

**Failure To Read
Instructions Will
Void Warranty**



HPS 500 VCU INSTALLED HEPA SYSTEM

Pure Air Systems is delighted to introduce a portable HEPA air filtration system that stands out for its high performance and commercial-grade quality. This system, designed to meet the same stringent performance standards as our renowned line of high-volume HEPA filtration units, offers you the same level of air purity in a compact, portable form.

HIGH PERFORMANCE IN A SMALL PACKAGE

The HPS 500 unit is 13" square and 22" long and weighs only 34 lbs. This all-steel unit comes complete with a Pre-filter, Carbon filter, and a true, certified, hospital-grade 99.995% at MPPS H14 HEPA filter. Each unit has a VCU-wired remote air volume controller that can be set from 36 to 100%, a lighted rocker on/off switch, and a 10' hospital-grade power cord.

HIGH-VOLUME PORTABLE HEPA WITH AIRFLOW CONTROL

The Model HPS 500 is a versatile solution that moves up to 500 CFM. With the variable speed VCU controller, you can set the airflow from 0-100% in 1% increments, giving you full control over the filtration process. The HPS 500 is the most powerful portable HEPA for its size on the market today, making it a valuable addition to any home, office, or small application.



HPS 500 with extended inlet collar for attachment to HVAC or duct system.

USE AS A CENTRAL FILTRATION SYSTEM

The unique design of the HPS series allows for use as either a true stand-alone portable unit or as a central HEPA filtration unit attached to the return air side of the heating/cooling system and installed in a by-pass configuration. Please get in touch with your local Pure Air Systems dealer or Pure Air Systems directly for more information.

www.pureairsystems.com

800-869-8025

MATERIALS NEEDED FOR COMMON HVAC INSTALLATIONS

- 1) A Section of 8" diameter sheet metal (recommended) or flex duct. For most installations, you will need 4' to 6'.
- 2) A Section of 6" diameter sheet metal (recommended) or flex duct. For most installations, you will need 6" to 24".
- 3) An 8" collar for connection to the return air duct.
- 4) A 6" collar for connection to the fan return side of the HVAC unit.
- 5) A 4" by 16" piece of sheet metal for an Air Scoop. Or a prefabricated Reflector 8" inlet side and Deflector 6" discharge side. It is recommended that this be installed with every unit.
- 6) Sheet metal screws, duct tape, metal tape., and duct sealant.
- 7) Thermostat wire (18 or 20 gauge / six conductor).

ASSEMBLY INSTRUCTIONS

- 1) Unpack your unit.
- 2) Remove the 8” round collared door from the inlet side of the unit.
- 3) **VERY IMPORTANT NOTE! MAKE SURE THE BLOWER WHEEL SPINS FREELY.**
- 4) Remove the Pre-filter and Carbon filter from the filter section.
- 5) Remove the clear bag from the Carbon filter and reinsert it in the void within the HEPA filter.
- 6) Reinsert the Pre-filter and reattach the 8” round collared door.
- 7) Follow the installation instructions for ducting if attaching to an HVAC ducted system.

INSTALLATION OF THE DUCTING

Select the proper location for the attachment of the inlet and discharge ducts. Keep a minimum of 6 feet between the inlet and discharge openings. This will prevent the Pure Air Systems' filtration unit from recycling the same air. Cut the openings in the existing return air duct. We recommend an Air Scoop or Reflector be placed inside the return air duct to direct air into the inlet duct of your filtration system. Ensure the Air Scoop or Reflector is angled to direct the air from the return air duct into the inlet duct of your filtration system.

Use sheet metal screws, duct tape, aluminum tape, or duct sealant to attach the duct sections to the collars on the inlet of the unit and the air return. Ensure there are **"NO" air leaks**. Repeat this same procedure for the discharge duct. Ensure all connections are airtight and taped or sealed.

