

# JBC

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

## INSTRUCTION MANUAL



## Fume Extractor

Ref. FAE1-B

# Packing List


The following items should be included:

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



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



 *Unseal the filter before the first use*

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



**RJ12-USB A adapter** ..... 1 unit  
 Ref. 0023504



**USB A/B cable** ..... 1 unit  
 Ref. 0021042



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



**Manual** ..... 1 unit  
 Ref. 0023483



## Features

Aspiration tubes for workbench and tool stands extraction

Quick release levers for filter change



Process screen

Filter saturation indicator

Green: Filter OK

Yellow: ≤ 20% carbon lifetime or about to saturate

Red: End of carbon lifetime or filter saturated



USB-B connection

Pedal connection

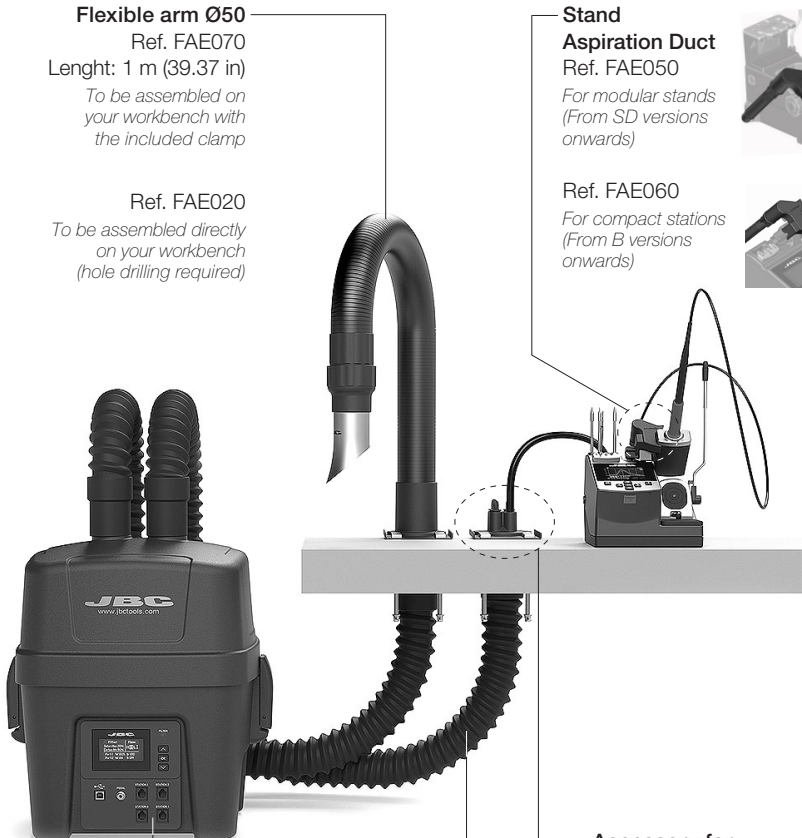
RJ12 station connections (to station robot port)



Power socket

Main switch

# Basic Working System



**Flexible arm Ø50**

Ref. FAE070

Lenght: 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)*



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

Ref. FAE040

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

**Fume Extractor**

Ref. FAE1-1B (100V / 120V)

FAE1-2B (230V)

**Flexible Hoses Ø50**

Ref. FAE010

Lenght: 1,5 m (59.05 in)

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

**Attention**

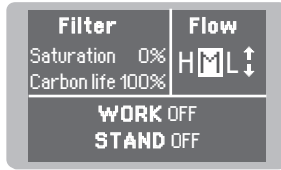
*Avoid awkward positions in order to minimize pressure losses*

Ref. FAE030

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

## Turning on the fume extractor

Once the fume extractor is turned on, the display shows a similar screen as the following one and the filter saturation indicator is green if the carbon lifetime is higher than 20%.



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.

