

# JBC

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

English



## Heavy Duty station

Ref. HDE-A

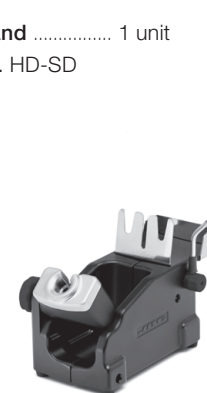
## Packing List

The following items should be included:

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



**Stand** ..... 1 unit  
Ref. HD-SD



**HD General purposes Handle** ..... 1 unit  
Ref. T470-A



**Tip Cleaner**..... 1 unit  
Ref. CL9885



**Sponge** ..... 1 unit  
Ref. S0354



**Stand Cable** ..... 1 unit  
Ref. 0011283



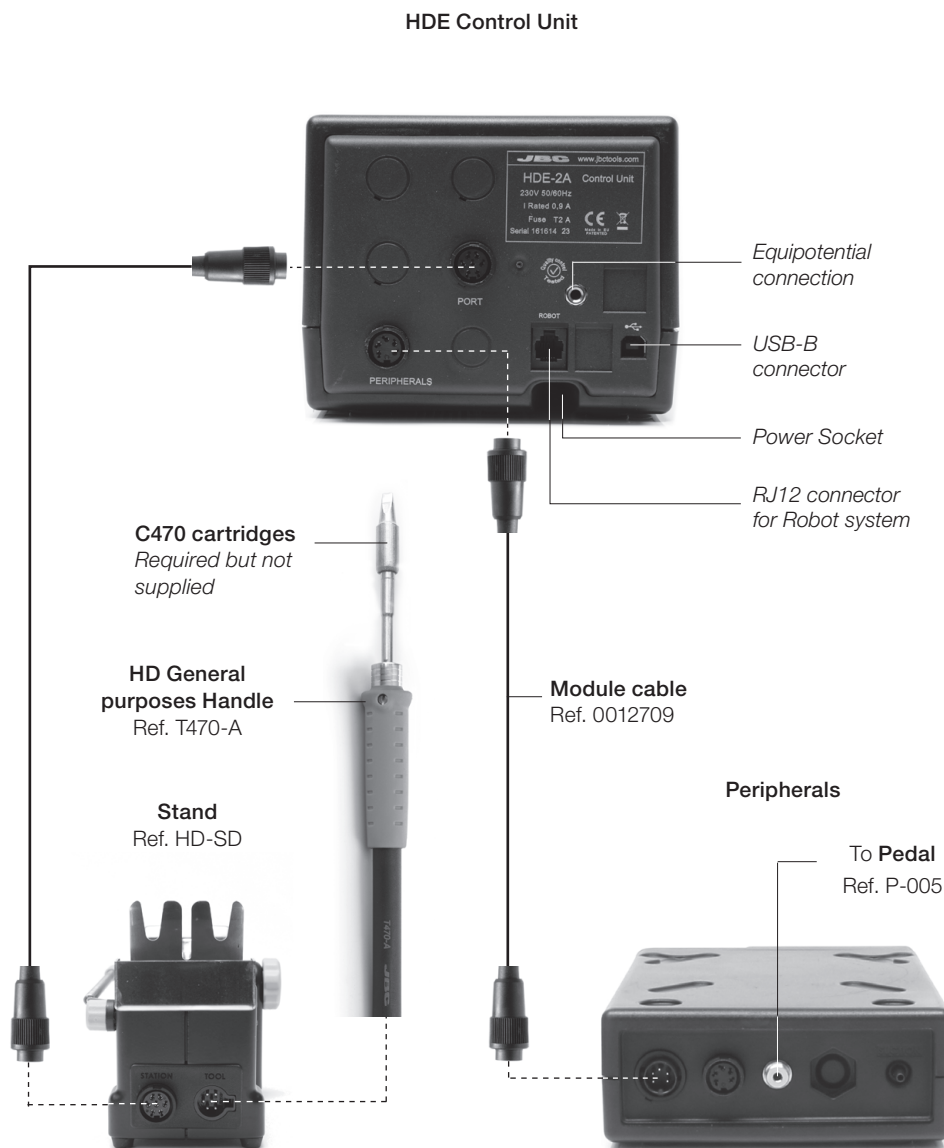
**Power cord** .....1 unit  
Ref. 0010569 (230V)  
0013671 (100/120V)



