

# JBC

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

## INSTRUCTION MANUAL



## Fume Extractor

Ref. FAE2-5A

# Packing List

The following items should be included:

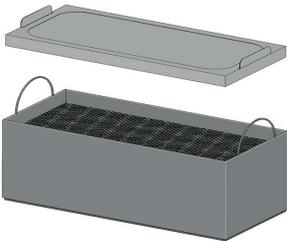
**Fume Extractor** ..... 1 unit  
Ref. FAE2-5A



**RJ12 direct cable** ..... 2 units  
Ref. 0019751



**Compact Filter + Pre-filter** ..... 1 unit  
Ref. FAE2-100  
\*Already assembled



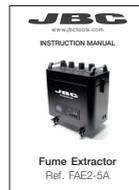
**Cleaning stick** ..... 1 unit  
Ref. 0004009



**Power cable** ..... 1 unit  
Ref. 0009417 (100V / 120V)  
0009401 (230V)



**Manual** ..... 1 unit  
Ref. 0018826



## Features

Aspiration tube for up to 4 stands (2 work intakes configuration) or for 1 workbench (4 work intakes configuration).

Aspiration tube for up to 4 stands (2 work intakes configuration) or for 1 workbench (4 work intakes configuration).

Aspiration tubes for workbenches

Quick release lever for filter change

Filter saturation indicator

Process screen

Wheels and brake system to move around easily

Power socket

Main switch

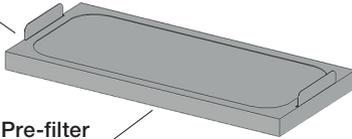
Connections ports



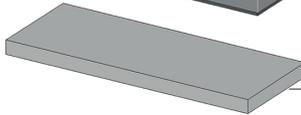
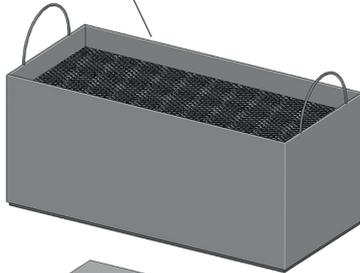
# Features