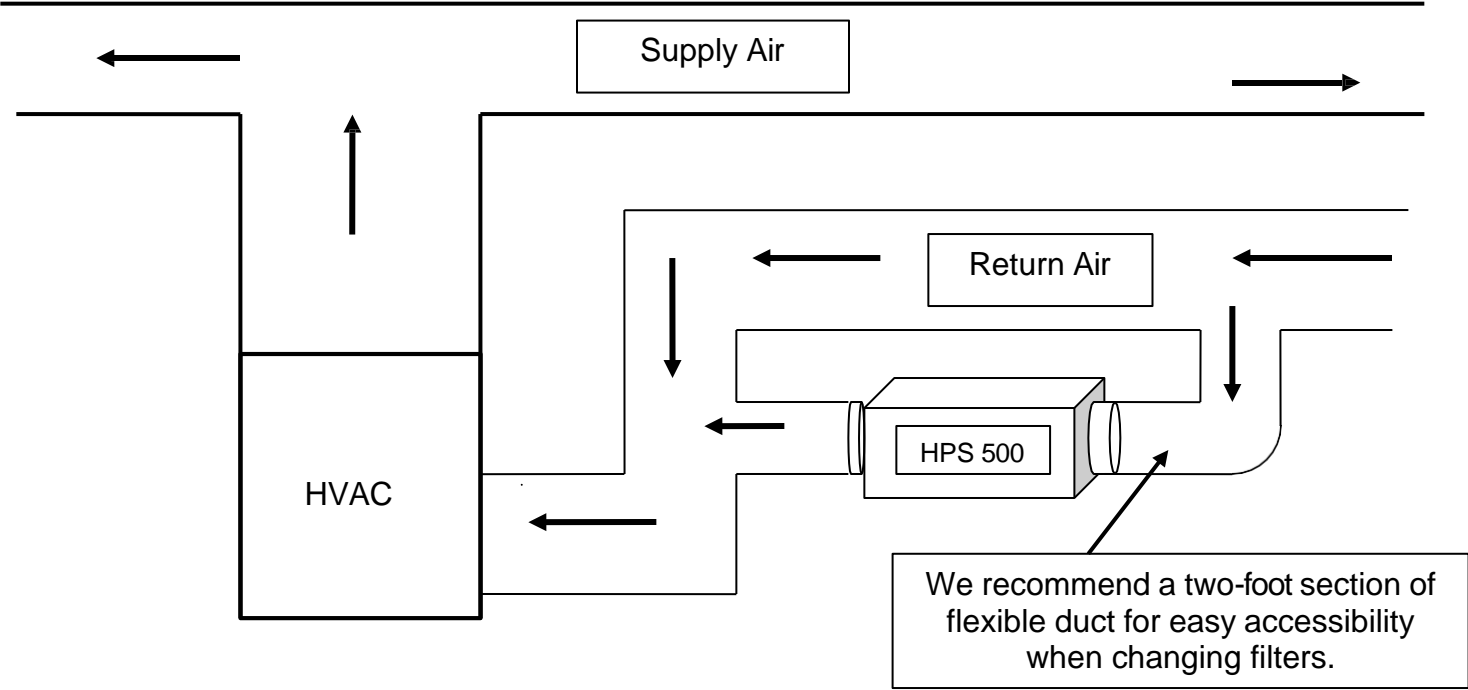
Please look at the attached "typical installation" drawings. The inlet duct should be connected to the central return air duct leading to the heating/cooling system, and the discharge duct should be connected to the point where the return air duct enters the heating/cooling fan area.

ALWAYS INSTALL THIS SYSTEM IN A BY-PASS CONFIGURATION.

ODOR ADSORPTION MODELS

All Odor Adsorption (OA) models are identical to the standard models except for the absence of a HEPA filter. A Carbon cartridge (OA Filter) replaces the HEPA filter.

Installation Drawings for HPS in By-Pass Configuration



Typical Installation HPS 500
Partial By-Pass Configuration

ELECTRICAL WIRING & POWER CONNECTION

NOTE: ALWAYS FOLLOW ELECTRICAL CODES FOR YOUR AREA.

For our air filtration systems, we strongly recommend a dedicated 15-Amp service.

VCU CONTROLLER

The VCU digital speed controller will allow you to adjust the speed from 36 -100% in 1% increments. The “RED” LED display will show the speed in percent of air volume capacity. If no other changes are made to the VCU controller after 20 seconds, the controller will blink with the speed shown (with an “F” in front of a number from 0-100) and then switch to 0. The RPM feature is not used for this motor setup. Always turn the power off at the lighted rocker on/off switch when the unit is not in use. Turning the VCU controller to the “0” or “OFF” position will stop the motor, but it “WILL NOT” turn off the power to the motor. For more information on the VCU controller.

[EVO/ECM-VCU-Pro](#)



WIRING TO TERMINAL STRIP IN FILTRATION SYSTEM

The VCU controller can be located anywhere within 150 feet of the unit. Run the low-voltage, six-conductor, 18—or 20-gauge thermostat wire from the unit to where you will mount the VCU controller box. Then, match up the color wires to the terminal strip on the exterior of the filtration unit with the terminal strip in the VCU controller box.

TESTING THE UNIT

To ensure that the VCU controller is wired correctly, check that the controller is illuminated. Turn on the lighted rocker switch on the unit. The VCU controller should now be capable of adjusting the speed of the motor in the unit. If it does not, please check that the wiring between the terminal strips is correct.

