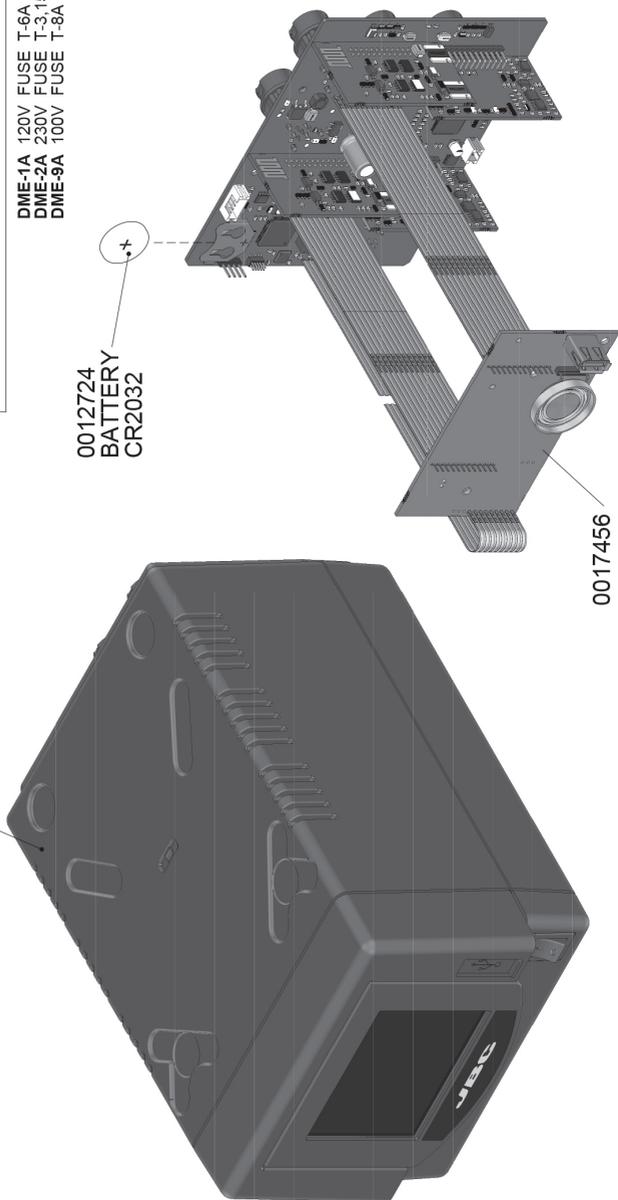ESD protected housing "skin effect"

Exploded View

DME-1A 120V
DME-2A 230V
DME-9A 100V
FOUR-TOOL CONTROL UNIT

FROM SERIE 177156

DME-1A / DME-2A / DME-9A

SPARE PARTS	
DME-1A / DME-2A / DME-9A:	
-CIRCUIT	0017456
-ENCLOSURE	
· TOP	0011035
· BOTTOM	0014567
· FRONT+DISPLAY	0011014
· BACK	0011861

DME-1A 120V FUSE T-6A
DME-2A 230V FUSE T-3,15A
DME-9A 100V FUSE T-8A

0012724
BATTERY
CR2032

0017456

JBC

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.

This product should not be thrown in the garbage.
In accordance with the European directive 2002/96/EC, electronic equipment at the end of their life
must be collected and returned to an authorized recycling facility.

CE

Manual in other languages available on our website

www.jbctools.com