**Pre-filter**  
Ref. FAE2-110



**Compact filter + Pre-filter**  
Ref. FAE2-100

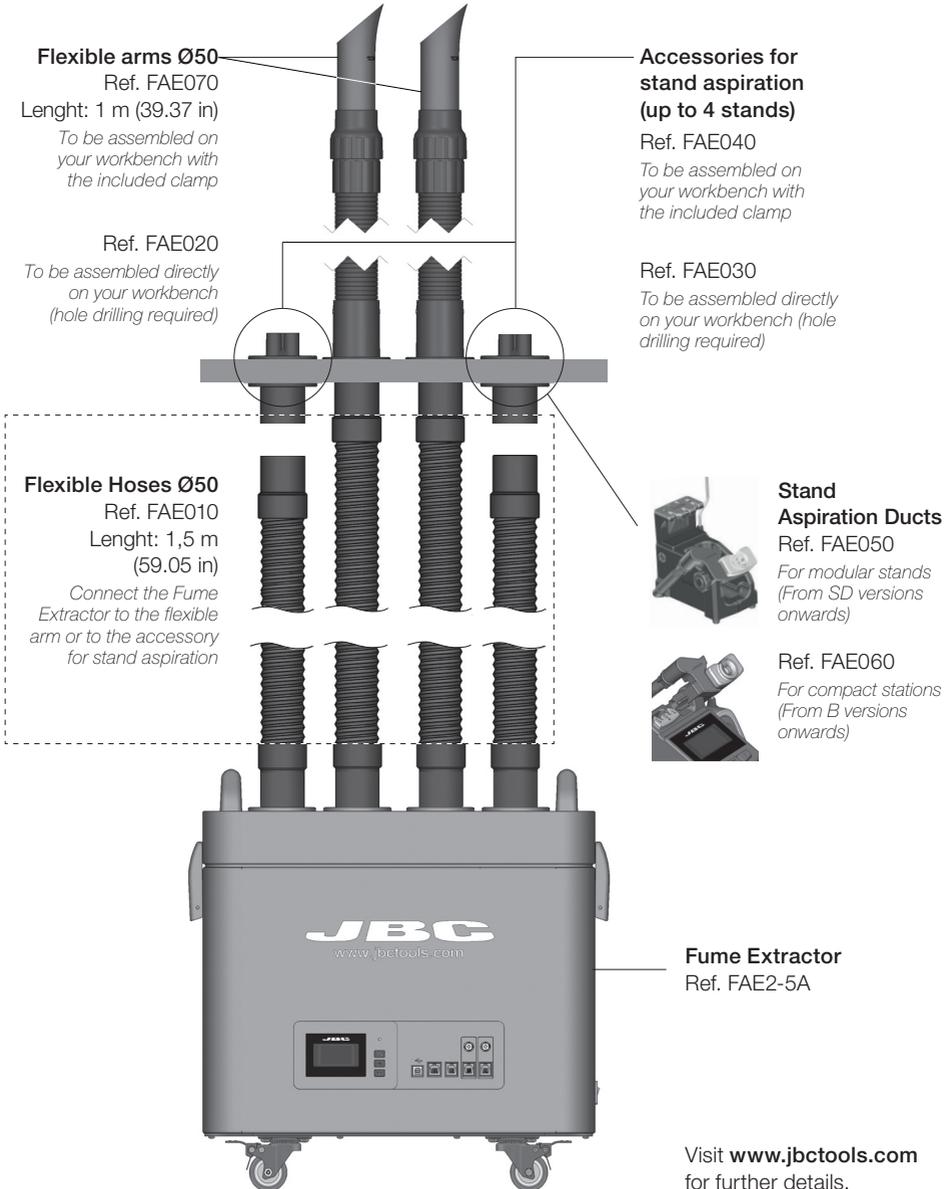


**⚠ Important:**  
Before using, unseal the filter and remove the bottom protection of the compact filter.



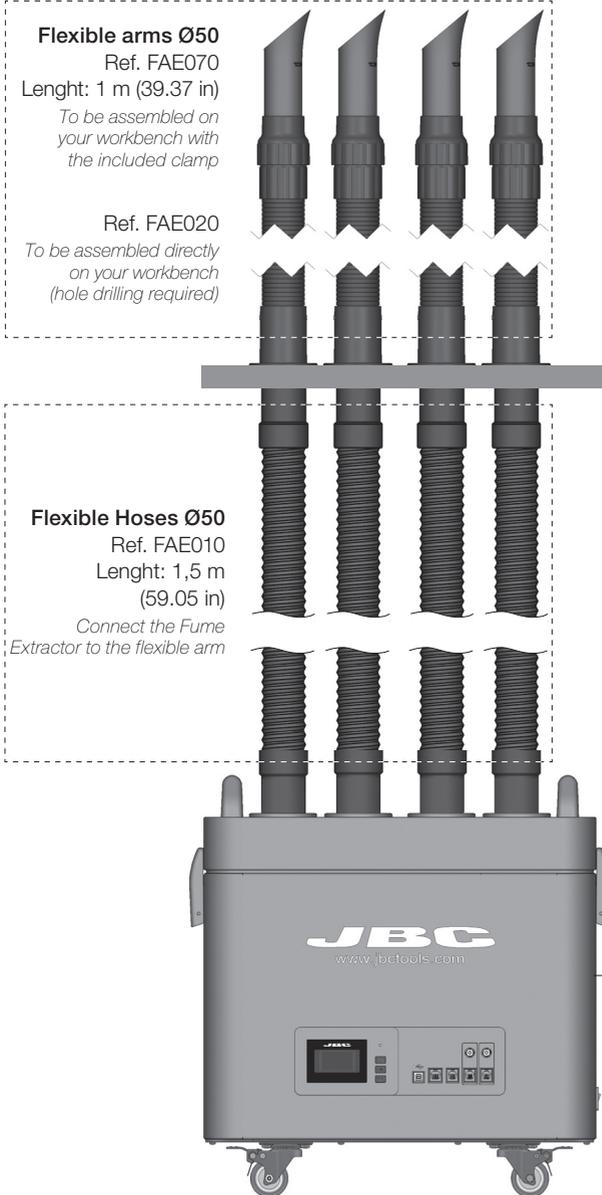
## Assembly for 2 work intakes configuration (default configuration)

For a basic working system you need:



## Assembly for 4 work intakes configuration (optional configuration)

In this configuration aspiration at stand is not available, aspiration flow is set High. Note that in this configuration, suction force per intake is decreased when compared to 2 work intakes configuration. See details on page 16. For a basic working system you need:



Visit [www.jbctools.com](http://www.jbctools.com) for further details.

## Communication ports

RJ12 connections take precedence over USB connections. The fume extractor will only attend RJ12 port.

## Connection with Excellence range

Connect up to 2 stations directly to the fume extractor using RJ12 ports.

