

H E A D W I N D



EC MIXED FLOW **INLINE FAN**

INSTRUCTION MANUAL

S A F E T Y & O P E R A T I O N

Thank you for purchasing a Headwind HVC EC Mixed Flow Fan.

Please keep this Instruction Manual for future reference, along with the packaging for storage when the fan is not in

use.

Statements in this Instruction Manual with the symbol * refer to options only available for use with fans that feature **Multiple Speed Control Signals**.

Please consult us for the availability.



WARNING

Electric Shock Hazard
Do Not Open. No user serviceable parts inside. Refer servicing to qualified service personnel.



- 1 To avoid the risk of electric shock, fire or injury to persons, always make sure the product is unplugged from the electrical outlet before relocating, servicing or cleaning it.
- 2 When using the EC Mixed Flow Fans, basic electrical safety precautions should always be followed.

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1 SAFETY INSTRUCTIONS

1.1 Warnings

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

To ensure safety, please read the following instructions before using this fan.

Use this fan only as intended. Use other than as described may result in electric shock or injury to persons.

WARNING: EC FANS WITH MULTIPLE SPEED CONTROL SIGNALS DO NOT FUNCTION WITHOUT A SPEED CONTROLLER OR FULL SPEED PLUG FITTED. SPEED CONTROLLER OR FULL SPEED PLUG MUST BE CONNECTED BEFORE POWER UP.

1.2 Safety Instructions

- This product is intended for indoor use only.
- Install with duct on inlet and duct and/or fan attenuator/silencer on exhaust of fan.
- Install guard screens if personnel have access to inlet or exhaust of fan.
- For general ventilation use only.
- **Warning:** Do not use to exhaust hazardous explosive materials and vapors.
- Ensure that the fan is switched off from the supply mains before removing the guard.
- Precautions must be taken to avoid the back-flow of gases, a check valve is necessary.
- **DO NOT** pull the cord too hard as it could damage and fray. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid an electrical hazard.
- **DO NOT** allow the power cord or any other parts of the fan to touch hot surfaces, open flames, cooking or other appliances and **DO NOT** place near hot gas or electric burners.
- Ensure all the packaging has been removed and that the voltage used corresponds to the voltage indicated on the rating plate.

- **DO NOT** cover any openings on the fan or insert objects or parts of the body into any of its openings when fan is on or off.
- To protect against electric shock, do not immerse unit, plug or cord in water or other liquids.
- Keep the cord away from areas where it could be walked on or tripped over.
- To disconnect, first turn the unit off, grip the plug and pull from the wall outlet. NEVER pull the plug by the cord.
- Turn the unit off when moving to another location and before cleaning.
- **DO NOT** operate if the housing is damaged.

DO NOT use this fan in the following circumstances:

- Flammable or hazardous atmosphere, near explosive gases, or chemical dust.
- Environmental humidity is above 90%.
- Operating Temperature is less than 15°F / -10°C, or above 140°F / 60°C.
- Environment with significant dust.
- Places where children or pets have easy access to the fan blades.

1.3 Maintenance

- Clean the unit regularly to ensure the blades can move freely.
- **DO NOT** clean whilst the unit is switched on. Turn off and unplug the unit.
- **DO NOT** use cleaning detergent or chemicals to clean the fan.
- Wipe the unit and blades with a damp cloth.
- **DO NOT** spray water or liquid on or into the fan.
- Never immerse in water or let water enter the fan controller outlet.
- **DO NOT** clean the unit with cloths that have metal parts.

