For detailed instructions, download the full guide at:



Installation Guides and Manuals - Humidex

Quick Start Installation Guide

English

This Guide Covers the Following Models:

(Basement)

DVS-BS DVS-BH DVS-HW HCS-BS HCS-BS myHome (Crawl Space) DVS-CS DVS-CH DVS-CE HCS-CS HCS-CS myHome

(BoosterFan) DVS-CR HCS-BSF myHome

Manufactured by:

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Register Warranty at: https://clairitech.com/en/support/register

READ AND SAVE THESE INSTRUCTIONS

Introduction

Congratulations on the purchase of your new system which will provide you with year-round moisture control and improved air quality for a healthy fresh and drier indoor environment. Please take note the following safety information:

<u>CAUTION</u> For general ventilating use only. Do not use to exhaust hazardous or explosive material and vapours

WARNING!! To reduce the risk of fire, electric shock, or injury to persons, observe the following:

- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction. (APTHC Only)
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Unplug or disconnect the appliance from the power supply before servicing.
 - a. For permanently connected systems, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag to the service panel.
- Do not use this appliance with any solid-state speed control device.
- Do not operate any fan with a damaged cord or plug. Discard fan or return to an authorized service facility for examination and/or repair.
- Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over.

Combustion Appliance Present in Dwelling

With the presence of appliances evacuating air outside the building envelope (such as range hood, bathroom fan, dryer, etc.) there should be an adequate air supply reentering the building envelope design. If the air pressure inside the building gets lower than the barometric pressure outside air may be drawn in from any point of entry which may include a chimney. The smoke and gases from any combustion appliance (oil furnace, gas/wood stove, fireplace, etc.) may be drawn into the building rather than go out the chimney.

This can be prevented by lowering the maximum ventilation rate of the system or by introducing more make-up air inside the building. A fresh air kit (Air Supply Ventilator) is available from your dealer, to introduce additional air supply if needed.

The system's installation includes allowing for replenishment air coming into the basement and crawl space either passively via a vent upstairs, open stairwell or with a mechanical booster fan, thereby avoiding a depressurization in the lower areas.

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Service and Warranty

Consumer Limited Warranty

ClairiTech Innovations Inc. warrants to the first consumer that this product, when shipped in its original container, will be free from defective workmanship and materials, and agrees that it will, at its discretion, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for the period(s) set forth below. The defective part must be returned to the manufacturer ClairiTech Innovations Inc. All transportation charges are the sole responsibility of the purchaser.

This warranty does not cover any appearance items of the product nor if the items or product have been damaged, defaced, subjected to improper voltage, abnormal service or handling, has been altered or modified in design or construction or was installed and has been rendered inoperable for an extended period of time.

In order to enforce the rights under this limited warranty, the purchaser must fill out and return the warranty card within 90 days.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described herein, or to extend the duration of any warranties beyond the time period described herein on behalf of ClairiTech Innovations Inc.

The warranties described herein shall be the sole and exclusive warranties granted by ClairiTech and shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period described herein, shall constitute complete fulfillment of all liabilities and responsibilities of ClairiTech to the purchaser with respect to the Product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, and strict liability or otherwise. In no event shall ClairiTech be liable, or in any way responsible, for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than an authorized servicer, unless approved by ClairiTech in writing. Nor shall ClairiTech be liable or in any way responsible for any incidental or consequential economic or property damage.

Warranty Period for this product:	Five (5) year on parts and electrical from date of purchase, two (2) years on all electronic components, and (2) years on Controller. (HCS Models)
Additional Items Excluded from Warranty Coverage (If Any):	Appearance items of the product, Exterior vent and any printed material.

To properly validate your warranty, you must complete and return the warranty card within 90 days. If your device is not registered, proof of purchase will be required if it requires service after approval from our Service Department.

You can also register your warranty online <u>http://www.clairitech.com/support/register</u>.

This warranty is non-transferable and applies to residential use only.

Pre-Installation

Tools Required for Installation

- Electric reciprocal or hole saw 6¹/₄"
- Drill with a $\frac{1}{4}$ concrete bit
- Phillips or Robinson Screw Driver
- Measuring Tape
- Hammer
- Pencil

Key Installation Facts

- 1) Unit must be installed at floor level up to 3" off the floor.
- 2) Unit should be installed as far away as possible from the source of replenishment air.
- 3) Outside duct must be no less than 6" and dedicated for the Unit only.
- 4) A sufficient replenish air passage must be provided between the location where the unit is installed and the remaining part of the house or apartment.
- 5) The area within a radius of 4 feet around the unit should be clear to allow the air to be pulled into the vents.
- 6) Unit should not be installed within 8 feet of combustion appliance.