**Manual** ..... 1 unit  
Ref. 0013170



## Connections



## Features

2.8" Color TFT screen  
with capacitive keyboard

USB-A connector

Tilt the display for  
easy reading

## Peripherals

Join the station port with 1 module and 1 pedal. See below the compatible peripherals:

**Fume Extractor Switch**  
Ref. FSE-A

**Pedal**  
Ref. P-005



## Compatible Soldering Iron Handles

### T470: Handles for Heavy Duty

Use C470 Cartridge range

For intensive soldering jobs requiring continued high thermal power. They feature a non-slip-grip with a good thermal insulation and a screw which fixes the cartridge and prevents rotation.

#### HD General Purposes

Ref. T470-A



#### HD General Purposes with 3m cable

Ref. T470-SA

#### Better Handling

Ref. T470-ZA

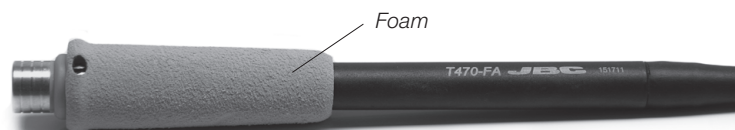
For a greater manual control of the tool.



#### Thermal Insulation

cable Ref. T470-FA

Foam grip for soldering jobs with high thermal requirements.



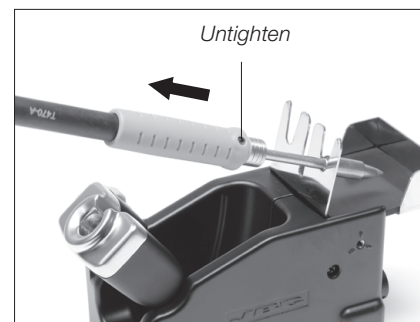
#### Thermal Insulation with 3m

Ref. T470-MA

Note: All models are supplied with a 1.5m cable except those specified with 3m.

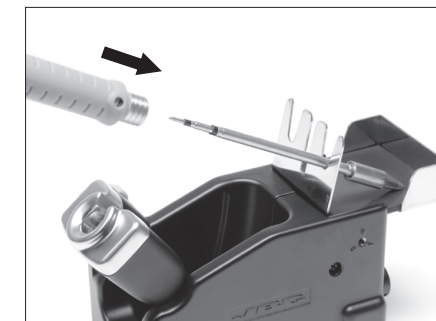
## Changing cartridges

### 1. Removing



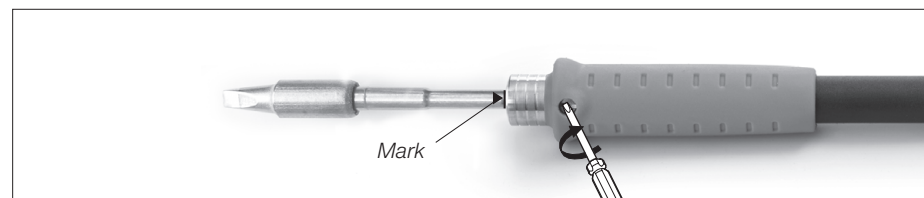
Untighten the screw. Place the Soldering Iron in the extractor and remove the cartridge.

### 2. Inserting



Insert the cartridge and press slightly until the mark\*

### 3. Fixing



Once the cartridge is properly inserted we recommend tightening the screw to prevent moving.

