

JBC

www.jbctools.com

INSTRUCTION MANUAL



Fume Extractor

Ref. FAE1-B

Packing List

The following items are 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 1 workbench and up to 4 stands (1 work intake configuration) or for 2 workbenches (2 work intakes configuration).



Quick release levers for filter change

Process screen

Filter saturation indicator

Green: Filter OK

Yellow: $\leq 20\%$ carbon lifetime or about to saturate

Red: End of carbon lifetime or filter saturated



USB-B connection

Pedal connection

RJ12 station connections



Power socket

Main switch

1 work intake configuration assembly (default configuration)

Flexible arm Ø50

Ref. FAE070

Length: 1 m (39.37 in)

To be assembled on your workbench with the included clamp

Stand

Aspiration Duct

Ref. FAE050

For modular stands (From SD versions onwards)



Ref. FAE060

For compact stations (From B versions onwards)



Ref. FAE020

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

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)

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



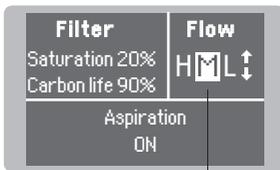
Fume Extractor

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

FAE1-2B (230V)

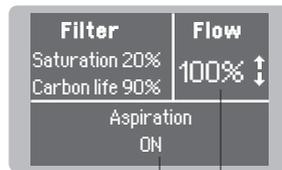
Main screen

Preset program screen



High, medium and low aspiration programs

Custom program screen



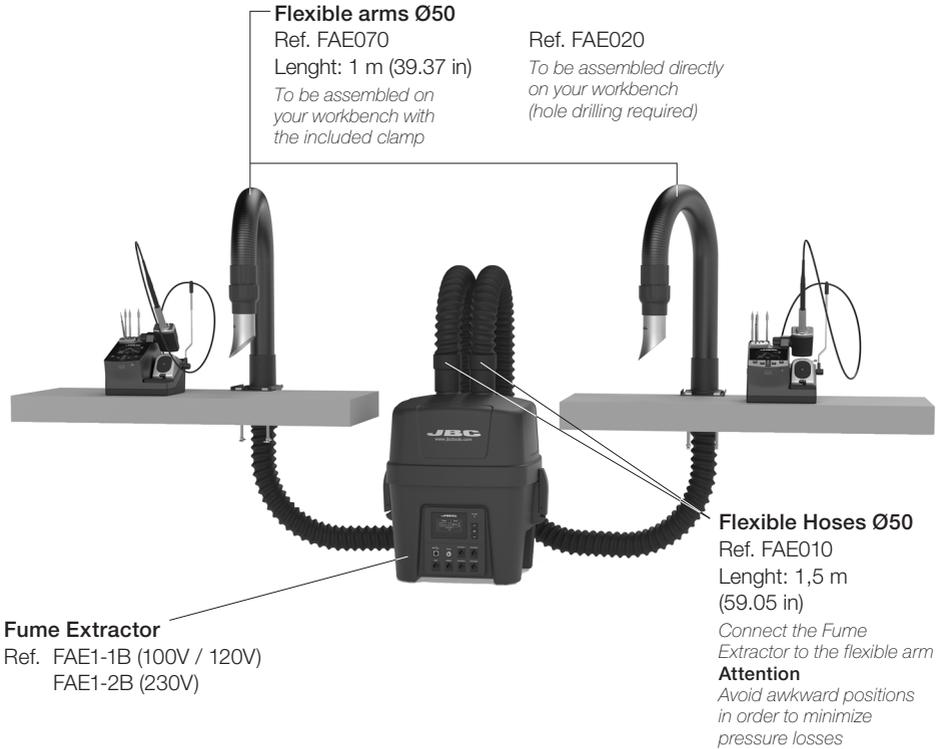
Flow rate Aspiration status

Troubleshooting

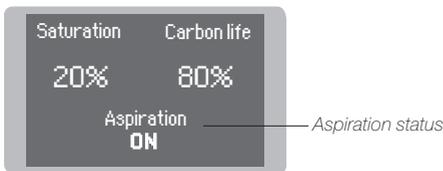
Station troubleshooting available on the product page at www.jbctools.com

2 work intakes configuration assembly (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 1 work intake configuration (see details on page 14). Change Work intakes parameter into 2 in order to set this configuration (see page 7).