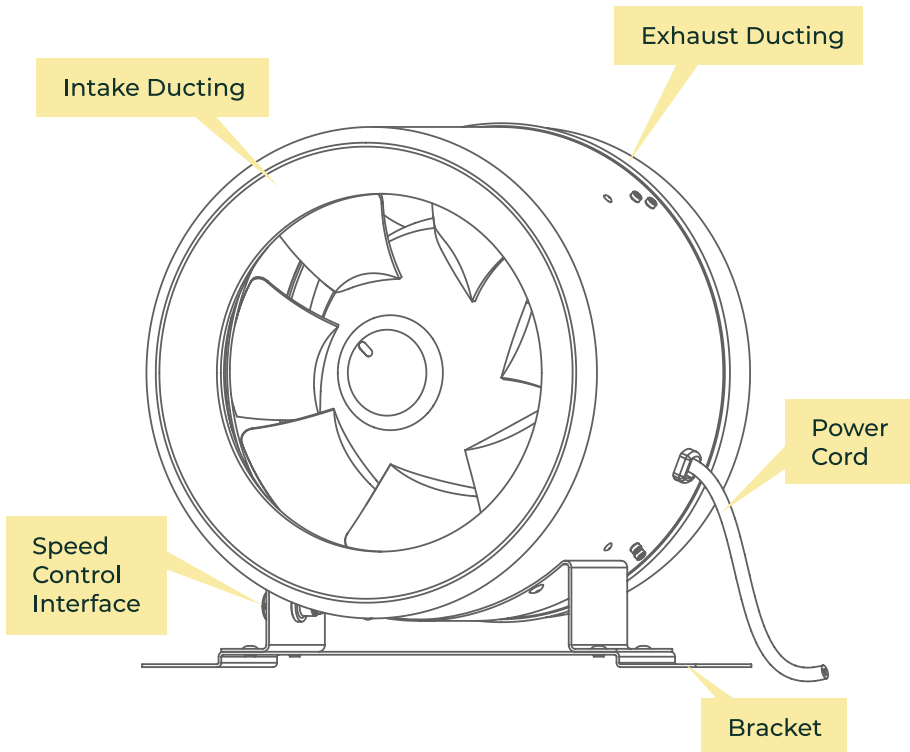
2 PRODUCT OVERVIEW

2.1 Features

This **Headwind HVC EC Mixed Flow Fan** is powered using a cutting-edge EC motor, featuring high static air pressure, aerodynamically-optimized airflow, quiet operation, and extremely high efficiency. They are ideal for residential, commercial and industrial ventilation applications, and even hydroponic ventilation (exhaust and intake).

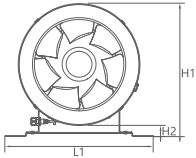
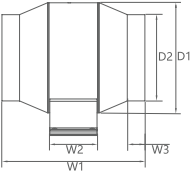
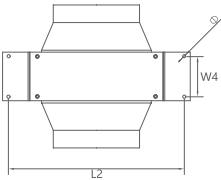
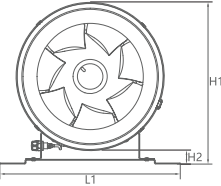
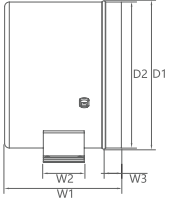
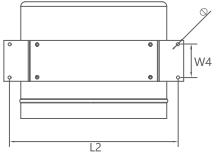
Multiple Speed Control Signals available [Potentiometer; PWM; 0-10V, Tachometer] *

2.2 Product Contents



EC Mixed Flow Fan

2.3 Specifications

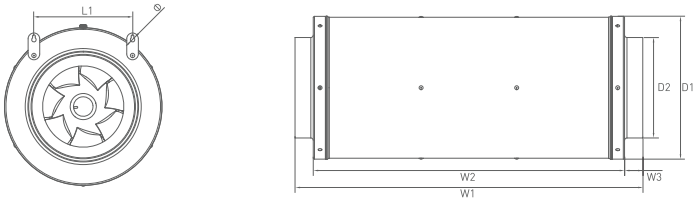
Model No.	Dimensions		
SE-A100 SE-A100-H02 SE-A150-H02			
SE-A125 SE-A150Z SE-A200Z SE-A125-H02 SE-A200-H02 SE-A250-H02			