For a correct operation always update the soldering stations with the latest software version available. The minimum required version is number **8886160** for DDE, HDE & NAE stations and number **8886162** for DME stations.

For 2 work intakes configuration, when two stations are connected to the fume extractor, each station controls the extraction port to which it is connected. Every tool connected to the soldering station need to be assigned to an available fume extraction port through the Peripherals menu of the station.

For 4 work intakes configuration, when two stations are connected to the fume extractor, the station connected to port1 controls extraction ports 1 and 2, whereas station connected to port2 control extraction ports 3 and 4. Every tool connected to the soldering station need to be assigned to an available fume extraction port through the Peripherals menu of the station.



# Aspiration ports control



*The pedal connection takes precedence over the RJ12 connection, the equipment will only attend the Pedal port.*

For 2 work intakes configuration:

If only 1 station is connected to Port1, the station will detect the 2 work intakes identified as FAE\_a (work1) and FAE\_b (work2).

For 4 work intakes configuration:

If only 1 station is connected to Port1, the station will detect the 4 work intakes identified as FAE\_a (work1), FAE\_b (work2), FAE\_c (work3) and FAE\_d (work4).

For 2 work intakes configuration:

When 2 stations are connected to Port1 and Port2, work intakes 1 and 2 are both detected as FAE\_a in the Peripherals menu of soldering stations.

For 4 work intakes configuration:

When 2 stations are connected to Port1 and Port2, work intakes 1 and 3 are detected as FAE\_a and work intakes 2 and 4 as FAE\_b in the Peripherals menu of soldering stations.

For 2 work intakes configuration:

If 1 station is connected to Port2, the station will only detect the work2 intake identified as FAE\_a.

For 4 work intakes configuration:

If 1 station is connected to Port2, the station will detect the 2 last work intakes identified as FAE\_a (work3) and FAE\_b (work4).

## Connection with QSC-A

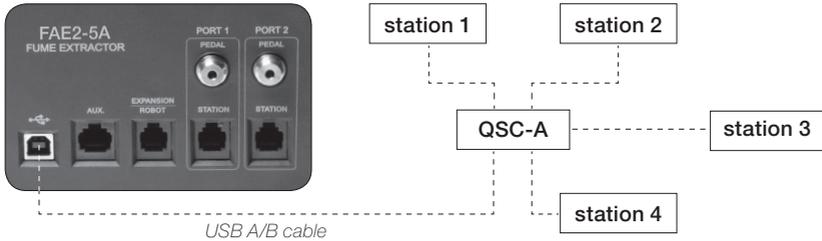
QSC-A makes possible connecting as many JBC Stations<sup>1,2</sup> as desired to the fume extractor FAE, through the USB interface (USB A-B cables required).

The software inside the QSC makes easy configuring which of the 2 fume extractor ports will be opened when picking up any tool from its stand.

You can configure the FAE directly on the QSC (requires a HDMI connected to a screen, a keyboard and a mouse) or from any computer in the same LAN as the QSC (connected by Wifi or Ethernet) by tipping the address in a Web Browser (see page 17).

<sup>1</sup> JBC stations featuring USB connectors are supported except for JT-D, TE-D and older hot air stations. PHB/PHS preheaters and older are not supported.

<sup>2</sup> Fume extraction on the stand is limited to 8 tools for 2 work intakes configuration.



# Working modes

## Autonomous

### Pedal

Activate the vacuum system with the pedal without being connected to a JBC station.

For 2 work intakes configuration, each pedal control its associated port, whereas for 4 intakes configuration, pedal port1 controls work1 and work2 intakes and pedal port2 controls work3 and work4 intakes.

### Continuous mode

The fume extractor works in continuous mode with the four valves opened.

## Remote

### QSC-A

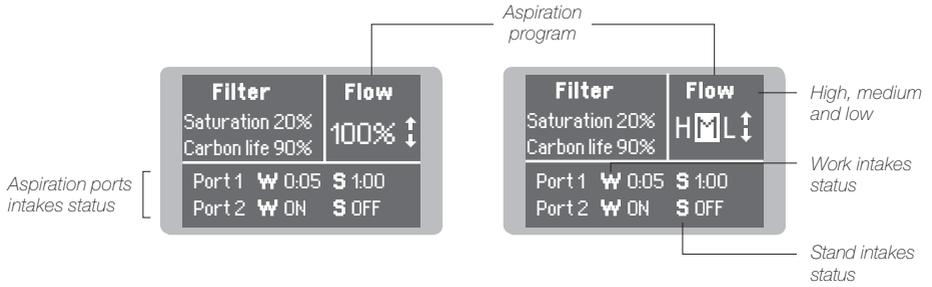
The valve in the working area opens when the tool is lifted from the stand. Once the tool is returned to the stand and enters sleep mode, the valve in the work area closes and the stand valve opens. Stand extraction is not available for 4 work intakes configuration.