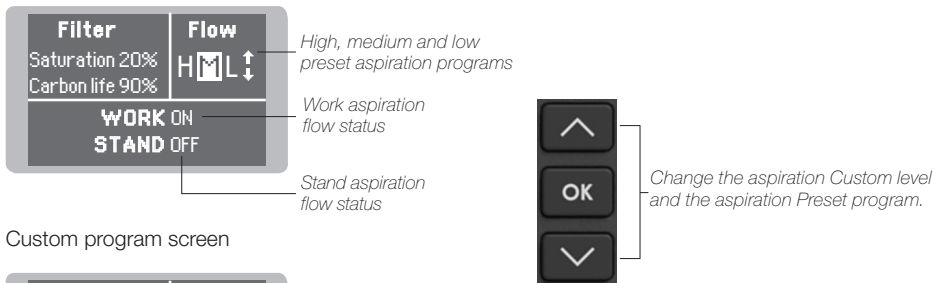


## Menu Interface

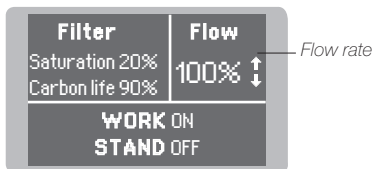
### Main Screen

Main screen may vary according to the Program parameter.

Preset program screen



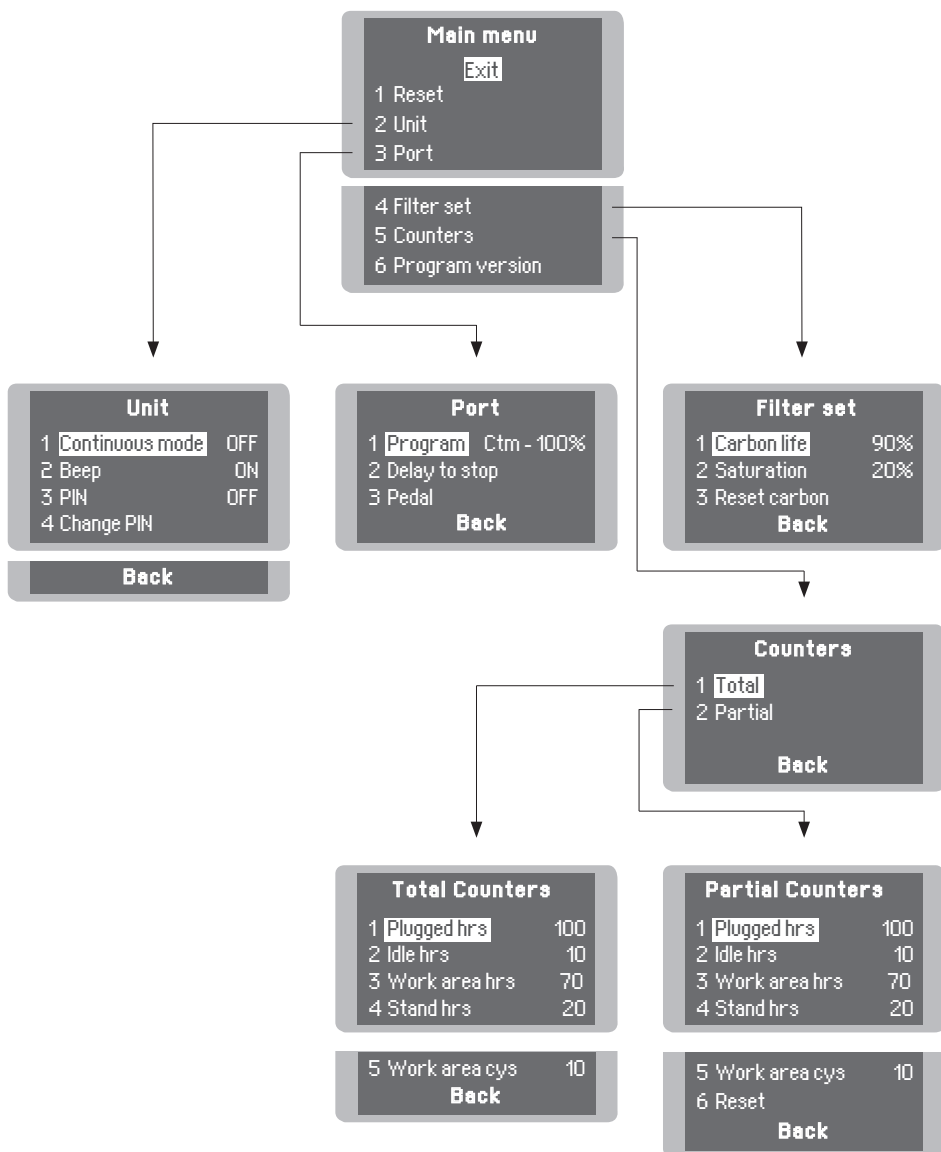
Custom program screen



# Menu Interface

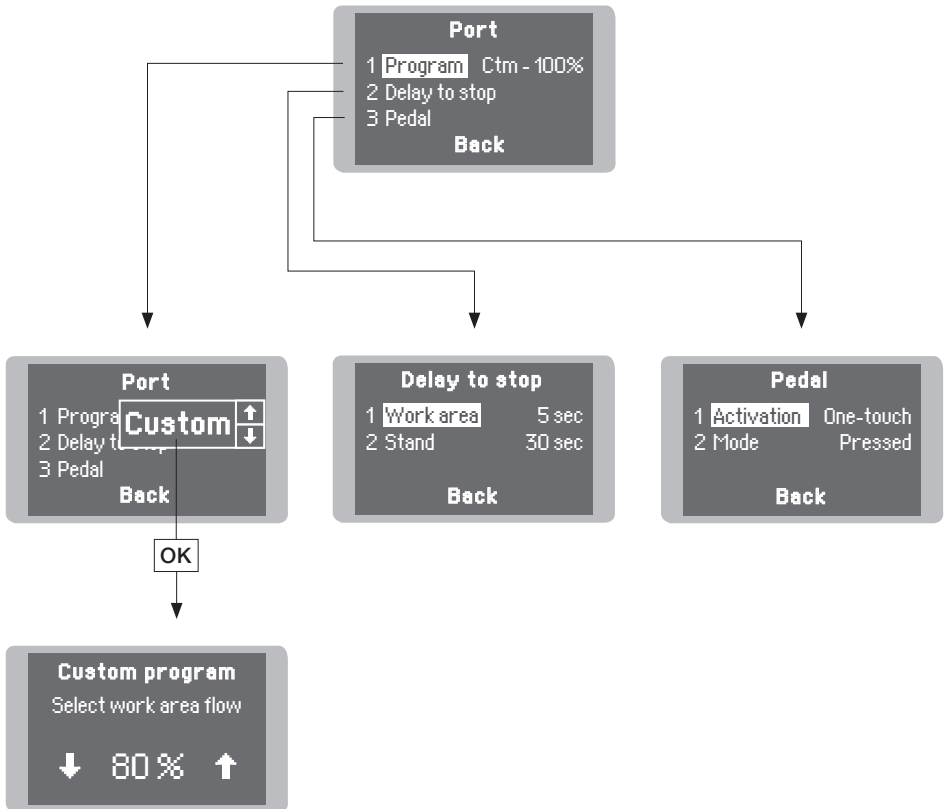
## Main menu parameters

Original PIN: 0105



## Menu Interface

### Port menu parameters



# Parameters



**Important: Power off any Station or Device connected to the fume extractor before modifying any parameter.**

## Unit

Parameter	Description
Continuous mode	Enable/disable continuous aspiration. When enabled, fume extractor suction is activated. Aspiration remains active until continuous mode is disabled or the equipment is powered off. 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/P-405 pedal. (See pedal activation modes on page 9)

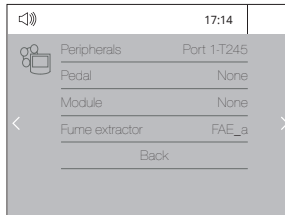


### RJ12 station connections for Excellence range

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. An RJ12 direct cable is required (ref. 0019751).