Model No.	L1	L2	H1	H2	D1	D2	W1	W2	W3	W4	φ
SE-A100	184	175	150	25	125 $\emptyset$	98 $\emptyset$	164	51	20	37	5
SE-A125	184	175	151	26	126 $\emptyset$	124 $\emptyset$	110	51	12	37	5
SE-A150Z	187	175	173	21	153 $\emptyset$	150 $\emptyset$	165	80	20	37	5
SE-A200Z	222	210	223	22	203 $\emptyset$	200 $\emptyset$	220	105	30	39	5
HVC Dura											
SE-A100-H02	160	140	152	18	123 $\emptyset$	98 $\emptyset$	162	56	20	37	5.5
SE-A125-H02	160	140	152	18	123 $\emptyset$	98 $\emptyset$	162	56	46	37	5.5
SE-A150-H02	218	192	191	11	180 $\emptyset$	148 $\emptyset$	198	70	20	45	5.5
SE-A200-H02	222	210	222	18	202 $\emptyset$	198 $\emptyset$	190	105	25	39	5
SE-A250-H02	300	288	272	19	252 $\emptyset$	248 $\emptyset$	210	105	25	56	5

Note: Dimension unit is mm, tolerance + 1mm

Fan Specifications							
Model No.	Rated Voltage	Max. Power Consumption	Frequency	Max Speed	Max. Airflow	Max. Static Pressure	Max. Noise Level
SE-A100	220-240VAC	18W	50/60Hz	5000RPM	160CFM/275M³H	34mmH²O/334Pa	51.6dBA
SE-A125	220-240VAC	20W	50/60Hz	5000RPM	166CFM/280M³H	37mmH²O/363Pa	43.8dBA
SE-A150Z	220-240VAC	40W	50/60Hz	5000RPM	350CFM/594M³H	51mmH²O/500Pa	50.3dBA
SE-A200Z	220-240VAC	75W	50/60Hz	3800RPM	710CFM/1205M³H	53mmH²O/520Pa	48dBA
HVC Dura							
SE-A100-H02	110-240VAC	18W	50/60Hz	5000RPM	160CFM/275M³H	34mmH²O/334Pa	51.6dBA
SE-A125-H02	110-240VAC	18W	50/60Hz	5000RPM	160CFM/275M³H	34mmH²O/334Pa	51.6dBA
SE-A150-H02	110-240VAC	45W	50/60Hz	3500RPM	365CFM/621M³H	41mmH²O/406Pa	54.9dBA
SE-A200-H02	110-240VAC	85W	50/60Hz	3000RPM	696CFM/1182M³H	50mmH²O/486Pa	47.8dBA
SE-A250-H02	110-240VAC	150W	50/60Hz	3200RPM	1065CFM/1808M³H	52mmH²O/510Pa	55.6dBA

Note: The noise value is the measured value at the distance of 3 meter from the fan inlet

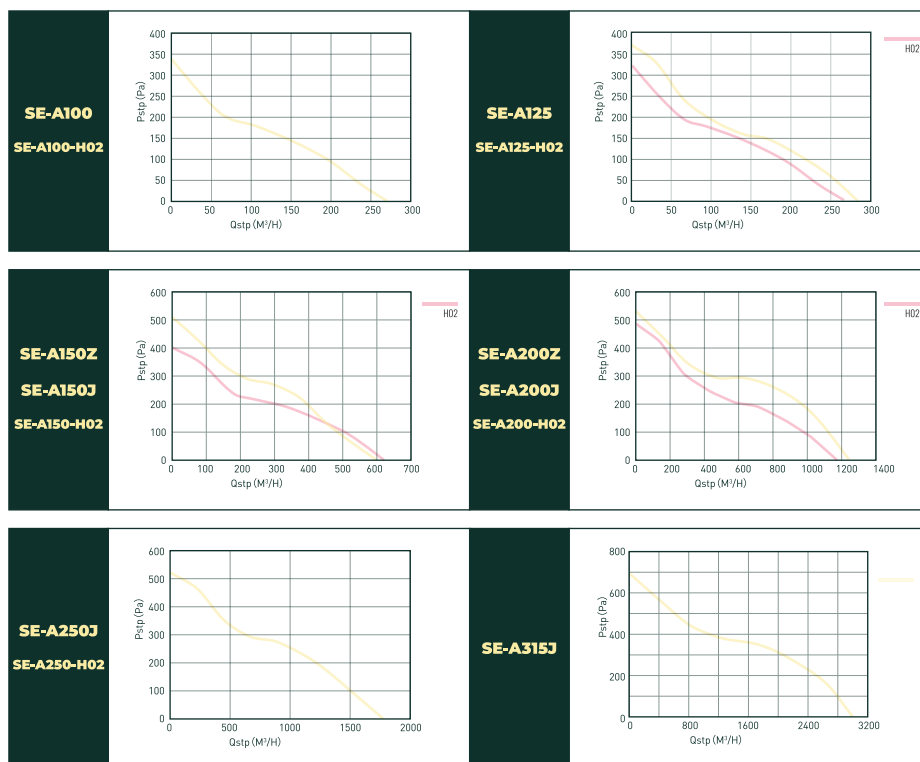
Model No.	Dimensions
SE-A150J SE-A200J SE-A250J SE-A315J	