### Station

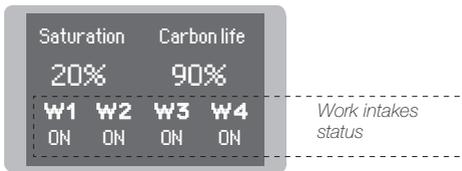
The valve in the working area opens when the tool is lifted from the stand. Once the tool is returned to the stand and enters sleep mode, the valve in the work area closes and the stand valve opens. After a period of inactivity on both ports, the unit stops. Stand extraction is not available for 4 work intakes configuration.

## Control Process

### Main Screen for 2 intakes configuration



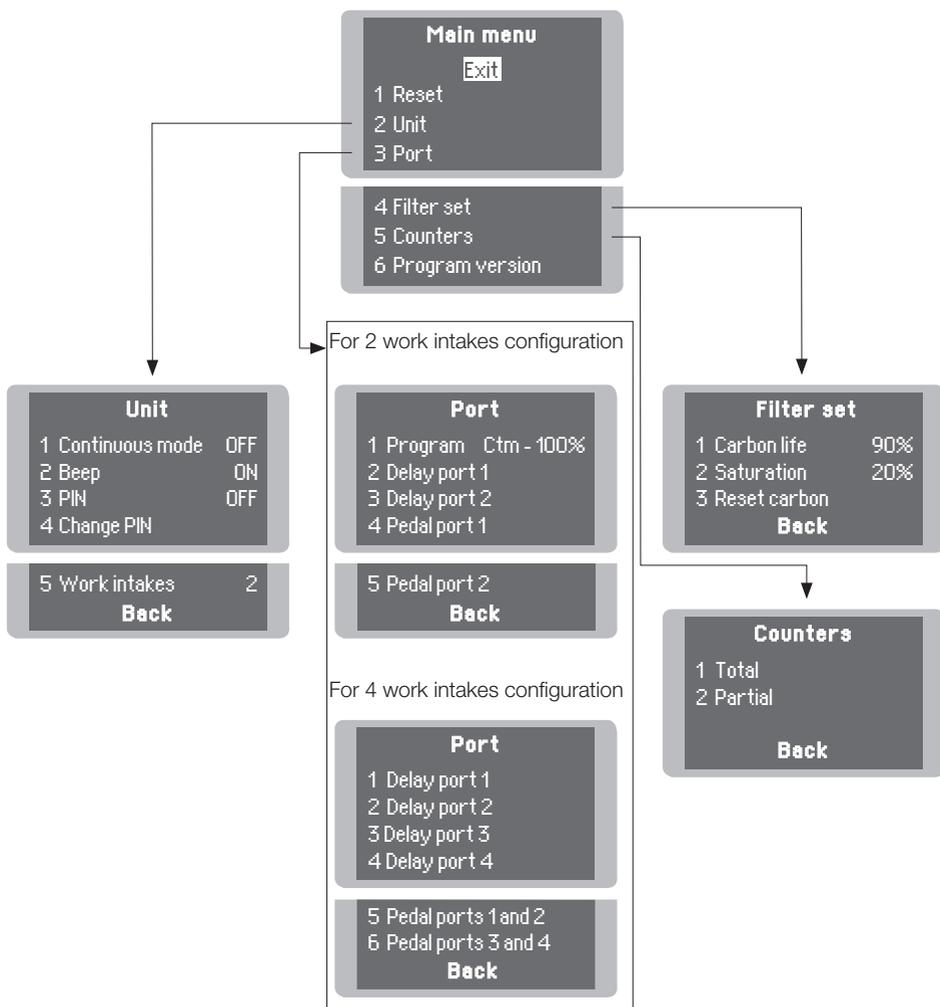
### Main screen for 4 intakes configuration



