

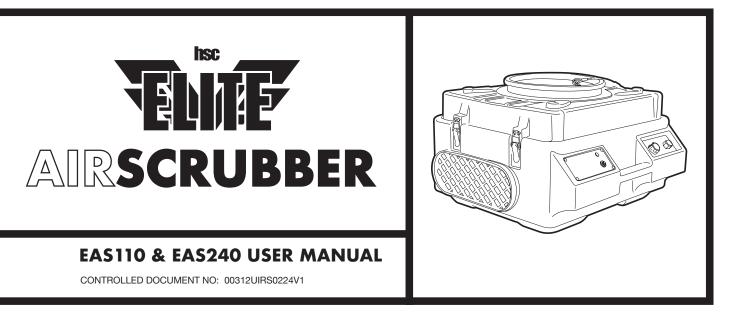
USER MANUAL



*Please note, when ordering online via our website if the part number is not recognised, please Email spares@hscgroupuk.co.uk or Telephone 0115 946 1988

KEEP THIS BOOKLET FOR FUTURE REFERENCE

📞 Nottingham: 0115 946 1988 • London: 0208 830 3333 🛛 🖂 Nottingham: sales@hscgroupuk.co.uk • London: sean@hscgroupuk.co.uk 🛛 🌐 www.hscgroupuk.co.uk



IMPORTANT SAFETY INSTRUCTIONS

Before using this **EAS110 OR EAS230** please read this user manual, if you do not understand any of the instructions within please do not use and consult your retailer or the manufacturer for clarification.

Failure to follow these instructions may result in damage to the product, property or cause personal injury.

KEEP THIS BOOKLET FOR FUTURE REFERENCE





INSPECT YOUR NEW PRODUCT

Thank you for purchasing an Elite Air Scrubber manufactured to the highest standards drawing upon over 20 years' experience supplying the UK hire and construction industry, this product will, if used in accordance with these operating instructions, affixed labels to the product and properly maintained, will provide you with many years of reliable service.

The EAS110 and EAS240 are the most compact, durable and portable units in our popular line of high performance air scrubbers. The lightweight design and ergonomic design make the units easy to carry and transport and the stackable design ideal to store.

For maximum flexibility, the Elite Air Scrubber features variable airflow and can be operated vertically or horizontally for user and application convenience. The Air Scrubber is designed to accept 12" inlet flex duct and 10" lay flat outlet duct for a variety of operating set-up options.

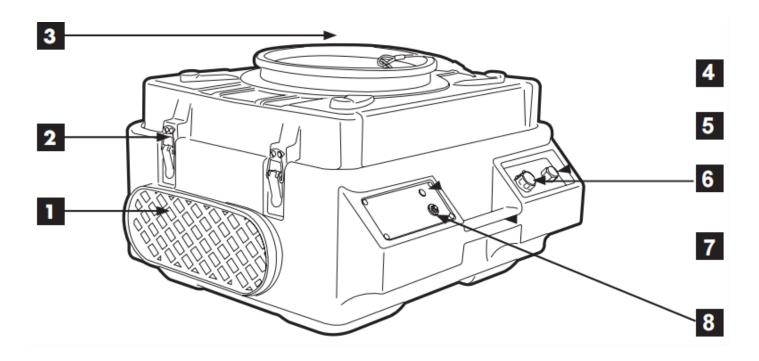
The Air Scrubber delivers a maximum 1240 m³/hr of HEPA filtered air, while drawing less than two amps of power. This makes the Air Scrubber perfect for a variety of remediation projects where space and power are at a premium. A single Air Scrubber is capable of providing 4 air changes per hour (the recommended minimum) on a $210m^3$ room (more than a 8 x 8 x 3m).

The Air Scrubber's 2-stage filter design - with documented true HEPA filtration performance - will remove hazardous particles from the air and, with the addition of an optional carbon/potassium permanganate filter, will adsorb a wide range of odours and gases.