SE-A150J	123	243ø	148ø	547	469	39	10
SE-A200J	174	304ø	198ø	699	619	40	10
SE-A250J	221	353ø	248ø	859	769	45	10
SE-A315J	268	415ø	313ø	940	848	46	10

Fan Specifications						
Model No.	Max. Power Consumption	Frequency	Max Speed	Max. Airflow	Max. Static Pressure	Max. Noise Level
SE-A150J	40W	50/60Hz	5000RPM	350CFM/594M ³ H	51mmH ₂ O/500Pa	42.9dBA
SE-A200J	75W	50/60Hz	3800RPM	710CFM/1205M ³ H	53mmH ₂ O/520Pa	37.7dBA
SE-A250J	150W	50/60Hz	3200RPM	1065CFM/1808M ³ H	52mmH ₂ O/510Pa	43.5dBA
SE-A315J	320W	50/60Hz	3000RPM	1757CFM/2987M ³ H	69mmH ₂ O/677Pa	52.5dBA

Note: The noise value is the measured value at the distance of 3 meter from the fan inlet

2.4 Fan Performance Curves Vs. Static Pressure



NOTE:

- The fan date is based on laboratory testing and is for reference only.
- There may be a 10% tolerance in actual use.

3 FAN CONTROLS

The **Headwind HVC EC Mixed Flow Fan** offers a standard variable speed controller via potentiometer. It can also offer multiple ways to control the fan speed, supporting various HVACR control systems and is compatible with other controllers using PWM & 0-10V.

3.1 Standard Control

All EC fans go with a portable variable speed controller or wall mounted controller.



PORTABLE SPEED CONTROLLER

0-100% variable speed control by potentiometer simple and portable.

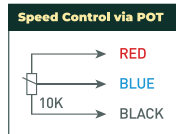
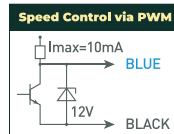
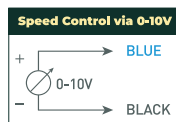
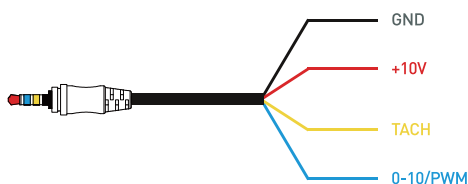


FULL SPEED PLUG

This plug is useful when no speed control is required. The fan will work at MAX. SPEED once plugged.

3.2 DIY 4-Pin Speed Control

EC fan with Multiple Speed Control Signals is packed with a DIY 4 pins connection cable, please refer to the diagram below*.



4 OPTIONAL CONTROLLERS AND ACCESSORIES*

EC fan with Multiple Speed Control Signals offers great flexibility and compatibility of speed control with various accessory: smart control, wall mounted variable control, controller adaptors and extension cable.*



PRO SMART CONTROLLER WITH TEMPERATURE AND HUMIDITY PROBE

[SOLD SEPARATELY]

10 speed controller with temperature and humidity probe, to accurately monitor environment, supporting up to 2 EC fans with differential pressure adjustment using Manual, Auto or Alert modes.



SMART CONTROLLER WITH TEMPERATURE PROBE

[SOLD SEPARATELY]

6 speed controller with temperature probe to accurately monitor environment, supporting up to 4 EC fans simultaneously using Manual, Auto or Alert modes.