Main screen

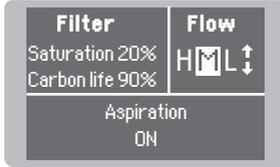


Troubleshooting

Station troubleshooting available on the product page at www.jbctools.com

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.

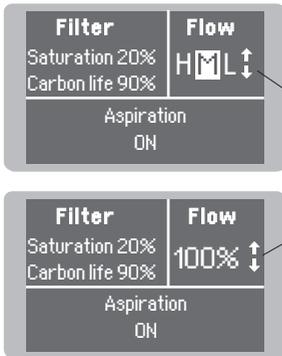


Menu Interface

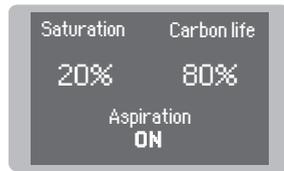
Main Screen

Main screen may vary according to the Work intakes and Program parameters. For 1 work intake configuration the aspiration flow can be changed by keys, whereas for 2 work intakes configuration the flow cannot be changed.

1 work intake configuration¹



2 work intakes configuration²



*Change the aspiration
Custom level and the
aspiration Preset program.*

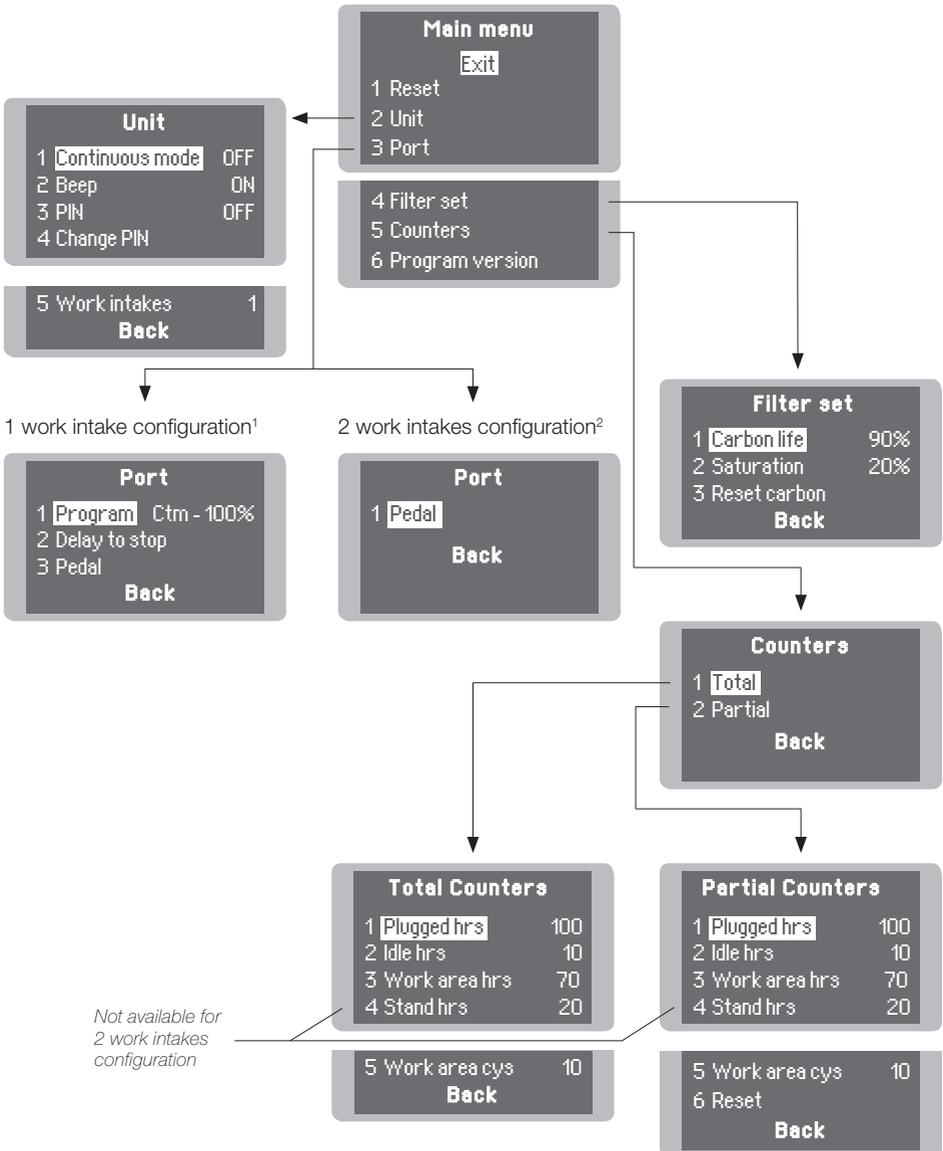
Troubleshooting

Station troubleshooting available on the product page at www.jbctools.com

Menu Interface

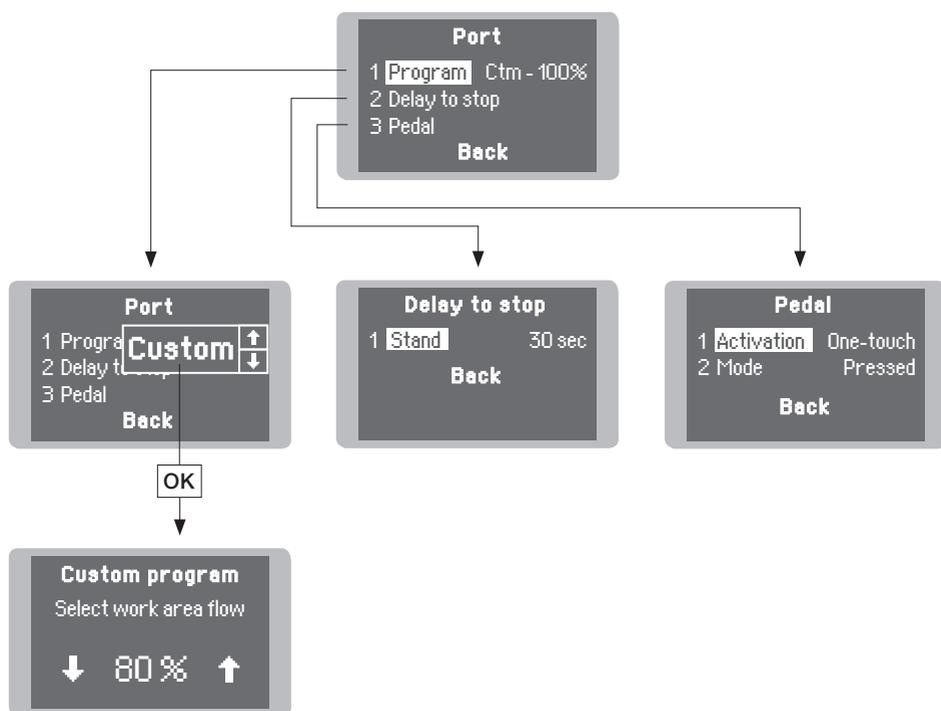
Main menu parameters

Original PIN: 0105

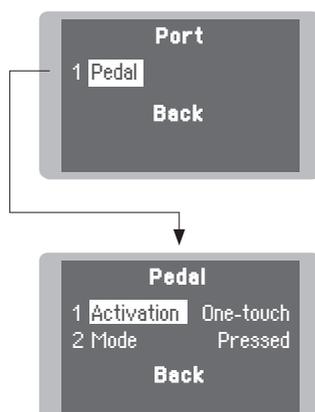


Menu Interface

¹Port menu 1 work intake configuration



²Port menu 2 work intakes configuration



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.
Work intakes	It sets how many intakes will work as workbench extractions. The options are 1 and 2. By default Work intakes is 1.