THE AIR SCRUBBER

- Less than 2 amps
- Compact design
- · Variable speed controls
- Multiple optional ducting options
- Tough, plastic housing
- Optional carbon filter

PRODUCT KEY COMPONENT IDENTIFICATION



- 1. Air outlet
- 2. Fiter change access
- 3. Air inlet including dust containment cover
- 4. Filter blocked indicator

- 5. Mains power inlet
- 6. Variable speed control
- 7. Integeral carry handle
- 8. Mains circuit breaker

SPEC	IFICA	TIONS
------	-------	-------

Model	EAS110	EAS240
Voltage (volts)	110Vac	230Vac
Power (watts)	180W	210VV
Current (amps)	1.93A	0.93A
RPM (MAX)	2490	2525
Air Flow (m3/hr)	1240	1236
Noise (decibel)	77 db	80 db
Neight (kilograms)	15.5KG	15KG
Filter – pre filter	G4 Paper frame	G4 Paper frame
	pleated	pleated
Filter - Primary	HEPA – H13	HEPA – H13

BEFORE USE CHECK FILTERS AND REMOVE ANY TRANSIT / PACKAGING OR COVERING MATERIALS BEFORE USE

IMPORTANT SAFETY INSTRUCTIONS

- **CAUTION:** Risk of electric shock. Electric shocks can cause serious injury or possibly death, to reduce the risk of electric shock please follow the below:
- DO NOT expose or use in standing water or rain
- DO NOT use with extension cord
- UNPLUG fan before servicing or changing filters. Consider stored charge within capacitors.
- DO NOT block air intake or outlet. Ensure a minimum of 1M distance from air inlet / outlet to any obstructions.
- Indoor use only
- DO NOT place objects on the product during use.
- DO NOT place objects on the product during use.
- DO NOT operate with damaged mains cable or plug.
- DO NOT run mains cable under carpeting. Do not cover cable with dust covers, or similar coverings.
- **DO NOT** route mains cable under furniture or appliances. Arrange mains cable away from traffic area and where it will not present as a potential trip hazard.
- When not in use always disconnect the unit from the power supply.
- When removing the plug from the socket always do so by holding and pulling the main body of the plug and **NOT** the cable.
- **DO NOT** modify this equipment to do tasks other than those intended, this will invalidate your warranty, product approvals and pose a risk to the user, bystanders, and property.
- **NEVER** leave the unit running unattended.
- DO NOT use the equipment if there is any damage noted on the mains inlet cable.
- **DO NOT** run the main cable across walkways, paths or in front of doors / doorways. Once the cable has been routed into the desire position please secure. Also consider and avoid sharp edges, water and chemicals when positioning the cable.
- ENSURE the cable is fully unwound before use.
- If the external mains cable is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid hazard.
- In some applications it may be necessary to complete a risk assessment and method statement on the use of this product. Please note this is the responsibility of the user to consider all foreseen and unforeseen risks and mitigate where possible.
- Reading, understanding and adhering to these user instructions is essential for safe use and sufficient product training.
- **DO NOT** use the equipment if there are any signs of damage that may present a hazard in use. If you are unsure seek advice from a qualified person, retailer, or the manufacturer.
- It is recommended this unit is used with an RCD device.
- ENSURE your hands are dry when connecting, using, and disconnecting an electrical appliance.
- Always make sure the plug fuse and any other circuit protection is of the correct rating, refer to the products rating label. If you are unsure, please contact either the reseller or manufacturer for assistance.
- **DO NOT** leave the unit plugged in and/or running unattended where young children or infirm people may be able to touch the unit.
- **ALWAYS** ensure children and people with reduced mental capabilities are supervised at all times where the unit is used and in operation.
- ONLY use on a flat level surface.
- NEVER use this equipment in a potentially explosive environment. This product in NOT intrinsically safe.

OPERATION

AIR DUCTING

A. Inlet Ducting (optional)

Occasionally the area to be filtered may be difficult to access and/ or the unit cannot be located in the area. In such cases, the air can be ducted to the unit's inlet. A round 12" diameter flexible duct can be attached to the unit inlet. It connects by placing the wire in the ducting over the duct collar lip and securing in position. It may be removed after use for easier transport and storage. Flexible 12" duct is available from Elite.

B. Outlet Ducting (optional)

A detachable exhaust ring is supplied that will allow 10" round plastic duct to be attached to the Elite Air Scrubber outlet. Ducting is available from Elite.

To attach ducting to the collar, remove the ring from the unit by pressing release tab at the top of the grill. Put the plastic duct end through the inside of the ring. Roll the duct end outward so that it over-laps the outside of the ring. Clip the ring back onto the exhaust grill.