# Control Process

Main Menu

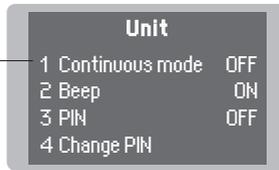
Original Pin: 0105



## Control Process

### Unit Screen

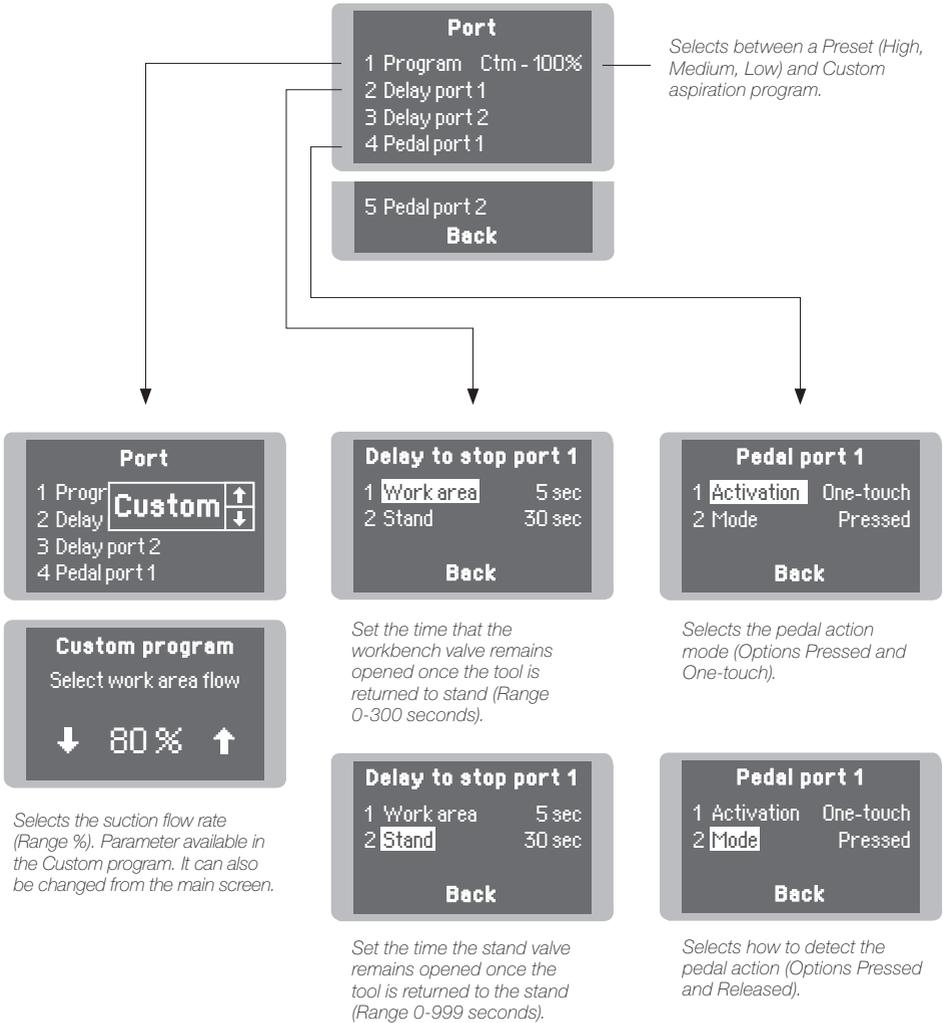
*It opens all aspiration intakes with the selected program (high, medium, low or custom).*



*When option 4 is selected, the 4 intakes will work as workbench extraction (extraction in the stand is not available).*