Port

Parameter	Description
Program	<p>It sets the fume extractor aspiration flow. You can select between Preset and Custom aspiration programs.</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 ten aspiration levels between H (High) and L (Low) can be selected for Custom program (range 10-100%). If a Custom aspiration program is selected, the selected aspiration level can be changed on the main screen.</p> <p>By default M (Medium) aspiration program is selected.</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>One-touch: Press the pedal once to activate aspiration. Press again to stop aspiration.</p> <p>Pressed: (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 10)

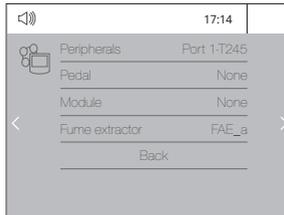


RJ12 station connections for Excellence range

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).



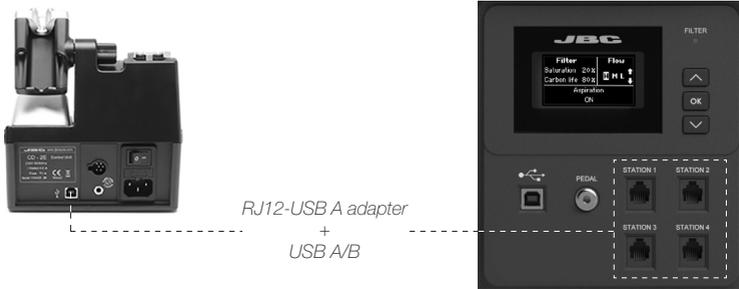
Connect up to 4 stations directly to a fume extractor through the Soldering Station Robot port. Every tool connected to a station can control the aspiration system, but previously it has to be assigned to the fume extractor through the Peripherals menu of the station. Each station detects a fume extractor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



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 9).



Fume extractor aspiration control priority:

RJ12 station connections / pedal > 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>

Fume extractor configurations

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

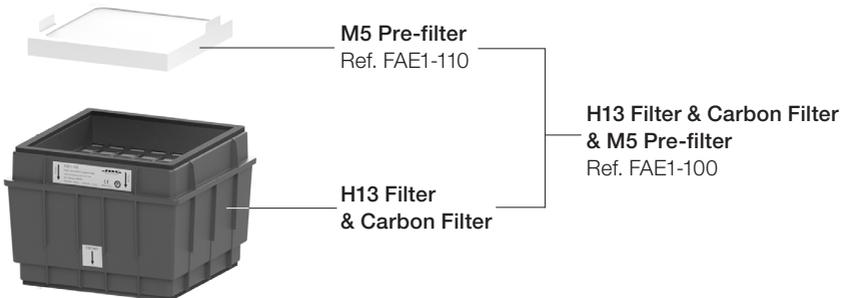
230V 50/60Hz	1 work intake	2 work intakes
Work aspiration intakes	1	2
Stand aspiration intakes	1	Not available
Flow per work intake	80 m ³ / h (47.08 cfm)	60 m ³ / h (35.31 cfm)
Preset aspiration programs	3	1
Custom aspiration programs	10	Not available
Power consumption	110 W	115 W

120V 50/60Hz	1 work intake	2 work intakes
Work aspiration intakes	1	2
Stand aspiration intakes	1	Not available
Flow per work intake	80 m ³ / h (47.08 cfm)	60 m ³ / h (35.31 cfm)
Preset aspiration programs	3	1
Custom aspiration programs	10	Not available
Power consumption	115 W	135 W

100V 50/60Hz	1 work intake	2 work intakes
Work aspiration intakes	1	2
Stand aspiration intakes	1	Not available
Flow per work intake	75 m ³ / h (44.14 cfm)	55 m ³ / h (32.37 cfm)
Preset aspiration programs	3	1
Custom aspiration programs	10	Not available
Power consumption	100 W	105 W

Maintenance - 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 16.
- 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.



Maintenance - 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

FAE1-1B	100V 50/60Hz.	Input power: 105W	Fuse 2A
	120V 50/60Hz.	Input power: 135W	Fuse 2A
FAE1-2B	230V 50/60Hz.	Input power: 115W	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 m³/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.

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 or misuse.

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

Get 1 extra year JBC warranty by registering here:
<https://www.jbctools.com/productregistration/>
within 30 days of purchase.



This product should not be thrown in the garbage.

In accordance with the European directive 2012/19/EU, electronic equipment at the end of its life must be collected and returned to an authorized recycling facility.