WIRELESS REMOTE WITH RECEIVER

[SOLD SEPARATELY]

Allows you to control your EC fan wirelessly. 6 pre-set speed levels (15-100% output). 50ft / 15m signal range, which works through walls, floors and ceilings. Ideal for fans installed in hard to reach places.



ADAPTOR TO SUIT 3 PIN CONTROLLERS

This adaptor has a 3.5MM TRRS male jack and a RJ45 female socket. Use to connect your Headwind HVC EC fans to other EC fan controllers on the market.



ADAPTOR TO SUIT RJ45 CONTROLLERS

This adaptor has a 3.5MM TRRS male jack and a RJ45 female socket. Use to connect your Headwind HVC EC fans to other EC fan controllers on the market.



3.5MM TRRS JACK EXTENSION CONTROL CABLE [SOLD SEPARATELY]

5 meter long extension cable to operate controllers up to a distance of 10 meters away.

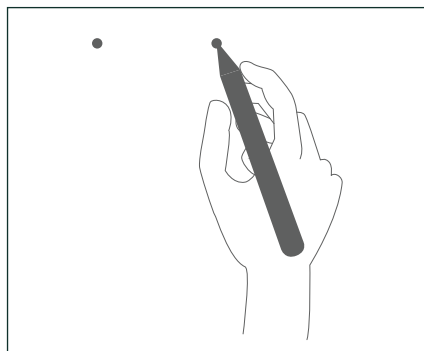
5 INSTALLATION

5.1 Warning

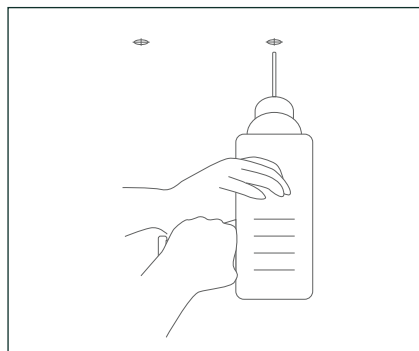
WARNING: MUST CONNECT SECURELY TO SPEED CONTROLLER OR FULL SPEED PLUG BEFORE POWER UP

- Unpack and check fan for damage; ensure that the fan impeller spins freely and does not touch the fan housing.
- Use a pre-filter on any intake vents to prevent dust, oil and other foreign substances from building up on the impeller. Build up of dust and or foreign material can cause an out-of-balance impeller and excessive vibration. Excessive vibration will reduce fan life expectancy.
- Use the appropriate attachment screws for the surface material being selected to mount the fan. Use the supplied mounting bracket or hanger.
- Do not install fan on sheet rock or weak surface.
- Do not deform fan bracket or fan housing.
- After completing the installation, electrical work and duct work, perform a test operation to confirm if the fan operates normally.
- After turning the power on, the fan should rotate freely and build up speed normally.
- If there is abnormal noise or no rotation, check all connections and check power supply.
- Always install the fan at the height of 2.1m or above.