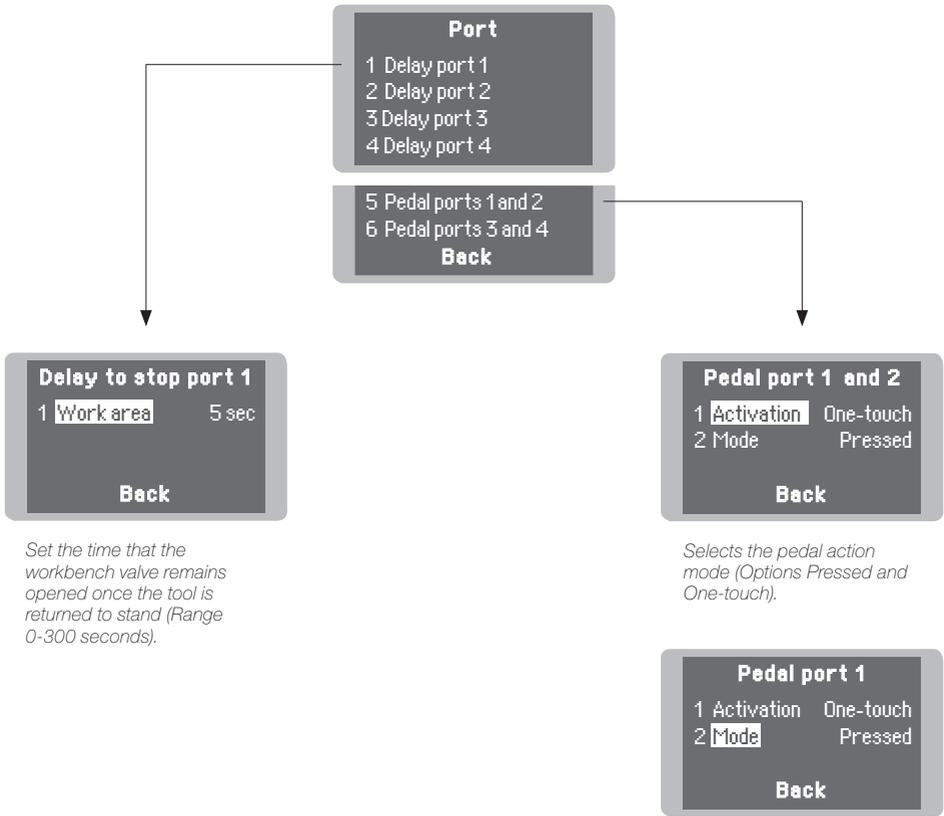
# Control Process

## Port Screen for 2 intakes configuration



## Control Process

### Port Screen for 4 intakes configuration



Set the time that the workbench valve remains opened once the tool is returned to stand (Range 0-300 seconds).

Selects the pedal action mode (Options Pressed and One-touch).

Selects how to detect the pedal action (Options Pressed and Released).

## Fume extractor configurations

Some parameters, features and the performance vary depending on fume extractor configuration, see the following table:

	<b>2 work intakes</b>	<b>4 work intakes</b>
<b>Work aspiration intakes</b>	2	4
<b>Stand aspiration intakes</b>	2	Not available
<b>Flow per work intake</b>	76 m <sup>3</sup> / h (44.73 cfm)	52 m <sup>3</sup> / h (30.6 cfm)
<b>Flow per stand intake</b>	4 m <sup>3</sup> / h (2.35 cfm)	Not available
<b>Preset aspiration programs</b>	3	1
<b>Custom aspiration programs</b>	9	Not a available
<b>Power consumption</b>	400	500

## Settings

### QSC-A FAE Configuration Screen

The software detects automatically if a fume extractor or any station is connected, showing a table as the image. The user can easily select which fume extractor ports will be activated every time a specific port (tool) is activated.

Color green: The link is done by clicking over the highlighted table position. The user only needs to uncheck the box in order to remove the link.

Color red: Stations and FAEs marked with a red indicator correspond to not currently connected equipment. Connections are saved in case that equipment is reconnected again in the future.

To save the configuration, press the "save" button.

The screenshot displays the 'Fume Extractor' configuration interface. At the top, it shows '2 Stations detected', '2 Fume Extractors detected', and '11 Ports detected'. Two callouts indicate '2 work intakes configuration' and '4 work intakes configuration'. Below this, a horizontal bar shows two fume extractors: 'F2' and 'F4W'. A table below lists ports for each. The 'F2' section has 4 ports (Port 1-4) and the 'F4W' section has 4 ports (Port 1-4). A 'Save' button is located at the bottom left. A callout points to the 'Save' button with the text 'Save your configuration' and 'Stations'. The JBC logo and 'Copyright © 2018 JBC S.L.' are visible at the bottom.

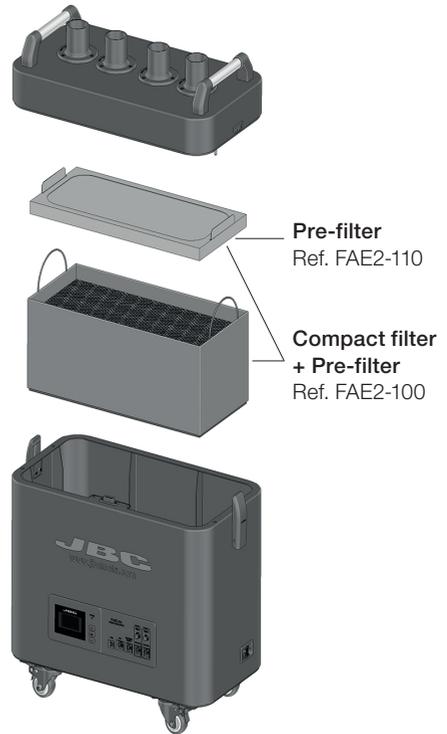
Fume Extractor	Port 1	Port 2	Port 1	Port 2	Port 3	Port 4
[ DME - NoName ]						
Port 1						
Port 2						
Port 3						
Port 4						
[ JISE - NoName ]						
Port 1						

### Update the equipment software

Fume extractor can be updated by means of JBC Updater software. If you want to update the equipment be aware there is no station connected to RJ12 connectors. If a station is connected by means RJ12 port the update process will not start.