**\*Important:** It is essential to insert the cartridges as far as the mark for a good connection.

### Compatible cartridges

The HDE-A works with C470 cartridges and T470 handles. Find the model that best suits your soldering needs in [www.jbctools.com](http://www.jbctools.com)



Round



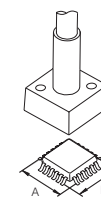
Chisel



Round bent

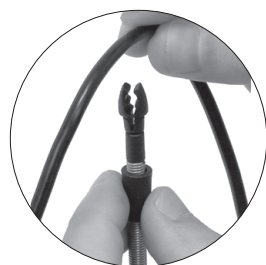


Bevel



Special models

## Adjustable Stand



**Cable collector**

*Keeps working area free of cable.*

## Quick tip changer

*The cartridge extractor / inserter system permits switching cartridges without interrupting your work.*



**Adjustable tool holder**

*Suits your work position.*



**Adjustable cable collector**

## Tip Cleaner

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

### Brass wool

Ref. CL6210

*Very effective cleaning method. It leaves a small layer of solder on the tip to prevent oxidation between cleaning and rewetting.*

### Sponge

Ref. S0354

*The least harmful cleaning method. Keep the sponge damp with distilled water when working to avoid tip wear.*

### Splashguard

*It minimises splashing of solder particles when using the brass wool.*



### Non-slip base

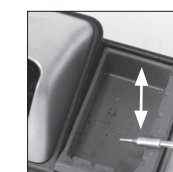
*No need to hold the base while cleaning tips.*

### Wiper

Ref. CL0236

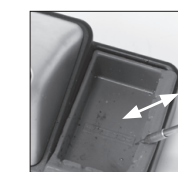
*A temperature resistant receptacle lets the operator remove excess solder by gently tapping or wiping. It can be easily removed for cleaning.*

### Tapping:



Tap gently to remove excess solder.

### Wiping:



Use the slots to remove remaining particles.

## Optional

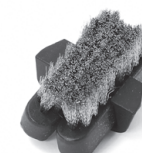
### Inox wool

Ref. CL6205



### Brushes

Ref. CL6220



### Tip-tinner

Ref. TT-A



### Sand

Ref. CL6211



## Work Screen

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



### Menu Options

Press INFO for each parameter description.



Station



Tools



Counters



Peripherals



Graphics



Reset

### System notifications (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.

## Operation

### The JBC Exclusive Heating System

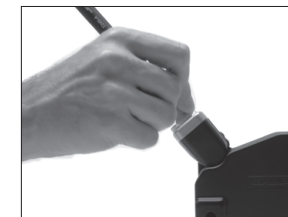
This revolutionary technology is able to recover tip temperature extremely quickly. It allows the user to work at a lower temperature and improve the quality of soldering. The tip temperature is further reduced thanks to the Sleep and Hibernation modes which increase the tip life by 5.

#### 1. Work



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

#### 2. Sleep

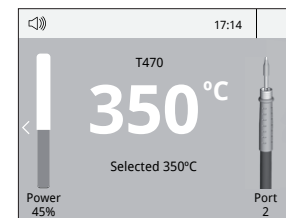


When the tool is in the stand, the temperature falls to 180°C / 360°F (preset sleep temperature).

#### 3. Hibernation

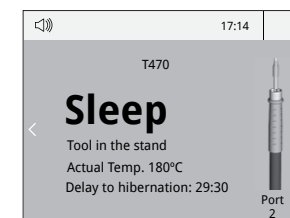


After longer periods of inactivity (pre-set to 30 min.), the power is cut off and the tool cools down to room temperature.



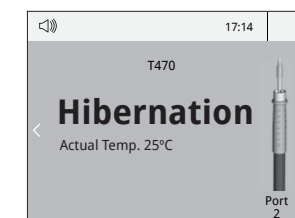
Tools Menu:

- Set temperature limits
- Select 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)

