JBC

www.jbctools.com

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

General purpose HD 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

Heavy Duty station
Ref. HDE-A

Features

HDE Control Unit

HDE-2A Control Unit
230V 50/60Hz
I Rated 0.9 A
Fuse T2 A
Serial 161614 Z3

PORT

ROBOT

PERIPHERALS

Equipotential connection

USB-B connector

Power Socket

Peripheral connector for joining modules and pedals

RJ12 connector for Robot system

C470 cartridges
Required but not supplied

General purpose HD Handle
Ref. T470-A

Stand
Ref. HD-SD

STATION TOOL

2.8" Color **TFT screen** *with capacitive keyboard*

USB-A connector

Tilt the display for easy reading

Compatible 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

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.
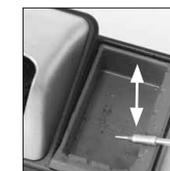
Non-slip base

No need to hold the base while cleaning tips.

Wiper
Ref. CL0236
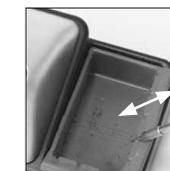
A temperature resistant receptacle lets the operator remove excess solder by gently tapping or wiping. It can be easily removed for cleaning.

Tapping:

Tap gently to remove excess solder.

Wiping:

Use the slots to remove remaining particles.

Optional

Inox wool
Ref. CL6205

Brushes
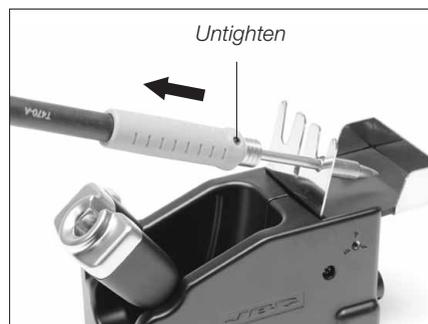Ref. CL6220

Tip-tinner
Ref. TT-A

Sand
Ref. CL6211

Changing cartridges
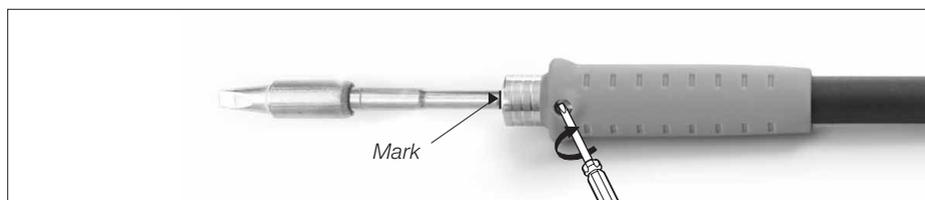
1. Removing

Untighten

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*
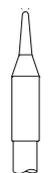
3. Fixing

Mark

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**
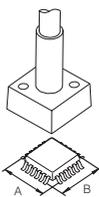

Round   Chisel   Round bent   Bevel   Special models

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.

General Purpose HD Handle
Ref. T470-A

General Purpose HD Handle with 3m cable
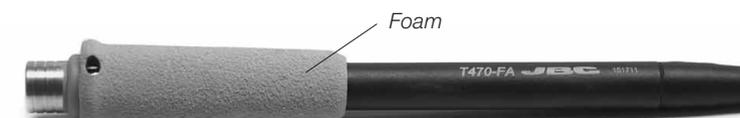Ref. T470-SA

Tri-lobed Handle
Ref. T470-ZA
For better handling of the tool.

Thermal Insulator HD Handle
Ref. T470-FA

Thermal Insulator HD Handle with 3m cable
Ref. T470-MA

Foam

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

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

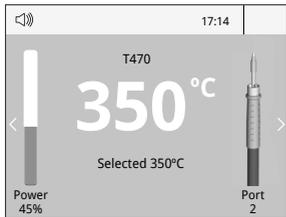When the tool is lifted from the stand the tip will heat up to the selected temperature.

Tools Menu:

· Set temperature limits
· Select temperature levels

2. Sleep

When the tool is in the stand, the temperature falls to 180ºC / 360ºF (preset sleep temperature).