IMPORTANT - What Not to Do

- 1) DO NOT install the unit more than approx. 3 inches off the floor.
- 2) DO NOT make more than one turn with the duct and the ductwork should not be longer than 3 feet in total, unless rigid ducting is used see "Ducting", Page 4.
- 3) DO NOT crush the vinyl Pipe.
- 4) DO NOT install the unit next to a replenishment air supply.
- 5) DO NOT install the unit within 8 feet of a heat source (Radiator, heater, etc...).
- 6) DO NOT install in remote closed off areas or where there are obstructions to the airflow.

Ideal location installation locations

For Basement and Crawlspace Models

Air drawn in by system pulls moisture off the surface floors and walls. To maximize the effectiveness, Install the unit in the dampest, coolest, and lowest part of the basement/crawlspace. If possible, Install the system as far away as possible from the source of replenishment air.

For BoosterFan Model

The booster fan unit should be installed no further than 20 feet from the system exhaust for optimal performance. The air exhausted from the booster should also be directed away from the exhaust unit by using the non-insulated flex provided.

Installation

Replenishment air to Basement from Upstairs

The damp air exhausted by the system must be replaced by the warmer/drier air from the upper levels. If there is no open stairwell, the airflow is restricted from coming down, then install a passive return grille with 100 sq. inches either in the door, in the wall, or in the floor to allow unobstructed air downstairs. Alternatively, you can shave down the door leading to the basement by 2"-3". For the Crawlspace with Booster Fan, a replenishment grille is provided with the booster fan.

When the flow is limited or inaccessible between rooms downstairs (if there are walls or partitions), then install a grille 10" x 14" (or other grill configuration, having total area of not less than 100 sq. in.) in the bottom of the door or wall to avoid having stagnant air in those areas. Otherwise interior doors must remain open. This insures that all the air drawn into the system comes from all areas of the basement.

Generally, for improved performance, it is best to keep all exterior basement/crawlspace doors, windows and vents closed. This will assure that the air is replenished with the air from upstairs and not with the humid air from outside.

Please check to make sure there are no openings/leaks around windows, doors, vents or other places, where outside humid air can enter the basement/crawlspace. Make sure that A/C Ducts are properly sealed and that all A/C Leads to the basement are closed. Sump Pumps holes should be properly covered.



The replenishment air area must have a minimum size of 100 sq.in.

Selecting the Duct Location

Now that you've decided where to install the unit, you must select a location for a 6¹/₄" duct hole in the outside wall. This hole is needed to pass a duct through the outside wall. Make sure that the hole's location is above ground level. Also make sure that the hole doesn't line up with a stud, electrical wires, or pipe.

For an interior wall installation: The distance between the system's back and the exterior wall should not be more than 12 feet. For this application the flex has to be replaced with rigid piping. Optional: The bottom cap may be removed for added airflow.

Ducting

The basement models come in two sections that allow for flexibility in positioning the duct at the most convenient height. For both models you can duct from the back of the unit, or from the top of the unit by removing the top cover. The duct can go through an outside wall, the floor joist or window. The duct should be vented above ground level to the outside or below ground into a window well that is open and not sealed off to the outdoors. The outside louver should be high enough to avoid infiltration of snow, flooding and rodents, etc. All necessary parts and outside louvers are included.

In cases where the basement height clearance is too low, the top portion of the bottom section can be cut down by a maximum of 40 inches with a cutter, leaving the vents at the bottom intact, for a minimum unit height of 62 inches. For extra high ceilings, an extension piece of 24 inches is available which can be added at the top of the unit.

When ducting the unit outside, no more than 3 feet of Vinyl Flex should be used. When circumstances require a longer span, rigid ducting can be used from the inside of the unit to the wall. The rigid duct will improve the airflow to compensate for the additional distance the air has to flow to reach the outside.

When replacing a pane for a window installation, use pressurized wood or similar water/rot proof material.

Make sure that no pipes, studs or wires are in the way.

The duct has to be dedicated and not combined with any other existing ductwork in operation. Seal well around the outside opening.