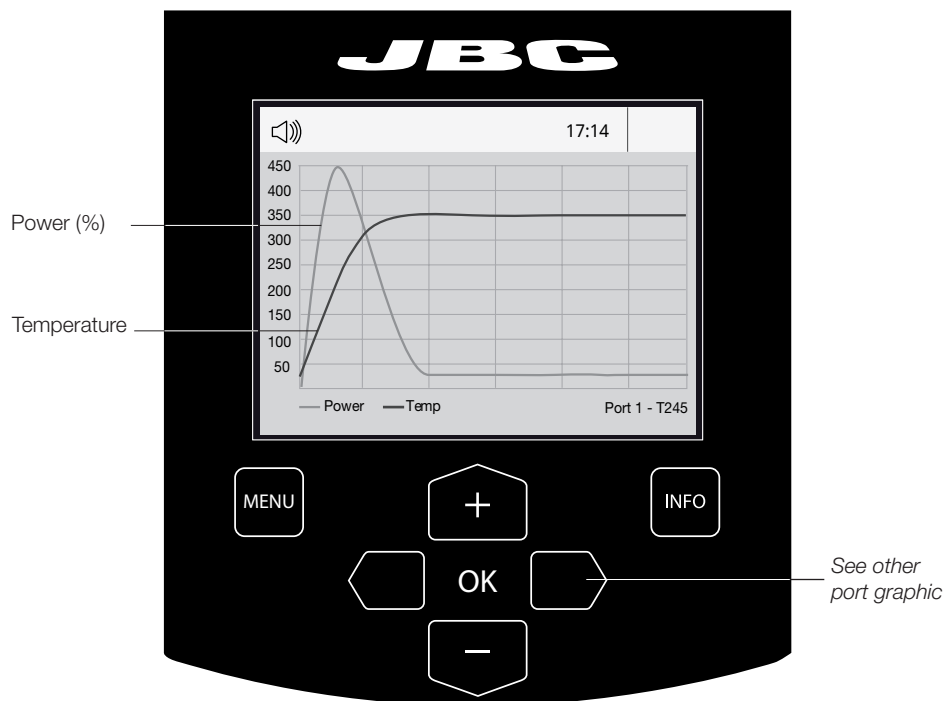


## Process analysis



Graphics

By pressing **Graphics** in the main MENU, temperature and power responses in real time are displayed for each port. This helps you decide which the proper tip is for every soldering job and the quality of the solder joint.




## Export graphics

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



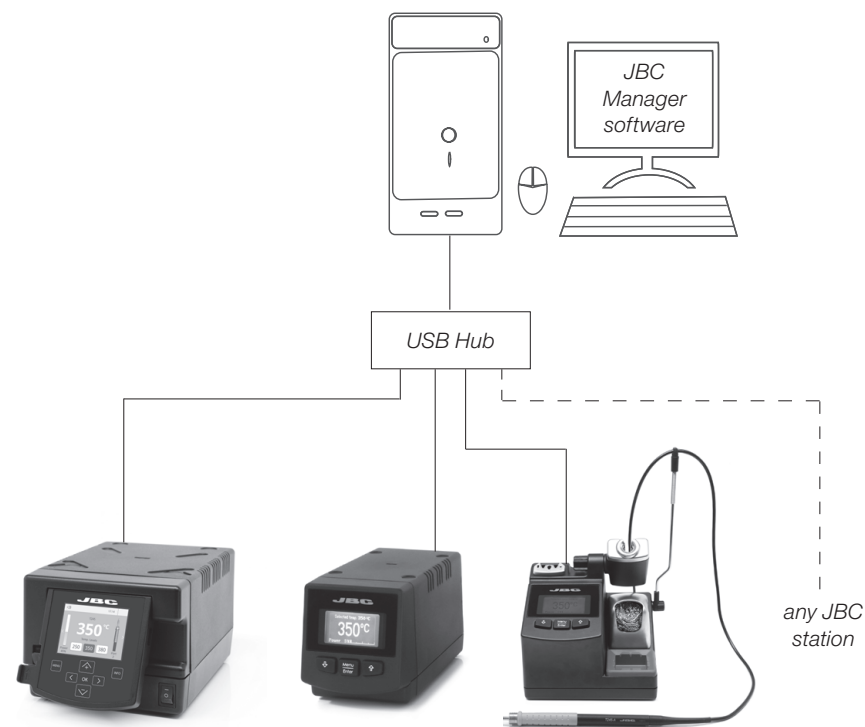
## Soldering Net

Remotely manage and monitor as many stations as your Windows PC can handle.

1. Download the **JBC Manager software** and the user manual from [www.jbctools.com/manager.html](http://www.jbctools.com/manager.html)
2. Connect the stations via USB-B connector and the PC will automatically detect them.
3. The notification  will be displayed on the station.