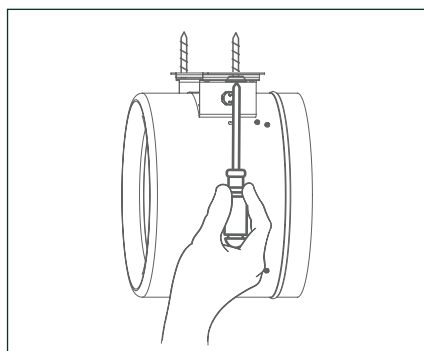
5.2 Wall Mounted Installation



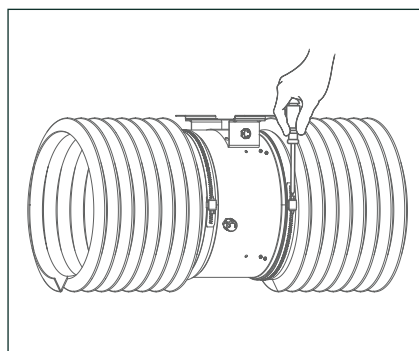
1 Mark the screw position on the wall



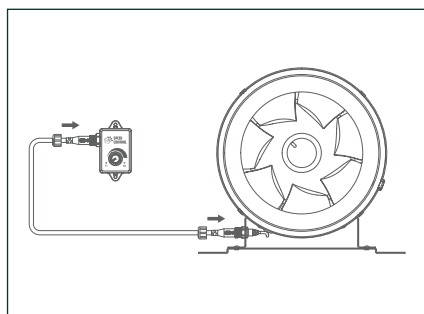
2 Drill holes into the wall



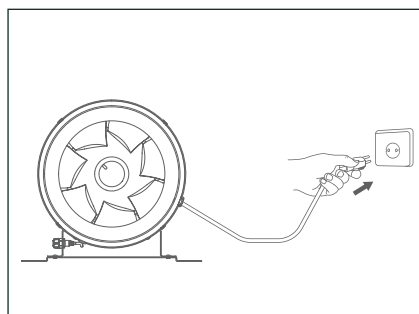
3 Screw the fan onto the wall



4 Connect the ducts on two sides using clamps and/or duct tape

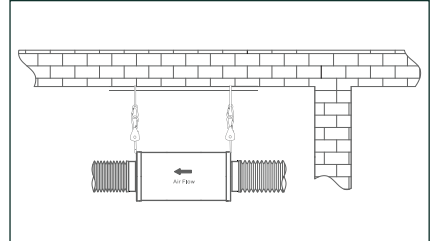
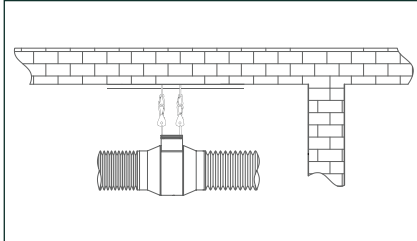


5 Connect the speed control to the fan and make sure the connection is in place and fastened



6 Power up the fan

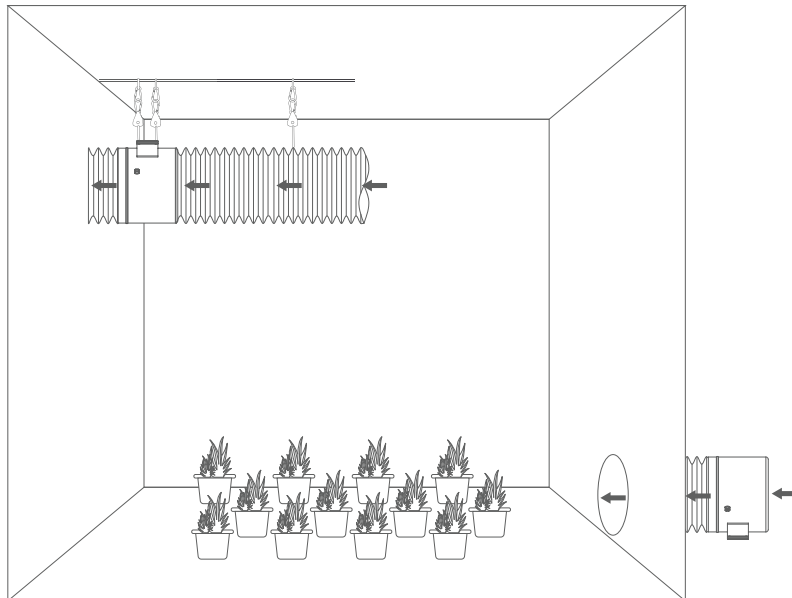
5.3 Hang Installation



5.4 Intake and Exhaust

This can be used as either an intake fan or exhaust fan in grow rooms or tents to achieve optimal whole space ventilation.

- Used as the intake fan or opening: If it's not used as a fan, it must be situated at a bottom corner of your grow space.
- Used as the exhaust fan: It must be hung (shown above) or mounted at the highest opposite corner.





ENVIRONMENTAL PROTECTION

DISPOSAL

This symbol indicates that this product must not be placed in general household waste. It should be sent to a separate recycling facility for recovery, check local authorities for details.

By responsible recycling and separating this product from other household waste it will help protect the environment and human health, as the volume of waste sent to incinerators or land-fills will be reduced and natural resources conserved.



HEADWIND

HVC

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