Preparing the System for Installation

Now that an installation location has been chosen a hole must be made for the vent. Start by measuring the required Unit height and mark the location of the hole. Remember that the units cannot be higher than 3" off the ground.				
From the inside, drill a pilot hole of approximately ¹ /4" wide at the center of the proposed 6 ¹ /4" hole.	1/4			
Outside the building, find the pilot hole.				
Now using a hole-saw, with the pilot hole as a guide, drill a $6^{1/4}$ " hole.				
Brick or Concrete Wall: There are two ways of going through brick or concrete. The first method consists of using a hammer drill. Make holes (approximately $5/8$ ") with the hammer drill 1" apart through the brick in a circular shape outlining the 6 ¹ / ₄ " hole. Finish cutting the outer edge of the hole using a chisel. If a hammer drill is not available, a chisel can be used. As brick is brittle chiseling from the center of the pilot hole will chip the brick easily.				
Join the two halves (Bottom section must fit inside Top section) of the basement model casing together, overlapping the two pieces such as the desired height is obtained. Remove screws if necessary. NOTE: If the unit has to be shorter than 85" cut the top of the bottom part.	Bottom: Top 27			
Secure the two halves together using 1/2" metal fastening screws.				
A cover plate can be used to close the gap between both halves if necessary. Using aluminum tape or duct tape seal the seam in the back where the two halves join together.				
Note : When installing the optional 24" extension, remove top cap and straighten the 90° elbow. Use the 6" galvanized pipe to extend the length needed. Cut the pipe to the proper length before snapping it together. Attach the top cap to the extension cover with the 4 screws provided. Add exterior cover to the base and fasten securely with the provided screws.				
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Fasten the unit to the wall

With the help of a tie wrap attach the flex pipe to the collar on the back of the unit before attaching the unit to the wall. Insert the other end of the flex pipe inside the hole in the wall.		
(a few Small $9/16$ " Screw can be used to affix the flex to the mount)		
Leaving a 1-inch gap between the top of the unit and the ceiling, drill ¹ /4" pilot holes through the lips of the unit and the wall.		
Insert the four plastics anchors in the wall with the help of a hammer.		
Secure the Unit to the wall using the four 1 1/4 inch screws provided.		

Attaching the Flex and Outside Vent

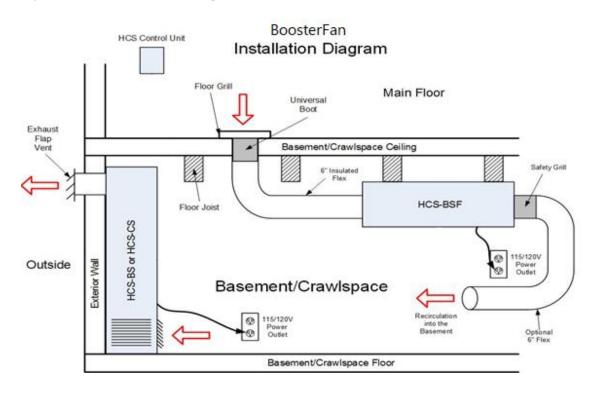
the 6" pipe and attach it with a 24" cable tie. Insert four 2-inch screws to secure the vent to the outside wall. Make sure the vent is not twisted by inserting the screws too tight and that the flaps are working properly.	Roll the flat metal plate into a cylinder and interlock both ends. Attach the vent to the newly formed 6" pipe with the ½ inch screws provided. From the outside, pull the flex pipe through the 6 ¼" hole onto	
Make sure the vent is not twisted by inserting the screws too tight		
	Make sure the vent is not twisted by inserting the screws too tight and that the flaps are working properly.	

NOTE: If high winds are often present in the location of the vent, they may cause a wind noise inside the house. If this is the case, an **anti-gust hood** (AGH-990) is available from your dealer.

Installation BoosterFan

- 1. To minimize noise propagation, install at least 6 ft. of 6 in. insulated flex between the universal duct boot (connected to the floor register) and the Booster Fan.
- 2. To further decrease noise propagation, 6 ft. of insulated flex can be used on the exhaust side of the unit. (Not Included)
- 3. Flex to pipe the Booster fan away from the exhaust system. Note the airflow arrow directions
- 4. If the building codes in your area require a backdraft damper to be installed, it must be placed on the exhaust side of the booster fan to limit the impact on the total airflow through the unit.
- 5. This unit is typically sold with an exhaust system. If this is the case, then the Booster Fan system is made to replace your Replenishment vent required with other exhaust systems.

Typical Installation Diagram



Installing and Wiring the Booster Fan

To allow the booster fan to draw air from the upper levels, a universal boot must be installed. First locate a safe place to cut out a hole to fit the universal boot. Once a safe and adequate area had been found, proceed by cutting the hole.

With the hole cut, install the universal boot which will allow the unit to pull the air down.