Tools Menu:

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

3. Hibernation

Long time in the stand

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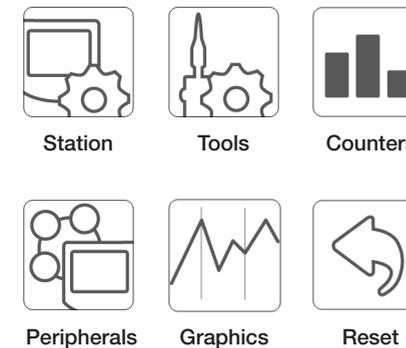

Tools Menu:

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

Work Screen

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

Status Bar

Tool in use

Power indicator

Displayed if temperature levels are activated

Station Information

Change port

Menu Options

Press INFO for each parameter description.

Station

Tools

Counters

Peripherals

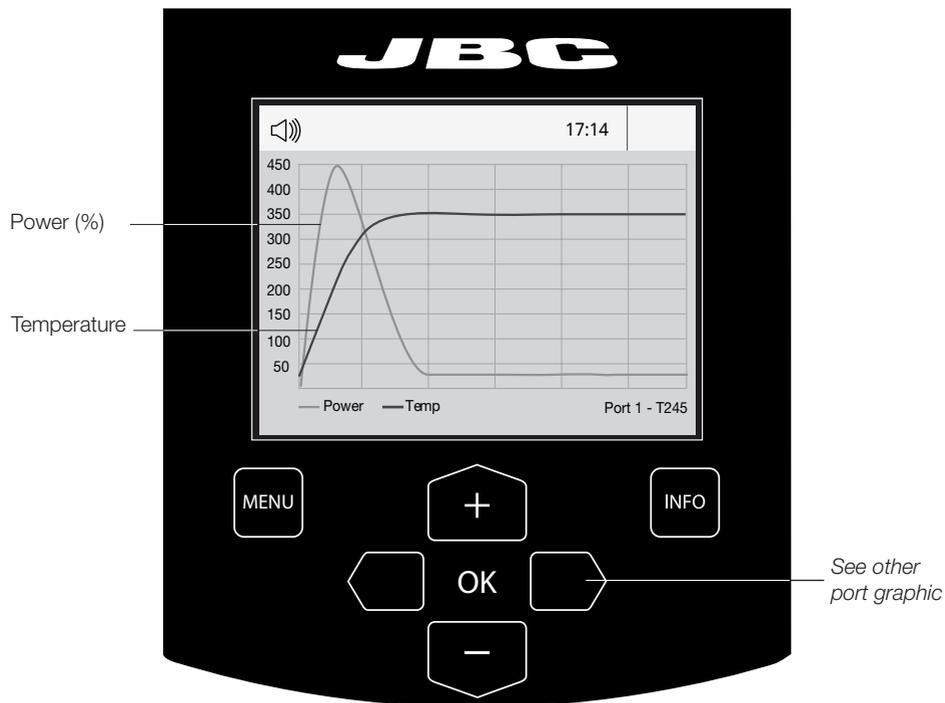Graphics

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.

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.

Power (%)

Temperature

See other port graphic

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**
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.