## Maintenance - Filter replacement

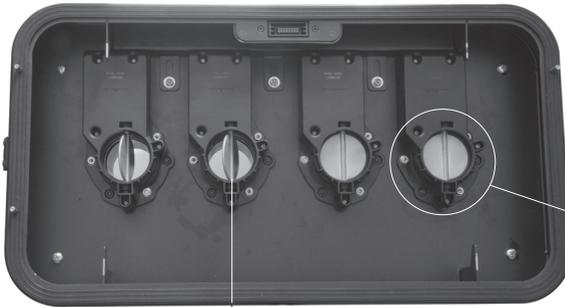
- The unit notifies through both the display and the LED when filters need maintenance.
- To replace the filters, first turn the fume extractor off. Then remove the cover by opening the quick release lever of the casing.
- If once the pre-filter has been changed the saturation indicator is on, it means that the compact filter is already saturated and must be replaced too.
- The duration of the compact filter is 1 year maximum once its packaging is opened.
- Once the compact filter has been replaced, the filter counter must be reset.  
(Main Menu > Filter set > Reset carbon)
- If the display shows an error when the equipment is switched on, it is probable that the cover and casing connectors are dirty and making false contact. Remove the cover again and clean both connectors.
- If the filter is changed while the fume extractor is on, once the cover is placed the equipment starts an automatic filter detection process: the work valves open, the stand valves close and the fume extractor suctions for a few seconds.



**Important:** Read the page 4 before using the fume extractor.

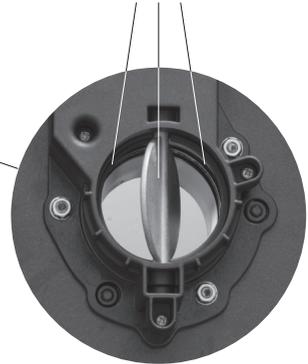
## Maintenance - Valves

- Check the status of the valves when replacing the pre-filter or the compact filter.
- Use the cleaning stick if necessary and clean with alcohol to remove dirt residues.



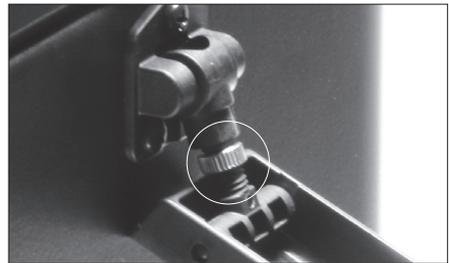
**Intake valve**  
Ref. 0018831

*Clean the disc  
and the gasket  
on both sides*



## Latch Adjustment

- The locking force between casing and cover can be adjusted by turning the knurled nut of the locking mechanism.
- Turn clockwise to loosen and counterclockwise to tighten.



