

# JBC

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

## INSTRUCTION MANUAL



## Fume Extractor

Ref. FAE1-A

# Packing List

The following items should be included:

**Fume Extractor** ..... 1 unit  
Ref. FAE1-1A (100V / 120V)  
FAE1-2A (230V)



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



**H13 Filter & Carbon Filter & M5 Pre-filter** ..... 1 unit  
Ref. FAE1-100  
Already assembled




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



**Manual** ..... 1 unit  
Ref. 0022744



 *Unseal the filter before the first use*

## Features



# Basic Working System

**Flexible arm Ø50**  
Ref. FAE070  
Length: 1 m (39.37 in)

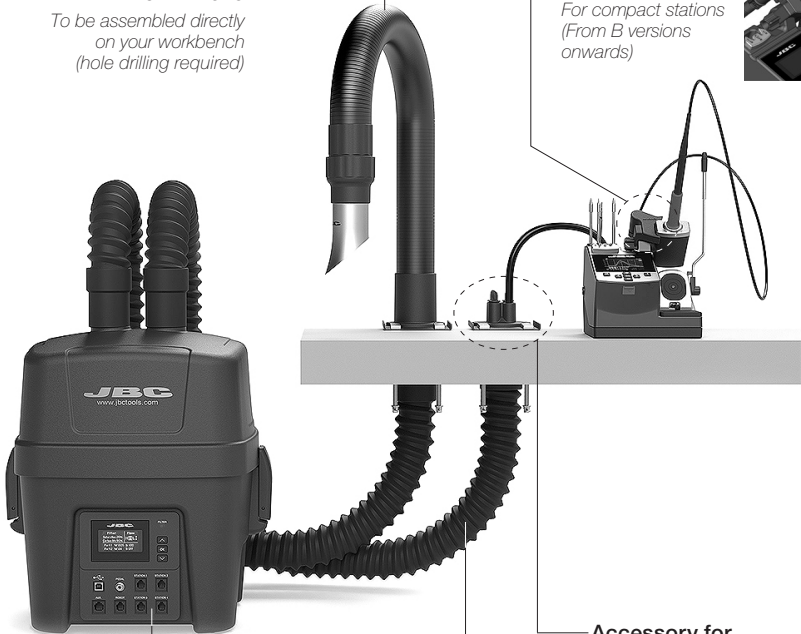
*To be assembled on your workbench with the included clamp*

Ref. FAE020  
*To be assembled directly on your workbench (hole drilling required)*

**Stand Aspiration Duct**  
Ref. FAE050

*For modular stands (From SD versions onwards)*

Ref. FAE060  
*For compact stations (From B versions onwards)*



**Fume Extractor**  
Ref. FAE1-1A (100V / 120V)  
FAE1-2A (230V)

**Flexible Hoses Ø50**  
Ref. FAE010  
Length: 1,5 m (59.05 in)

*Connect the Fume Extractor indifferently to the flexible arm or to the accessory for stand aspiration*

**Attention**

*Avoid awkward positions in order to minimize pressure losses*

**Accessory for stand aspiration (up to 4 stands)**

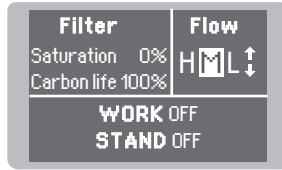
Ref. FAE040  
*To be assembled on your workbench with the included clamp*

Ref. FAE030  
*To be assembled directly on your workbench (hole drilling required)*

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

## Turn on the fume extractor

Once the fume extractor is turned on, the display shows the following screen and the filter saturation indicator is green.

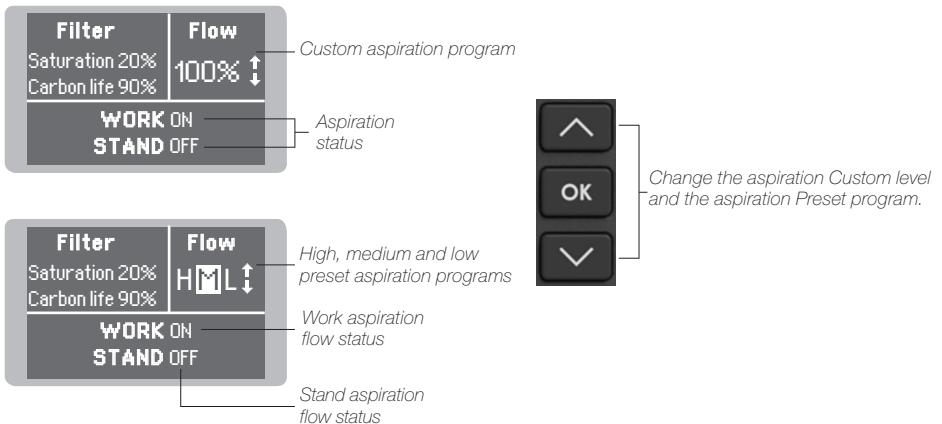


If the display shows STOP#4, power off the fume extractor, remove the cover, place it back and secure it using the quick release levers.