Once the boot has been installed, the Booster Fan can be mounted on a floor joist a minimum of 6 ft. away from the universal boot to reduce noise. Connect the universal boot to the booster fan with the 6 in. insulated flex provided.

If the building codes in your area require a backdraft damper to be installed, it must be placed on the exhaust side of the Booster Fan to limit the impact on the total airflow through the unit.

Note: A T-junction duct and flex can be added to the exhaust side of the Booster Fan to direct air into all areas of the crawl space

The Following Wiring is for HCS Booster Fan Only!!!

Now that the booster fan has been installed, it must be connected to the rest of the system. Run the white cable from the booster to the main exhaust.

Note: These steps must be completed before plugging in the booster fan.

After the white cable has been run it must be connected to the system. Make sure the main exhaust unit is unplugged before connecting the booster fan.

Wiring Guide:

Yellow Wire – B Green Wire – A Black Wire – GND Red Wire – VCC

Note: The main exhaust unit must remain unplugged until the booster fan installation is complete.

On the booster fan's end of the cable attach the black connector with the wiring matching the following wiring guide.	
Now that the connector has been wired, insert it into the booster fan unit.	

Now that the booster fan has been installed and connected to the main exhaust unit, it can be plugged into any 115V outlet. Afterwards, the main exhaust unit can be plugged in.

Note: A grounded extension cord with a maximum length of 10 feet may be used if necessary.

Return and Exchange Policy

Clairitech Innovations Inc. values its relationship with you and offers you the option to return most products you purchase directly from Clairitech Innovations Inc., as set forth in detail below.

Policy

Return period of 30 days for unused products and accessories:

Unless you have a separate agreement with Clairitech Innovations Inc., or subject to the provisions below, all equipment and accessories that have not been used, in new condition and in their original packaging may be returned to Clairitech Innovations Inc. within 30 days of the date of purchase for a refund of their purchase price, an equivalent credit note or the exchange of the product, less shipping and handling charges, resupply fee and applicable taxes, if already paid.

Return period of 15 days for defective or damaged products and accessories:

Requests for refund and/or exchange for defective or damaged merchandise can be made within 15 days of receipt of the merchandise. After 15 days, the manufacturer's warranty applies.

Note: Any product returned to Clairitech Innovations Inc. without the prior permission of Clairitech Innovations Inc. will be considered an unauthorized return; the customer will not receive any refunds or credit notes for the product and Clairitech Innovations Inc. will not return the product to the customer.

Damaged products and accessories:

If you have received damaged items, please contact us by phone or email before destroying or discarding the product and/or packaging. Failure to comply could see your request denied.

Fees

Unless the product is defective or the return is a direct result of a Clairitech Innovations Inc., the refund or credit does not include any shipping and handling charges shown on your packing slip or invoice; you are responsible for those and for any damages incurred during the return shipment.

Procedure

1. Before returning a product, you must first obtain a Return Authorization Number from Clairitech Innovations Inc. Customer Service before the end of the applicable return period. Proof of purchase will also be required.

To contact Clairitech Innovations Inc. Customer Service, please call 1-888-533-1348 or Email Us

Any product returned to Clairitech Innovations Inc. without the prior approval of Clairitech Innovations Inc. will be considered an unauthorized return; the customer will not receive any credit or refund for the product and Clairitech Innovations Inc. will not return the product to the customer.

2. Pack the product in its original package

3. Insert all the documents received concerning the order to be returned. Remember to keep a copy of all the documents provided.

4. To obtain a full refund, the products must be returned in perfect condition, in their original packaging and with all documents, parts and accessories.

5. The return costs must be prepaid; we will not accept deliveries paid at the reception.

6. For your protection, we advise you to provide the shipping service

7. Five days after the date of issue of the return authorization number Clairitech Innovations Inc. Customer Service, you must send the product to the following address:

ClairiTech Innovations Inc.

1095 ch. Ohio Service Rd

Boudreau Ouest, New Brunswick

E4P 6N4 - Canada

8. Upon receipt of your authorized and compliant return, Clairitech Innovations Inc will issue a credit or refund equal to the purchase price paid, less shipping and handling charges, restocking charges and applicable taxes subject to this policy.

9. For assistance please call <u>1-888-533-1348</u> or <u>Email Us</u>

10. For any questions regarding warranty terms please call 1-888-533-1348 or Email Us

NO RETURNS ARE POSSIBLE AFTER 30 DAYS FOLLOWING THE DATE OF THE BILLING DATE.

CLAIRITECH INNOVATIONS SHALL NOT BE LIABLE FOR, OR ANY CHARGE OF, A CONSUMER ORDER ERROR.