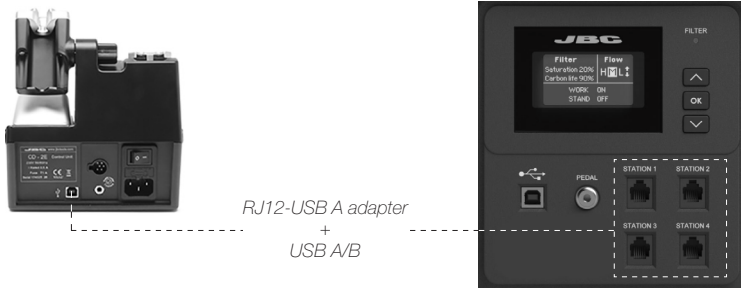
Connect up to 4 stations directly to a fume extractor through the Soldering Station Robot port. Every tool connected to a station can control the aspiration system, but previously it has to be assigned to the fume extractor through the Peripherals menu of the station. Each station detects a fume extractor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

## RJ12 station connections for Advanced range

Allows connecting JBC Soldering Stations featuring a USB-B port to the fume extractor in order to automatically activate the extraction when the tools are in use. An USB A/B cable (ref. 0021042) and RJ12-USB A adapter (ref. 0023504) are required. (You must not configure anything on the soldering station).



**Important: The Advanced stations, which will control the fume extractor, must be connected before powering it on. If the fume extractor is powered on and then an Advanced station is connected, it will not be able to control the fume extractor.**

## Continuous mode

When continuous mode is enabled, fume extractor suction is activated. Aspiration remains active until continuous mode is disabled or the equipment is powered off (see details on page 8).



### **Fume extractor aspiration control priority:**

Pedal > RJ12 station connections > Continuous mode function

## Update

Allows updating a fume extractor via the USB-B connector.



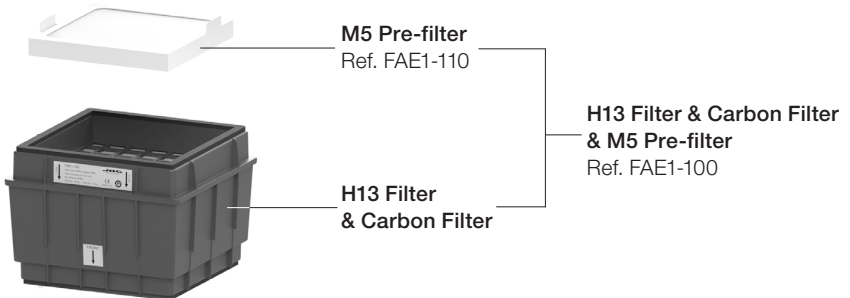
### **Update the equipment software**

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 to RJ12 connector the update process will not start. Download software from:

**<https://www.jbctools.com/software.html>**

## 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 the saturation indicator remains in red after changing the pre-filter, it means that H13 particle filter is already saturated and must be replaced too.
- See Filter replacement instruction on page 14.
- When the H13 particle 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 after its packaging is opened.
- If the filter is changed while the fume extractor is on, the unit starts the 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 safely.

## 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 leave the appliance unattended when it is on.
- Do not cover the ventilation grills. Heat can cause inflammable products to ignite.
- 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 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.

# Specifications

<b>FAE1-1B</b>	100V 50/60Hz.	Input power: 95W	Fuse 2A
	120V 50/60Hz.	Input power: 110W	Fuse 2A
<b>FAE1-2B</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: 180 m<sup>3</sup>/h (106 CFM)
- Blower max. vacuum: 3.2 kPa (0.46 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  
4 RJ12 connectors

Complies with CE standards.  
ESD protected.



## 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.



Manuals in other languages are available on our website

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