## Menu Interface

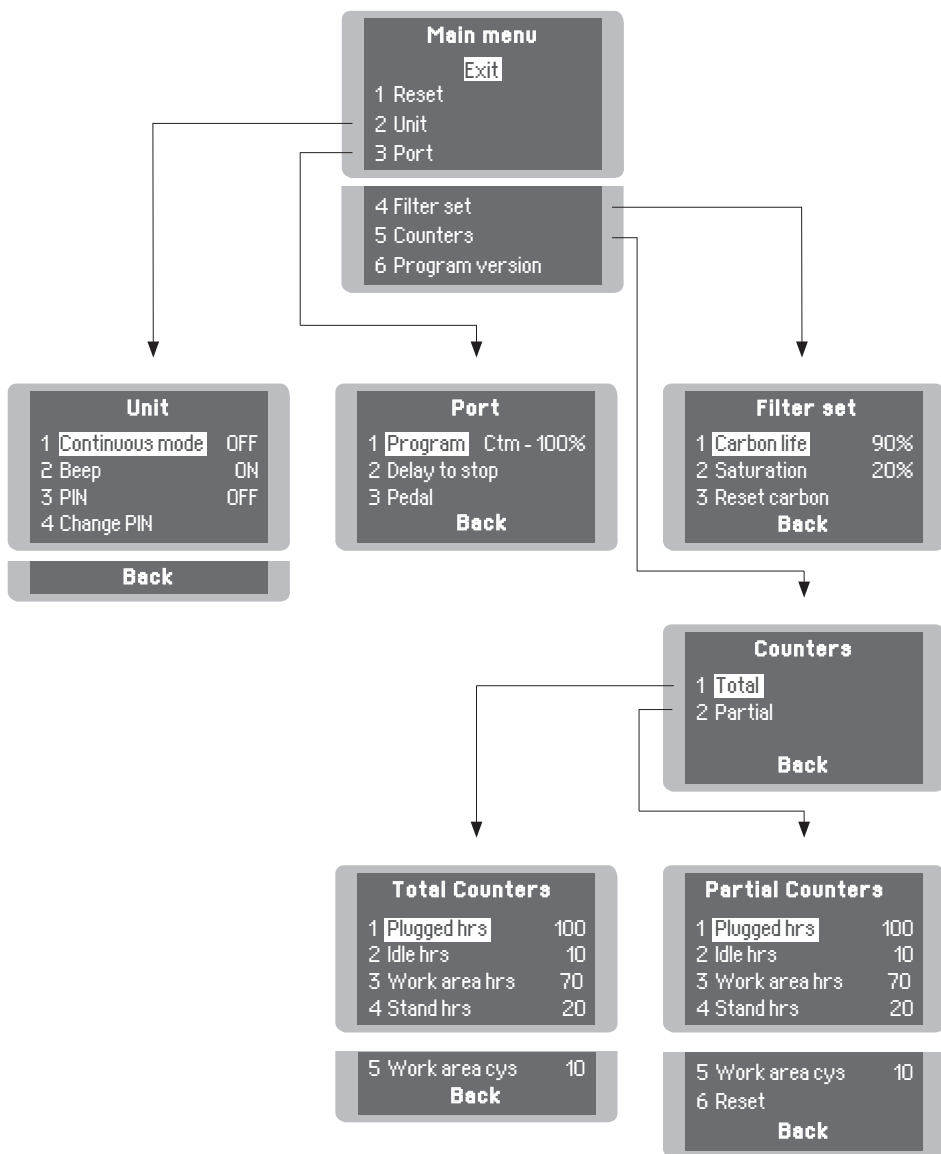
### Main Screen



# Menu Interface

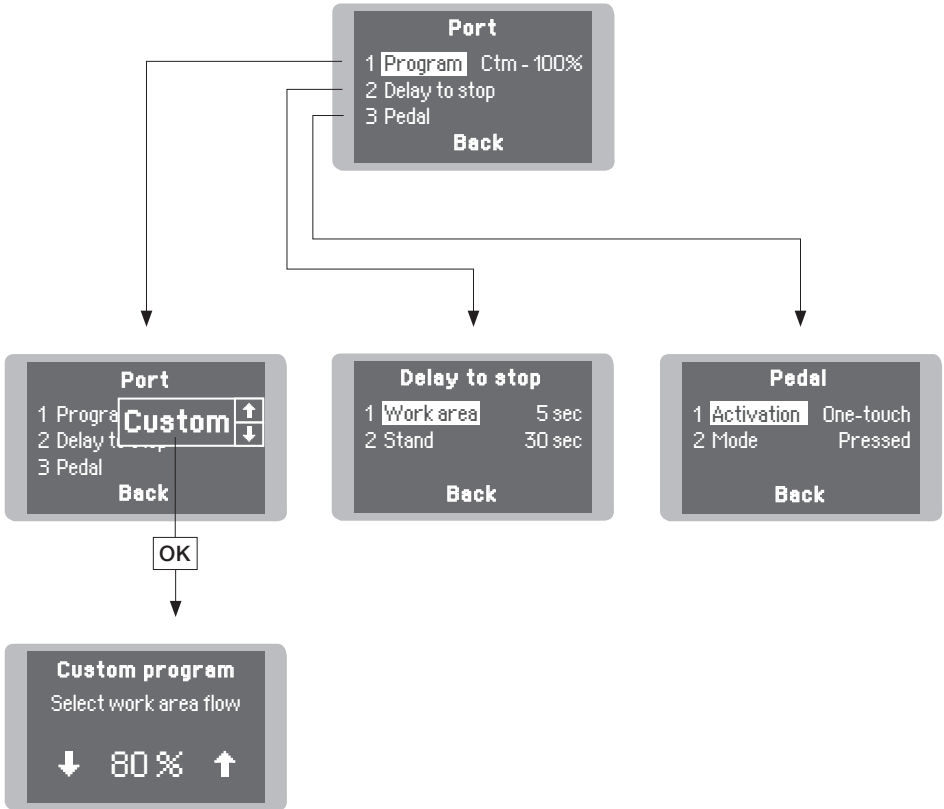
## Main menu parameters

Original PIN: 0105



## Menu Interface

Port menu parameters



# Parameters



**Important: Disconnect any Station or Device from the fume extractor before modifying any parameter.**

## Unit

Parameter	Description
Continuous mode	Enable/disable continuous aspiration. When enabled, fume extractor operation is controlled by the main switch of the unit. By default Continuous mode is OFF.
Beep	Enable/disable the sound of the keypad. By default Beep is ON.
PIN	Enable/disable PIN request when modifying parameters. By default PIN is ON.
Change PIN	Change the default security PIN code. By default the PIN is 0105.



## Port

Parameter	Description
Program	<p>It sets the fume extractor aspiration flow. You can select between a Preset and Custom aspiration program.</p> <p>H (High), M (Medium) or L (Low) are the three Preset available options. Use Up and Down keys to switch between them while being on the main screen.</p> <p>Up to nine aspiration levels between H (High) and L (Low) can be select for Custom program. If a Custom aspiration program is selected, the selected aspiration level can be changed on main screen.</p> <p>By default M (Medium) aspiration program is selected.</p>
Delay to stop / Work area	<p>It sets the time that a fume extractor keeps aspirating fumes on the work area once the tool is returned to the stand (range 0-300 seconds)</p> <p>By default Work area time is 5 seconds.</p>
