



www.jbctools.com

INSTRUCTION MANUAL



Fume Extractor

Ref. FAE2-5B

Packing List

The following items are included:

Fume Extractor 1 unit
Ref. FAE2-5B



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



!

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

Cleaning Stick 1 unit
Ref. 0004009



RJ12 Direct Cable 2 units
Ref. 0019751



RJ12-USB A Adapter 2 units
Ref. 0023504



USB A/B Cable 2 units
Ref. 0021042



Power Cable 1 unit
Ref. 0023715 (100V / 120V)
0023714 (230V)



Manual 1 unit
Ref. 0023482



Features and Connections



Assembly 2 Work Intakes Configuration (Default Configuration)



Main Screen

Preset program screen

Filter	Flow	
Saturation 20%	Carbon life 90%	High, medium and low preset aspiration programs
Port 1 W 0.05 S 1.00	Port 2 W ON S OFF	Work aspiration flow status
		Stand aspiration flow status

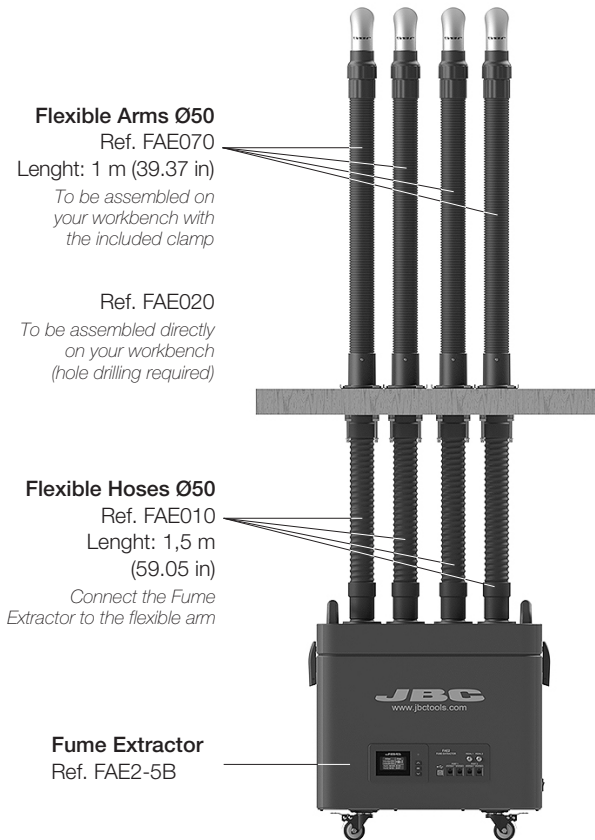
Custom program screen

Filter	Flow	
Saturation 20%	Carbon life 90%	Flow rate
Port 1 W 0.05 S 1.00	Port 2 W ON S OFF	

Troubleshooting

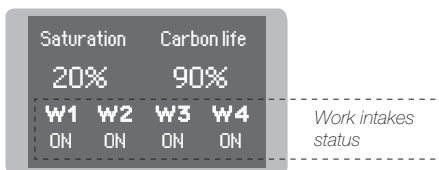
Station troubleshooting available on the product page at www.jbctools.com

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 14). Change Work intakes parameter into 4 in order to set this configuration (see page 7).

Main Screen



Troubleshooting

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

Switch on Fume Extractor

Once the fume extractor is switched 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%.

Filter		Flow
Saturation	0%	HML↑↓
Carbon life	100%	
Port 1	W OFF	S OFF
Port 2	W OFF	S OFF

If the display shows STOP#4 or STOP#7, power off the fume extractor, remove the cover, place it back and secure it using the quick release levers.

STOP #4

Cover opened or badly closed. Double check the cover.

STOP #7

Valve STAND1 error.
Restart the unit, if the error remains, replace the valve.

If the STOP#7 remains, replace the valve (ref. 0018831).

Menu Interface

Main Screen

Main screen may vary according to the Work intakes and Program parameters. For 2 work intakes configuration the aspiration flow can be changed by keys, whereas for 4 work intakes configuration the flow cannot be changed.

2 work intakes configuration¹

Filter	Flow
Saturation 20%	HML↑↓
Carbon life 90%	
Port 1 W 0.05	S 1.00
Port 2 W ON	S OFF

Filter	Flow
Saturation 20%	100%↑↓
Carbon life 90%	
Port 1 W 0.05	S 1.00
Port 2 W ON	S OFF



Change the aspiration Custom level and the aspiration Preset program.