JBC Manager software

USB Hub

any JBC station
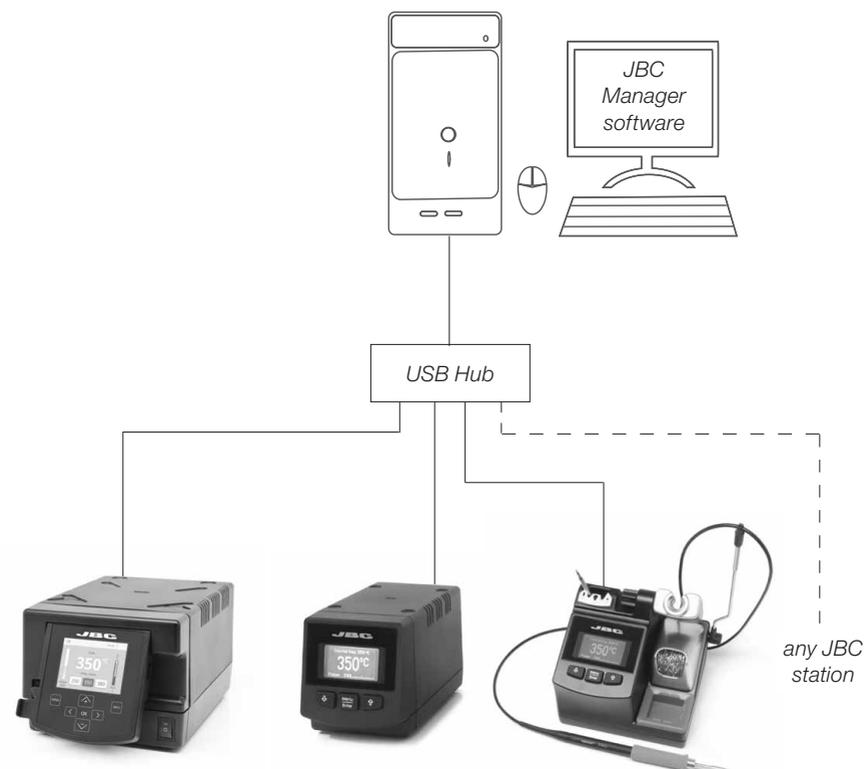
Working with Robots

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 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. 0002747

**HDE
Control Unit**

*RS-232
connection*
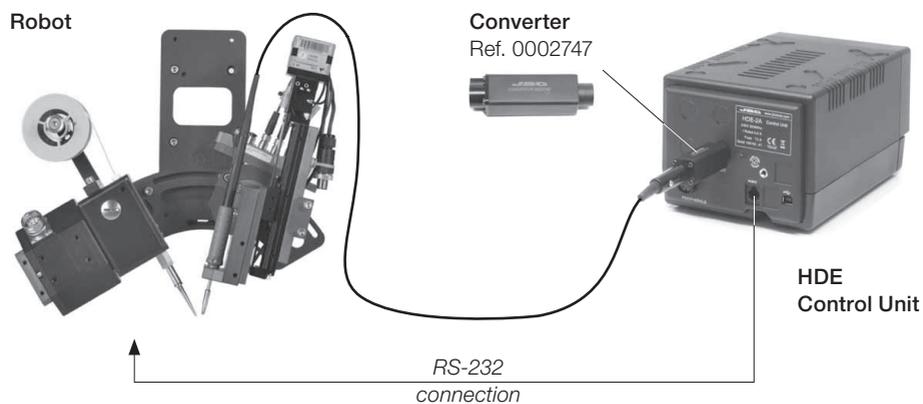
Update the station software

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.

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

*JBC
Update file*
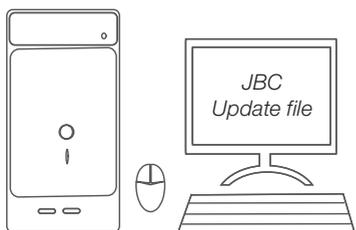
Maintenance

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

Fuse holder
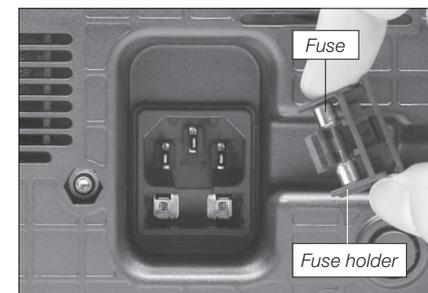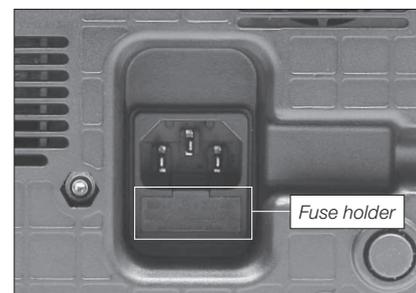
Fuse