**Read safety guidelines to do the equipment maintenance securely.**

# Safety



**Follow safety guidelines to prevent electric shock, injury, fire or explosion.**

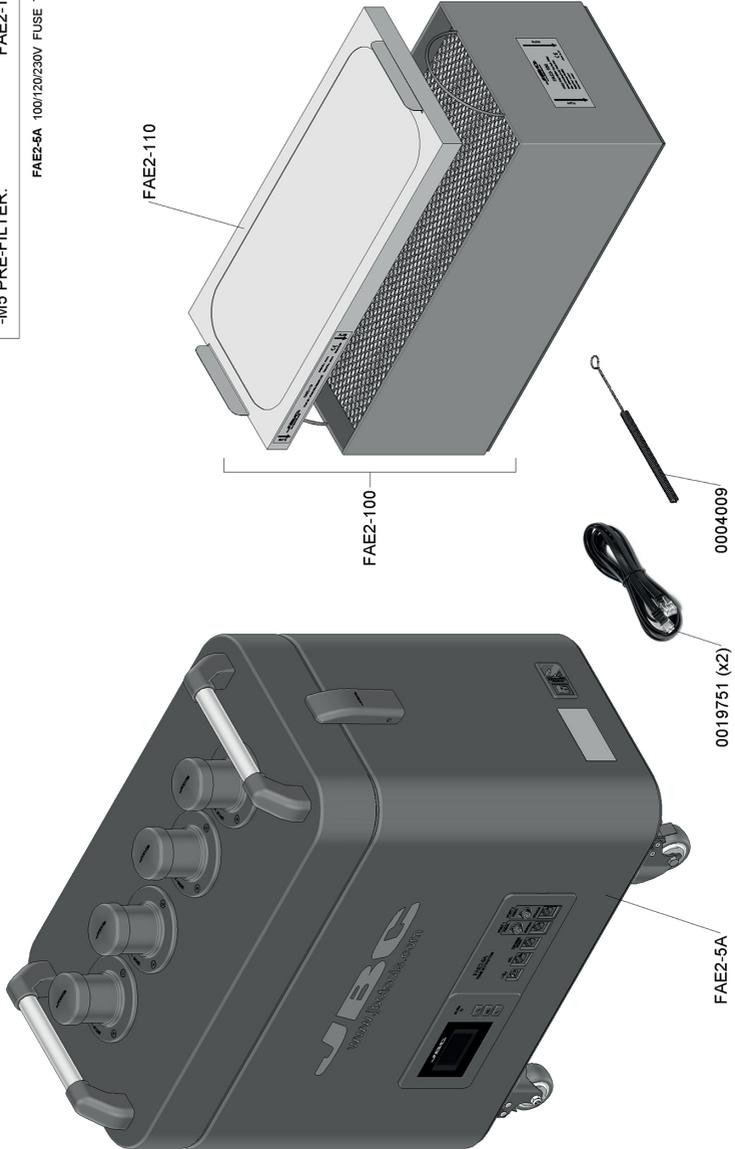
- The equipment is only designed to filtrate the fumes generated by soldering.
- Do not use the units for the filtration of combustible, explosive or corrosive gasses. Incorrect use may cause fire.
- The power cord must be plugged into approved bases. Be sure that it is properly grounded before use. When unplugging it, hold the plug, not the wire.
- Do not work on electrically live parts.
- 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.
- This appliance can be used by children over the age of eight and persons with reduced 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.
- Maintenance must not be carried out by children unless supervised.
- Keep your workplace clean and tidy. Wear appropriate protective mask, glasses and gloves when handling dirt filter or pre-filter.
- The quick release levers of the casing are only for handling the cover, not the complete equipment.
- Do not use the equipment without the filters.
- Saturated filters can not be cleaned and reused.
- Avoid blowing the filter or the dirty parts of the equipment, if necessary it is advisable to vacuum.
- Avoid losing particles in the filter during handling it.
- Treat the saturated filters as waste depending on the filtered contaminant and the applicable standars in each country. This is the European Waste Catalog classification:
  - 15 02: Absorbents, filter materials, wiping cloths and protective clothing.
  - 15 02 02: Absorbents, filter materials (including oil filters not otherwise specified, wiping cloths, protective clothing contaminated by dangerous substances.
  - 15 02 03: Absorbents, filter materials, wiping cloths and protective clothing.
- In case of not complying with the filter change recommendations, the maximum particle and gas concentrations established in each country could be exceeded.

## Exploded View

**FAE2-5A 100/120/230V**  
FAE2-5A FUME EXTRACTOR

SPARE PARTS	
<b>FAE2-5A:</b>	
-CIRCUIT:	0021308
-INLET VALVE:	0018831
-H13+ CARBON + M5 FILTER:	FAE2-100
-M5 PRE-FILTER:	FAE2-110

FAE2-5A 100/120/230V FUSE T-5A







# Specifications

**FAE2-5A** 120V 50/60Hz. Input power: 500W

**FAE2-5A** 230V 50/60Hz. Input power: 500W

**FAE2-5A** 100V 50/60Hz. Input power: 320W

- Weight: 33,6 kg (74.08 lb)
- Dimensions: 558 x 292 x 562 mm (21.97 x 11.50 x 22.13 in)
- Fuse: 8 AT
- Blower type: Brushless
- Max. flow rate: 290 m<sup>3</sup>/h (10241.25 f<sup>3</sup>/h)
- Max. vacuum: 6,1 KPa (0.88 psi)
- Work areas: 2
- Noise: 54 dB
- Pre-filter: Medium dust filter M5 (EN 779)
- Compact Filters: H13 particle filter (EN 1822)  
Activated carbon filter

Complies with CE standards.  
ESD protected.

# JBC

## Warranty

JBC's two 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.

**Register your warranty within 30 days of purchase in [www.jbctools.com/productregistration](http://www.jbctools.com/productregistration)**



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.



Manual in other languages available on our website

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