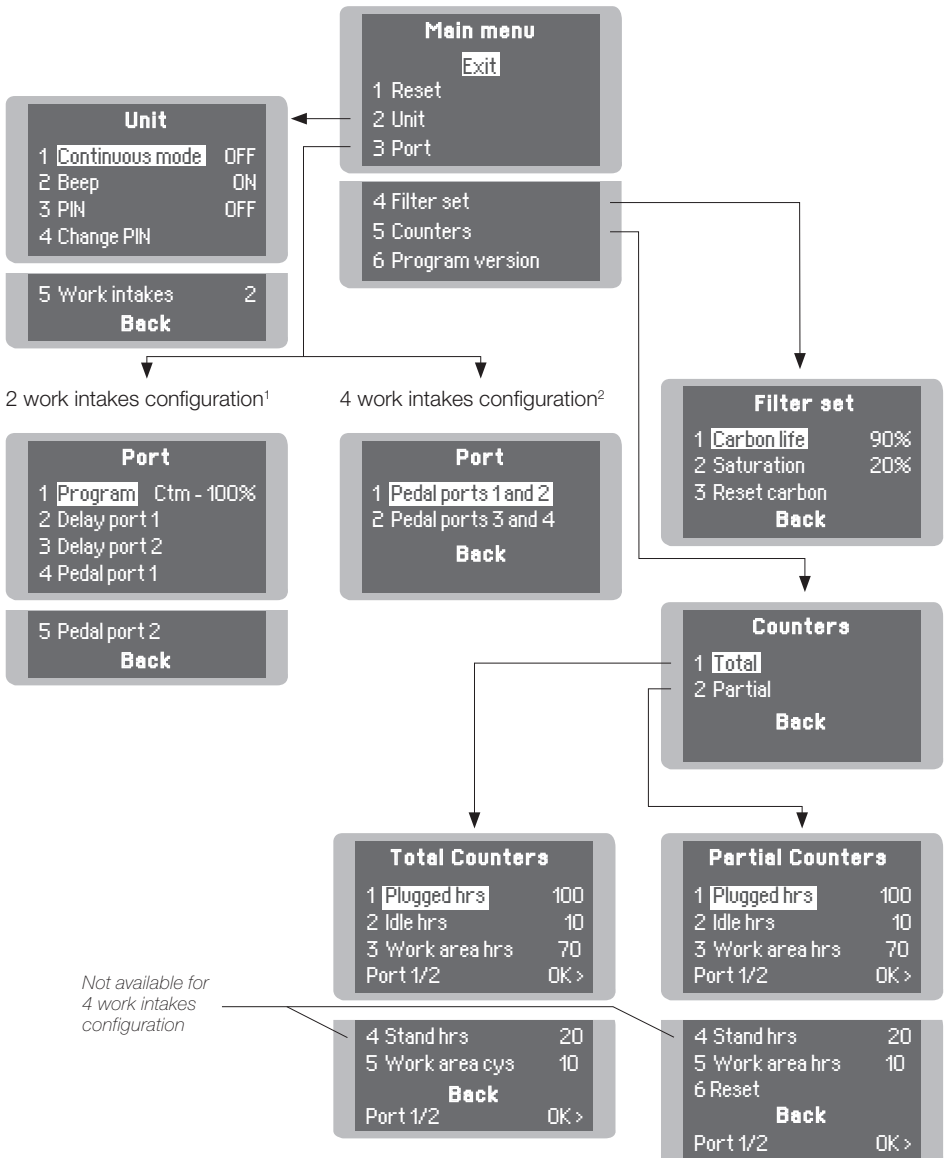
4 work intakes configuration²

Saturation	Carbon life			
20%	90%			
W1	W2	W3	W4	
ON	ON	ON	ON	

Menu Interface

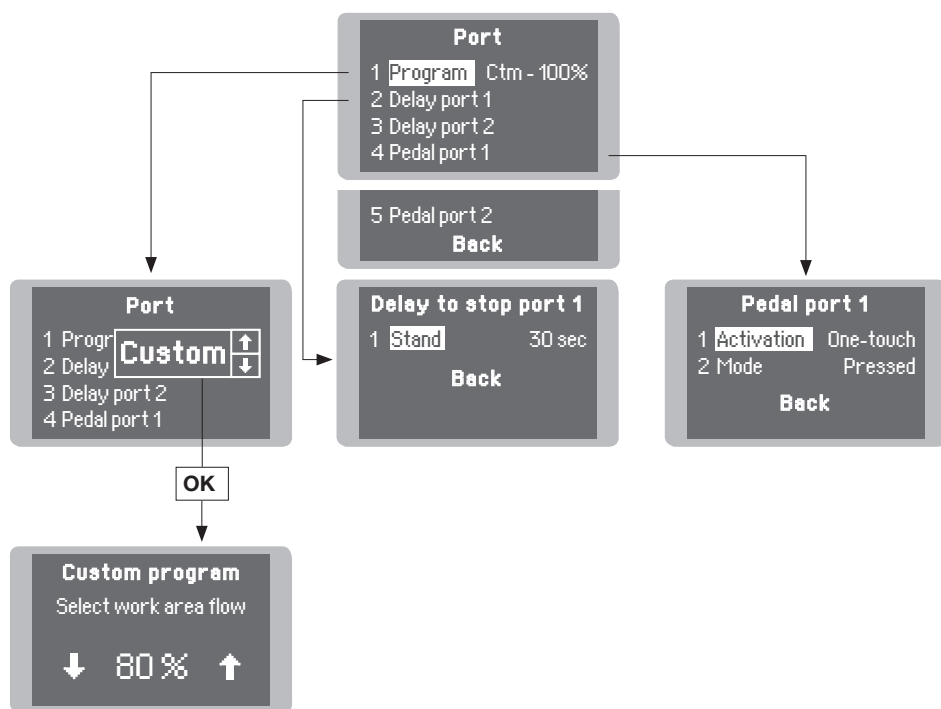
Main Menu Parameters

Original Pin: 0105

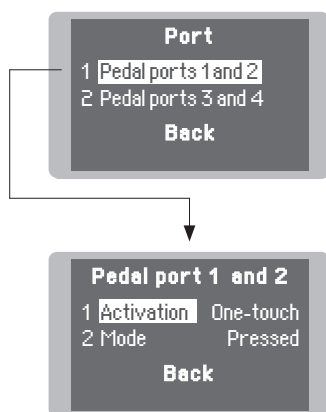


Menu Interface

Port Menu for 2 Work intakes Configuration



Port Menu for 4 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 the 4 aspiration intakes are opened and 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 2 and 4. By default Work intakes is 2.

Port

Parameter	Description
Program	It sets the fume extractor aspiration flow. You can select between Preset and Custom aspiration programs. 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. Up to ten aspiration levels between H (High) and L (Low) can be select for Custom program (range 10-100%). If a Custom aspiration program is selected, the selected aspiration level can be changed on main the screen. By default M (Medium) aspiration program is selected.
Delay to stop / Stand	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) By default Stand time is 60 seconds.