C. Negative Air Ducting

The Elite Air Scrubber can be used to filter and exhaust air from a space. When exhausting to outside the space, the space will be under a slight negative pressure. This will help prevent airborne particles from leaving the space, because the negative pressure will draw air in through openings in the space's exterior surfaces.

TRANSPORTING THE ELITE AIR SCRUBBER

The Air Scrubber should be transported vertically or horizontally on the appropriate feet located on the bottom of the unit or opposite the handle

ELECTRICAL REQUIREMENTS

The Elite Air Scrubber can be plugged into a earthed 13A BS1363 protected circuit or 110V 16A IEC60309 circuit, typically via a site transformer. It draws about 2 Amps with clean filters and no ducting. The amp draw will decrease slightly with added ducting and as the filters load with particulate. Due to the presence of circuit breaker, the unit must be plugged directly into a wall outlet. No extension cords should be used as this may cause nuisance tripping.

CAUTION: Exhausting too much air from a space with open combustion devices (e.g. furnace, fireplace or water heater) can cause those devices to backdraft. This can contaminate the space with potentially fatal gases.

In such cases, the Elite Air Scrubber must be used in one of the following three ways:

A. As a filtering unit only. Exhausting no air from the space and thus causing no negative pressure or backdrafting.

OPERATION

- **B.** Exhausting a very limited amount of air which does not cause backdrafting. In case B, the open combustion devices must be thoroughly checked to guarantee that they do not backdraft while the Elite Air Scrubber is running.
- **C.** Direct the outlet duct from the Air Scrubber to the room with the open combustion device(s). This will positively pressurize the room with HEPA filtered air, thus preventing backdrafting. As in case B, those combustion devices must be checked after the Air Scrubber is running to guarantee that they are not backdrafting.

POWER/SPEED CONTROL

The power/speed switch is located on the control panel. When turned on to any speed, it powers the impeller fan.

Occasionally the impeller fan may not start on low speed. If this occurs, rotate the speed control to high speed until the impeller fan starts, then adjust it to a lower speed.

CAUTION: Do not remove HEPA filter with the unit on. Removing the top and filters while running will expose the dangerous rotating impeller fan. Disconnect the appliance before changing filters.

RESETTABLE CIRCUIT BREAKER

The 12 AMP thermal resettable circuit breaker protects the unit.

The circuit breaker is designed to sense the total current draw through the circuit. The circuit breaker "trips" when more than 12 amps of electrical current are drawn through the device's power cord. Should an over-current condition occur, the Air Scrubber on-board circuit breaker activates and prevents nuisance visits to reset any breakers in the electrical circuit.

SERVICING

Before each use inspect for damage, blocked inlet or outlet.

When the Elite Air Scrubber is first turned on, check for excessive vibration. If the unit vibrates excessively or if impeller rubs on housing, turn off the unit immediately. Have a service technician inspect the unit to locate the problem.

MAINTENANCE

WARNING: Use extreme caution when changing the HEPA filter as hazardous material could be trapped in the media. Always make sure to dispose of filters in the appropriate way. If you are unsure of how to safely dispose of any filter-consult your health and safety representative or the HSE (Health and Safety Executive) for guidance.

Ensure that all hazardous materials are contained and disposed of properly and in accordance your local regulations.

AIR FILTERS

The standard Elite Air Scrubber HEPA System is equipped with two filters that progressively filter out smaller particles. An optional activated carbon/potassium permanganate filter can be also added. These filters must be checked regularly. Operating the unit with dirty filters will reduce the airflow, but will do no harm to the unit. Where possible regular cleaning and replacement of filters is recommended for efficient performance.

The two standard filters used are listed below (as installed in the unit from top to bottom):

A. 25 to 30% efficient (per ASHRAE 52.1-1992), MERV-7, pleated fabric pre-filter. G4
B. 99.97% DOP efficient HEPA filter. H13

STORAGE & TRANSPORT

Correct storage and recommended storage both short term and long term.