Fuse holder

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

2. 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.**
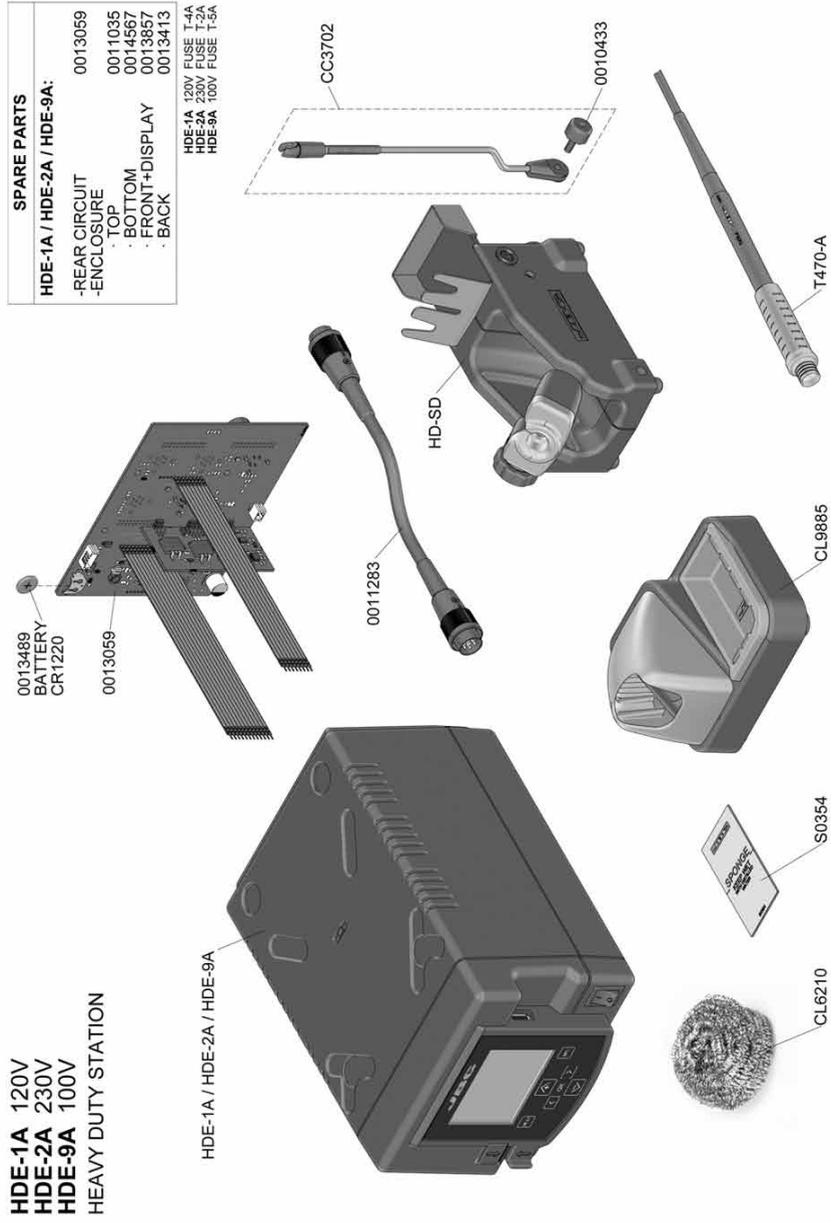
- Do not use the units for any purpose other than soldering or rework. Incorrect use may cause fire.

- 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.

- 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 ºC (190-932 ºF)
- Idle Temp. Stability (still air) ±1.5 ºC (±3 ºF)
- Tip to ground resistance: <2 ohms
- Tip to ground voltage: <2mV RMS
- Ambient Operating Temperature: 10-40 ºC (50-104 ºF)
- USB-A / USB-B / Peripherals connectors
- RJ12 connector for Robot

Complies with CE standards
ESD protected housing "skin effect"

Exploded View

SPARE PARTS

HDE-1A / HDE-2A / HDE-9A:

- REAR CIRCUIT	0013059
- ENCLOSURE	
· TOP	0011035
· BOTTOM	0014567
· FRONT+DISPLAY	0013857
· BACK	0013413

HDE-1A 120V	FUSE T-4A
HDE-2A 230V	FUSE T-2A
HDE-9A 100V	FUSE T-5A

CC3702

0010433

T470-A

HD-SD

0011283

CL9885

0013489
BATTERY
CR1220

0013059

S0354

CL6210

HDE-1A 120V
HDE-2A 230V
HDE-9A 100V

HEAVY DUTY STATION

HDE-1A / HDE-2A / HDE-9A

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 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.

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.

0013170-0215

www.jbctools.com