Pedal / Activation	It sets the pedal activation mode. One-touch: Press the pedal once to activate aspiration. Press again to stop aspiration. Pressed: (Mode function must be Pressed) aspiration is active as long as the pedal is kept pressed. By default Activation is Pressed.
Pedal / Mode	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. By default Mode is Pressed.

Filter Set

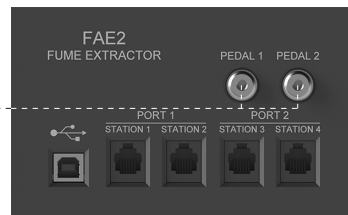
Parameter	Description
Carbon life	It shows remaining activated carbon lifetime expressed in %. It is also displayed on the main screen. When 0% is reached the system will show pop-up message STOP#1 to replace the filter.
Saturation	It shows saturation status of HEPA + carbon filter set, expressed in %. 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:

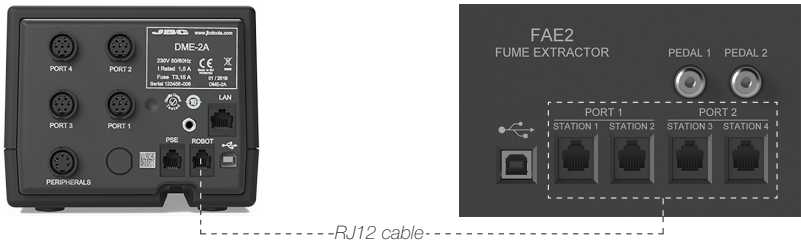
Pedal Connection

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)

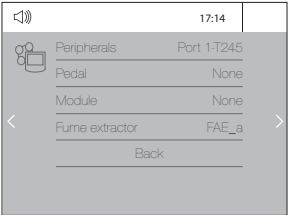


RJ12 Station Connections for Excellence Range

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).