### Functions:

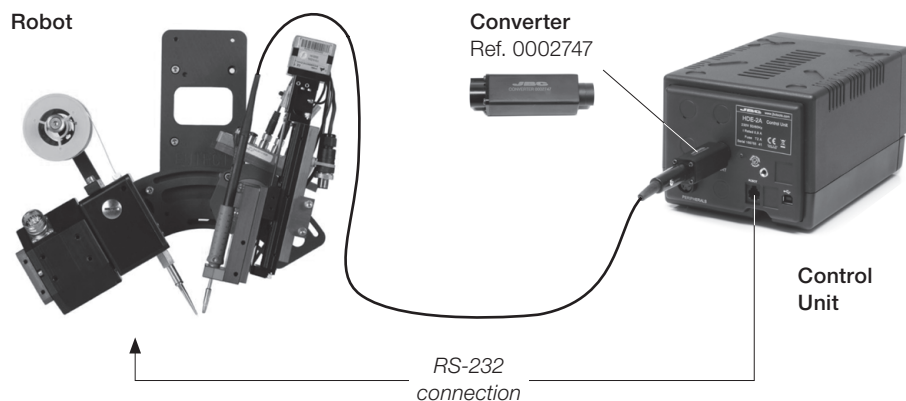
- Set all the station parameters from your PC.
- Organize groups of stations and set all their parameters at the same time.
- Store specific configurations for later uses.
- Analyze the soldering graphics of the stations on your PC and export them.




## Working with Robots

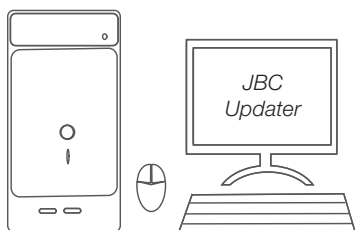
Manage and monitor the station using a Robotic system.

1. Connect the tool to the station port by means of the Converter.
2. Connect your Robot system to the Robot connector (RJ12) of the station.  
DB9-RJ12 Adapter 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](http://www.jbctools.com/jbcsoftware-menu-115.html).



## Update the station software

1. Download the JBC Updater software from [www.jbctools.com/software.html](http://www.jbctools.com/software.html) and save it on a USB flash drive. Preferably one with no other files.
2. Insert the USB flash drive.  
The icon  is displayed while updating.



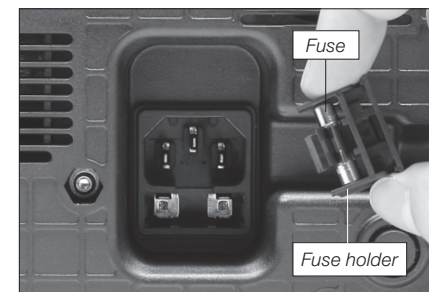
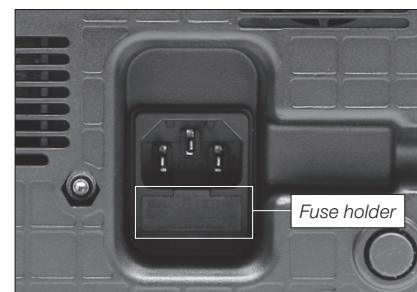
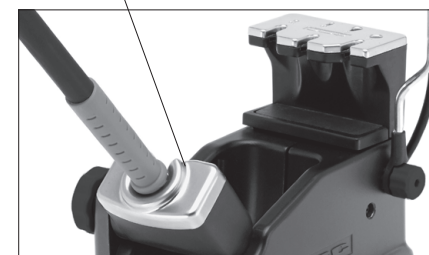
## Maintenance

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 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:



Clean periodically



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

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.**

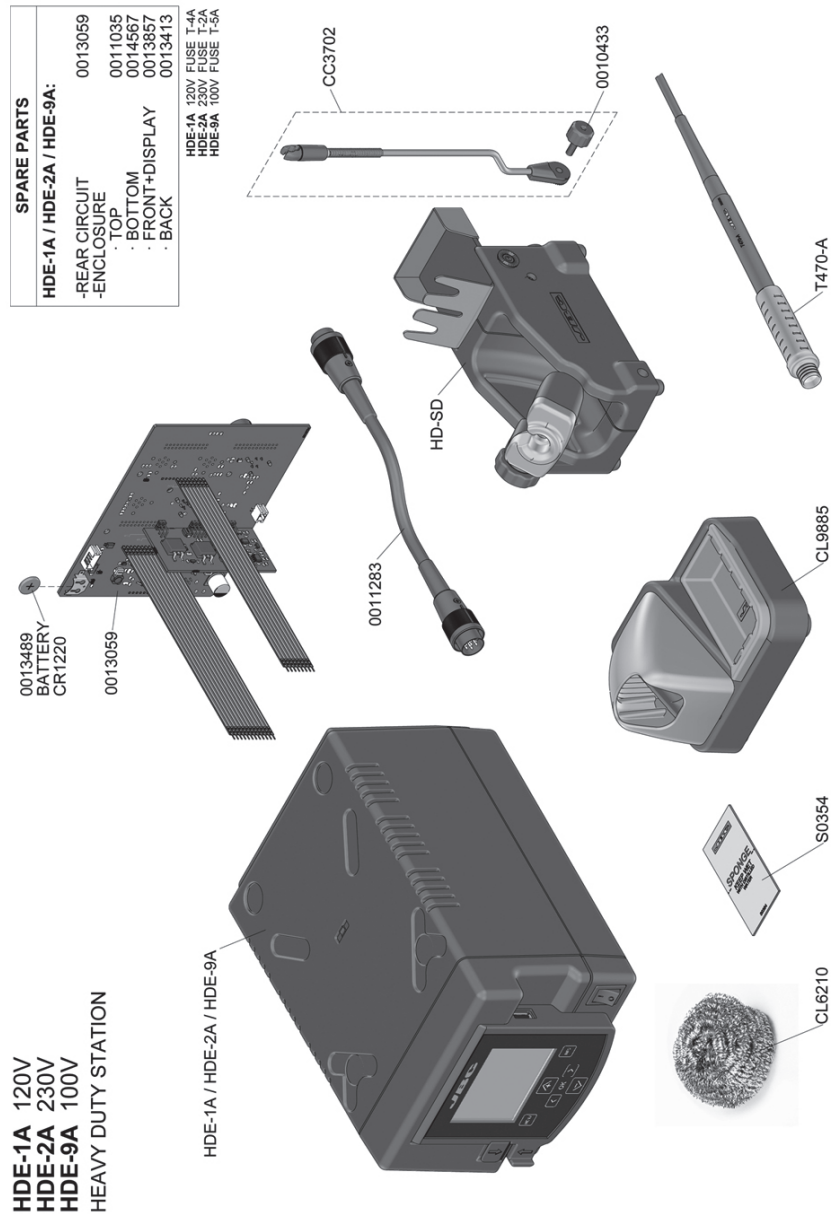
- Do not use the units for any purpose other than soldering or rework. Incorrect use may cause fire.
- The power cord must be plugged into approved bases. Be sure that it is properly grounded before use. When unplugging it, hold the plug, not the wire.
- Do not work on electrically live parts.
- The 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 inflammable products to ignite.
- Use a "non residue" classified flux and avoid contact with skin or eyes to prevent irritation.
- Be careful with the fumes produced when soldering.
- Keep your workplace clean and tidy. Wear appropriate protective 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.

## Specifications

- HDE-1A** 120V 50/60Hz. Input fuse: 4A. Output: 47V
- HDE-2A** 230V 50/60Hz. Input fuse: 2A. Output: 47V
- HDE-9A** 100V 50/60Hz. Input fuse: 4A. Output: 47V
- Weight: 5.9 Kg (13.1 lb)
- Dimensions: 145 x 120 x 225mm
- Output Peak Power: 250W
- Temperature Range: 90-500 °C (190-932 °F)
- Idle Temp. Stability (still air)  $\pm 1.5$  °C ( $\pm 3$  °F)
- Tip to ground resistance: <2 ohms
- Tip to ground voltage: <2mV RMS
- Ambient Operating Temperature: 10-40 °C (50-104 °F)
- USB-A / USB-B / Peripherals connectors
- RJ12 connector for Robot

Complies with CE standards  
ESD protected housing "skin effect"

## Exploded View





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### 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 due to use or mis-use.

In order for the warranty to be valid, equipment must be returned, postage paid, to the dealer where it was purchased.

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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.