Delay to stop / Stand	<p>It sets the time that a fume extractor keeps aspirating fumes at the stand once the tool is returned to it (range 0-999 seconds)</p> <p>By default Stand time is 60 seconds.</p>
Pedal / Activation	<p>It sets the pedal activation mode.</p> <p><b>One-touch:</b> Press the pedal once to activate aspiration. Press again to stop aspiration.</p> <p><b>Pressed:</b> (Mode function must be Pressed) aspiration is active as long as the pedal is kept pressed.</p> <p>By default Activation is Pressed.</p>
Pedal / Mode	<p>When the activation parameter is set to Pressed, the Mode parameter can be configured to Released mode. In this mode aspiration is always active until the pedal is pressed.</p> <p>By default Mode is Pressed.</p>

## Filter set

Parameter	Description
Carbon life	It shows remaining activated carbon lifetime expressed in %. It is also displayed on the main screen. When 0% is reached the system will show pop-up message STOP#1 to replace the filter.
Saturation	It shows saturation status of HEPA + carbon filter set, expressed in %. It is also displayed on the main screen. When 100% is reached the system will show pop-up message STOP#2 to replace the filter.
Reset carbon	Perform this action after replacing the HEPA + carbon filter set. The carbon lifetime counter will not start until the filter is detected for the first time. After executing that function Carbon life will be 100%.