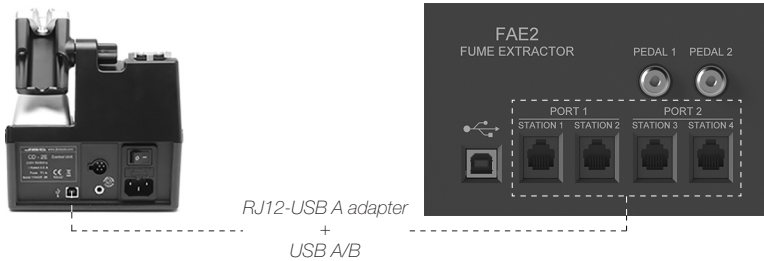
Connect up to 4 stations directly to a fume extractor through the Soldering Station Robot port. Every tool connected to a station can control the aspiration system, but previously it has to be assigned to the fume extractor through the Peripherals menu of the station. Each station detects a fume extractor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



For 2 work intakes configuration:

Stations (Excellence or Advanced range) connected to RJ12 connectors Station1 and Station2 can control Work1/Stand1 intakes, whereas those which are connected to Station3 and Station4 can control Work2/Stand2 intakes.

For 4 work intakes configuration:

Each station connected to RJ12 connector StationX can control WorkX intake (e.g. Station2 controls Work2).

Continuous mode

When continuous mode is enabled the 4 aspiration intakes are opened and 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:

	2 Work Intakes	4 Work Intakes
Work Aspiration Intakes	2	4
Stand Aspiration Intakes	2	Not available
Flow per Work Intake	76 m3 / h (44.73 cfm)	52 m3 / h (30.6 cfm)
Flow per Stand Intake	4 m3 / h (2.35 cfm)	Not available
Preset Aspiration Programs	3	1
Custom Aspiration Programs	9	Not a available
Power Consumption	400 W	500 W

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 (image 1).
- 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 (image 2) are dirty and making false contact. Remove the cover 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.



Image 1

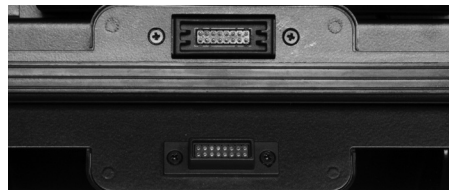


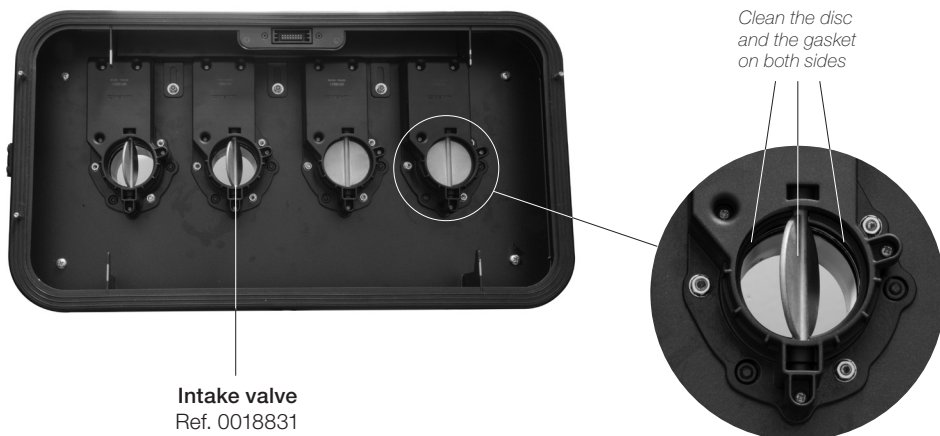
Image 2



Important: Read the page 2 before using the fume extractor.

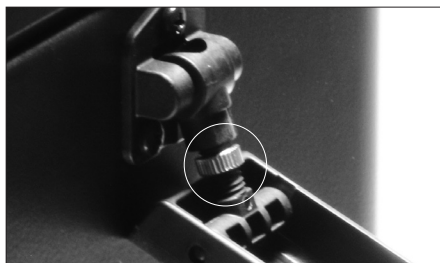
Maintenance - Valves

- 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.



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 safety.

Safety



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

- The equipment is designed to filtrate only 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.
- 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 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.

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Specifications

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

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

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

- Max. flow rate: 290 m³/h (10241.25 f³/h)
- Max. vacuum: 6,1 KPa (0.88 psi)
- Blower type: Brushless
- Work areas: 2
- Noise: 54 dB
- Pre-filter: Medium dust filter M5 (EN 779)
- Compact Filters: H13 particle filter (EN 1822)
Activated carbon filter
- Fuse: 8 AT
- Connections: USB connector station-PC
RJ12 connector
- Fume Extractor Dimensions / Weight: 560 x 320 x 590 mm / 33,6 kg
(L x W x H) 22.05 x 12.59 x 23.23 in / 74.08 lb
- Total Package Dimensions / Weight: 725 x 485 x 760 mm / 36 kg
(L x W x H) 28.54 x 19.09 x 29.92 in / 79.37 lb

Complies with CE standards.
ESD protected.



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.