- · Ensure the product is clean, use a dry using a lint-free cloth to remove any dust or debris from the unit
- Coil the mains cable onto the integral cable management and retain in position for protection.
- Where possible retain and use the original packaging for prolong periods of storage. If this is not possible use a clean cloth or dust sheets

FILTER REPLACEMENT

A. When the amber "filter change light" illuminates. It may be time to replace one or both filters. To check airflow accurately, an airflow meter or anemometer must be used:

• When the filter change light illuminates; remove all ducting and run on high speed. if the filter light remains lit; replace the pre-filter and run on high again. If the light remains; it is time to replace the HEPA filter for full 1240 m3/hr performance. Airflow on high speed with all filters clean and no ducting is slightly over 1240 m3/hr. The unit can be run with very dirty filters and virtually no flow without harming the unit however this will greatly reduce the filtering effectiveness. The operator's decision to change filters should be based on filter cost vs. the unit's filtering effectiveness considering the application used within. If airflow is 600 m3/hr vs. 1200 m3/hr, the unit will filter particles from a space at half the rate. The operator must judge if that is acceptable.

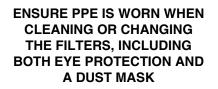
If the operator determines the filters should be changed due to low airflow, it is most economical to change them in the following order:

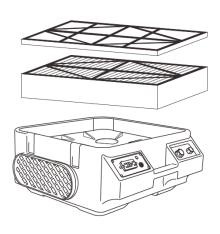
Change the pre-filter (top) first. This is the least expensive filter. Recheck the airflow. If the airflow is acceptable, no other filters need to be changed.

If the airflow is still too low, the HEPA filter must be changed. To remove the HEPA filter, follow these steps:

- 1. Open the filter compartment by release the clamps on one side and hinge open to access
- 2. Lift the sprung retaining clips to allow the filters to be withdrawn
- 3. Remove old filter.
- 4. Installing the new filter is the reverse of these instructions

B. Optional Activated Carbon/Potassium Permanganate Filters are available. They use a blend of activated carbon and potassium permanganate. This blend removes the vast majority of gaseous contaminants encountered in most filtering applications. The activated carbon removes the heavier volatile organics while the potassium permanganate removes lower molecular weight contaminants. This is well suited to the smoke odours present after fire damage. The life of the media blend depends upon both the hours used and the contamination level. Another advantage of the blended media versus activated carbon only is that part of the blend changes color as it loads up with contaminants. It starts out black, then turns pink, then brown, and finally white. It is best changed when it passes the brown stage and begins to turn white. It has lost most of its effectiveness at that point. The filter is the same size as the pleated fabric filter.







ENVIRONMENTAL PROTECTION: Please recycle any unwanted materials as opposed to disposing them as general waste. It is recommended the original packaging is retained and used to store the product when not in use for prolonged periods of time. If this is not applicable ensure the materials are sorted and recycled in accordance with local regulations.

SPECIFICATION CHANGE: It is our policy to continually improve products to ensure these meet the rigours of the industry we serve. Therefore, as such we reserve the right to alter specifications, data and components parts without prior notice.

WARRANTY: All Elite products come with a 1-year warranty from date of purchase, proof of which will be required in the event of any claim.

IMPORTANT: No liability will be accepted for the incorrect use of this product.

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal. Recycle it responsibly to promote the sustainable reuse of material resources. To return your used device. Please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.



The Hire Supply Company (UK) Limited 7-10 Eldon Road Trading Estate, Attenborough, Nottingham, NG9 6DZ, UK - Tel: 0115 946 1988

HSCGROUPUK.CO.UK

HSC Industrial and Commercial Equipment (EU) Ltd. 1st Floor, Penrose 1, Penrose Dock, Cork, T23 KW81, Ireland. Registered No: 689232

AIR SCRUBBER MANUAL



Recycling



ENVIRONMENTAL PROTECTION: Please recycle any unwanted materials as opposed to disposing them as general waste. It is recommended the original is retained and used to store the product when not in use for prolonged periods of time. If this is not applicable ensure the materials are sorted and recycled in accordance with local regulations.



SPECIFICATION CHANGE: It is our policy to continually improve products to ensure these meet the rigours of the industry we serve. Therefore, as such we reserve the right to alter specifications, data, components & parts with-out prior notice.

WARRANTY: Please refer to the manufactures terms & conditions.

IMPORTANT: No liability will be accepted for the incorrect use of this product.

KEEP THIS BOOKLET FOR FUTURE REFERENCE

📞 Nottingham: 0115 946 1988 • London: 0208 830 3333 🛛 🖂 Nottingham: sales@hscgroupuk.co.uk • London: sean@hscgroupuk.co.uk 🛛 🌐 www.hscgroupuk.co.uk