## Extraction control

Fume extractor aspiration may be controlled by:

### Pedal connection

By means of the Pedal connection, fume extractor aspiration may be activated/deactivated by a P-005 pedal. (See pedal activation modes on page 9)



## RJ12 station connections

Allows connecting JBC Soldering Stations featuring a Robot port to the fume extractor in order to automatically activate the extraction when the tools are in use. (See configuration steps on the soldering station in page 12).



## USB-B connection

Allows connecting a QSC device which makes possible connecting as many JBC Stations as desired to the fume extractor through the USB interfaces. (See details on page 13).

## Continuous mode

When continuous mode is enabled the fume extractor is controlled by the main switch of the unit. (See details on page 8).

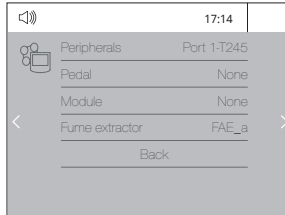


### Fume extractor aspiration control priority:

Pedal > RJ12 station connections > USB-B connection > Continuous mode function

## Connection to Soldering Stations featuring ROBOT port

Connect up to 4 stations directly to a fume extractor through the Soldering Station Robot port. Every tool connected to a station can control the aspiration system, but previously it has to be assigned to the fume extractor through the Peripherals menu of the station. Each station detects a fume extractor as a FAE\_a.



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



## Connection to QSC

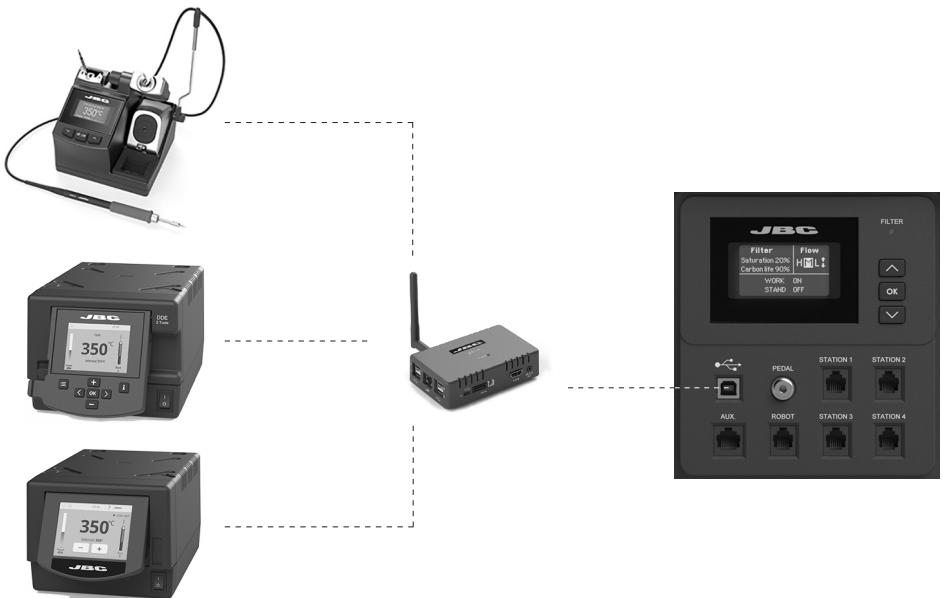
QSC makes a bridge function between JBC stations<sup>1,2</sup> and fume extractors allowing the connection of as many JBC stations as desired to the fume extractor through USB-B connection (USB A-B cables required).

QSC includes an easy to use interface to configure which tool will activate the aspiration system when it leaves the stand.

Fume extractor may be configured directly on the QSC (requires a screen with HDMI connection, a keyboard with USB-A connection and a mouse with USB-A connection) or from any computer in the same LAN as the QSC (Wifi or Ethernet) by tipping its address in a Web browser. (See more details in page 14).

<sup>1</sup>JBC stations with USB-B connection are supported except for JT-D, TE-D and older hot air stations, PHB, PHS and older pre-heaters.

<sup>2</sup>Aspiration on the stand is limited to 4 tools.



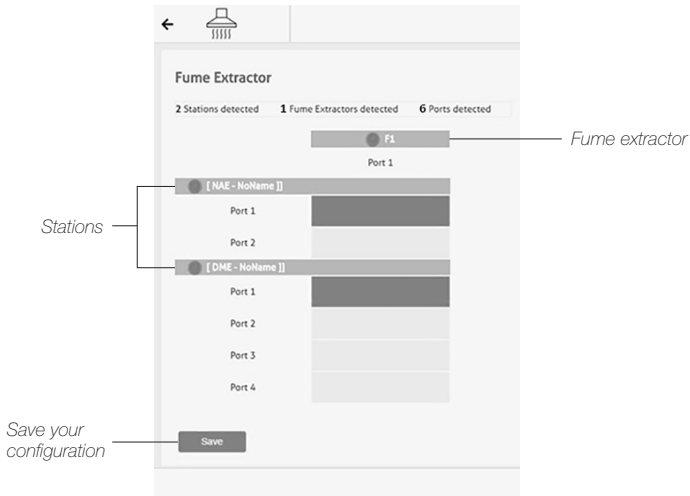
# Configuration of QSC

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 tool will activate the aspiration system when it leaves the stand.

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

Color red: Stations and FAEs marked with 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 "save" button.

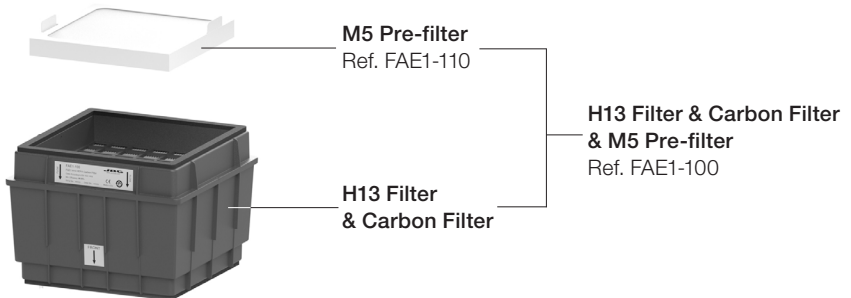


## Update the equipment software

Fume extractor can be updated by means of JBC Updater software. If you want to update the equipment be aware there is not a station connected to RJ12 connectors. If a station is connected yo RJ12 connector the update process will not start.

## Filter replacement

- The unit notifies through both the display and the LED when filters need maintenance.
- To replace the filters remove the cover by opening the quick release levers of the casing.
- If once the pre-filter has been changed the saturation indicator remains in red, it means that the H13 filter is already saturated and must be replaced too.
- See Filter replacement instruction on page 16.
- Once the H13 filter has been replaced, the carbon filter counter must be reset. (Main Menu > Filter set > Reset carbon)  
The duration of the compact filter is 1 year maximum once its packaging is opened.
- If the filter is changed while the fume extractor is on, once the cover is placed the equipment starts an automatic filter detection process, activating aspiration for a few seconds.



## Filter replacement



Connect the filter tube to the quick coupling placed on the metal sheet

**!** The filter has a given position. Make sure the filter ribs mate with the corresponding slots.

## Quick Release Levers Adjustment

- Turn clockwise to loosen and counterclockwise to tighten, in order to adjust the filter airtightness.



**!** 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.
- 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 standards 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.





# Specifications

<b>FAE1-1A</b>	100V 50/60Hz.	Input power: 95W	Fuse 2A
	120V 50/60Hz.	Input power: 110W	Fuse 2A
<b>FAE1-2A</b>	230V 50/60Hz.	Input power: 110W	Fuse 1.25A

- Weight: 10.5 kg (23.2 lb)
- Dimensions: 382 x 344 x 476 mm (15 x 13.5 x 18.7 in)
- Blower type: Brushless
- Blower max. flow rate: FAE1-1A 170 m<sup>3</sup>/h (100 CFM)  
FAE1-2A 190 m<sup>3</sup>/h (112 CFM)
- Blower max. vacuum: FAE1-1A 2.9 kPa (0.42 psi)  
FAE1-2A 3.4 kPa (0.49 psi)
- Work areas: 1
- Noise: 55 dB @ 1m
- Pre-filter: Medium dust filter M5 (EN 779)
- Compact Filters: H13 particle filter (EN 1822)  
Activated carbon filter
- Connections: USB-B  
Pedal connector  
RJ12 connector (4 for stations + 1 for robot)

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 its life must be collected and returned to an authorized recycling facility.



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