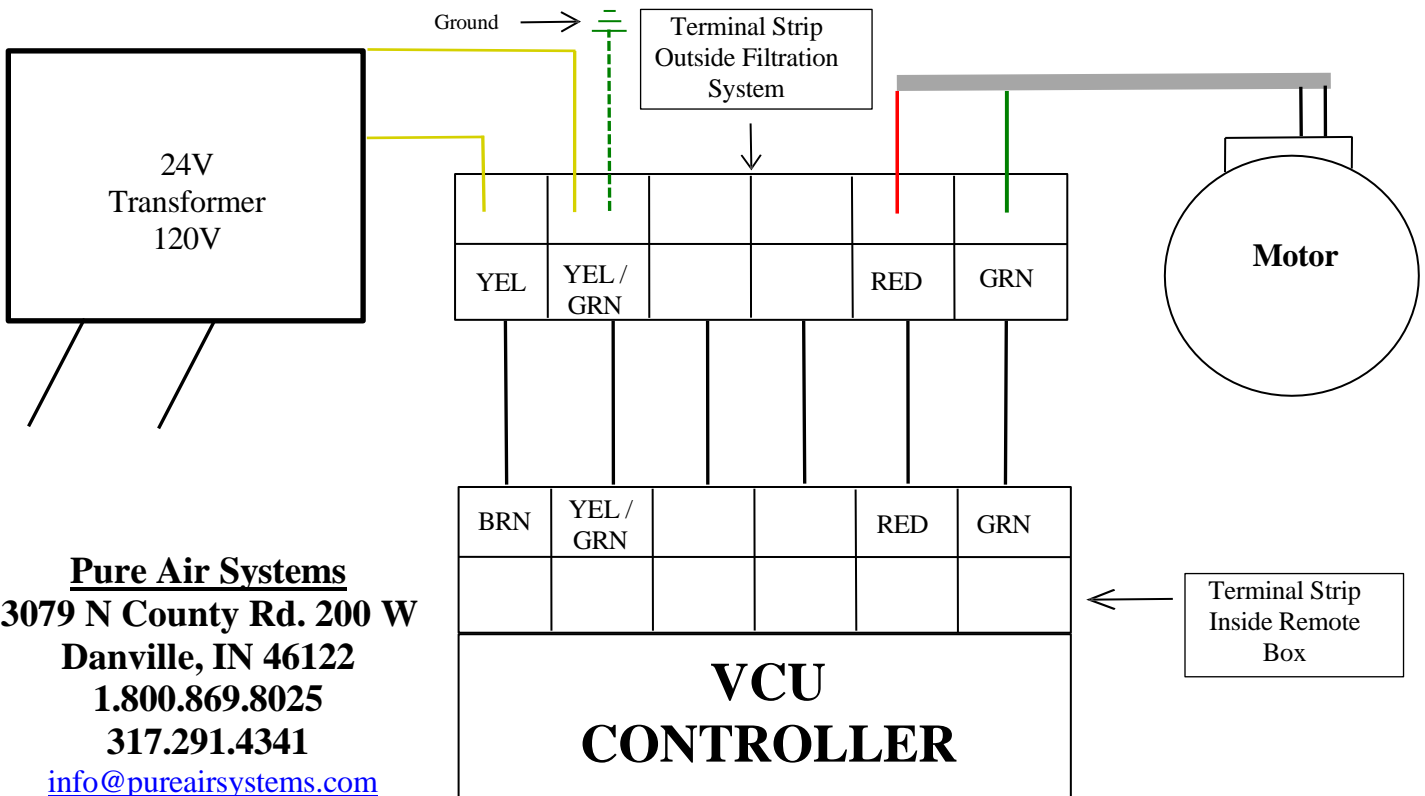


WIRING SCHEMATIC FOR PLUS UNITS
VCU CONTROLLER

For The Model HPS 500 Units

*****WIRING FOR 120V*****

ALWAYS TURN OFF THE POWER TO THE SYSTEM BEFORE CHANGING FILTERS OR WORKING ON THE SYSTEM.



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Instruction For Replacing Filters

For The Installed HPS 500

- 1) Turn off the lighted rocker switch and unplug the power cord.
- 2) Remove the 8 phillips head screws from all four edges of the 8” round collared door.
- 3) Remove the Pre-filter and Carbon filter from the filter section (for replacing the Pre-filter or Carbon filter only skip to step 8).
- 4) Locate the 4 phillips head screws (Two on the left and two on the right side) and loosen them until you can carefully remove the two HEPA filter compression brackets, one on the top and one on the bottom.
- 5) Remove the HEPA filter from the unit.
- 6) Insert the new HEPA filter into the unit, with the gasket facing the motor section and the void of the HEPA filter towards the rear so that the new Carbon filter can fit.
- 7) Reinstall the two HEPA filter compression brackets and tighten the 4 phillips head screws.
- 8) Remove the clear wrap from the Carbon filter and insert it into the void of the HEPA filter.
- 9) Insert a new Pre-filter with the blue side facing the Carbon filter and the white side facing the 8” round collared door.
- 10) Reattach the 8” round collared door to the system with the 8 phillips head screws.
- 11) Plug in the power cord and turn on the lighted rocker switch.

HPS 500 Series Data Sheet

Dimensions -S- Housing	21-1/4" x 13-1/4" x 13-1/4"
Duct Connections	8" Dia. Inlet / 6" Dia. Outlet
Portable	12" x 12" Inlet / 6" Dia. Outlet with Guard
Completed Weight	36 Lbs.
Motor/Blower Type	Forward Curved Centrifugal
Max Amps @ 120V	5
Hz	60
Phase	Single
Circuit	15 Amp
CFM After Filters	500
Pre-filter	Dual Layer
Carbon Filter Pad	Up To 1 Lbs. Activated
HEPA	Certified H14 99.995% @ MPPS
On/Off	Sealed Lighted Rocker Switch

Optional OA System

The "S" OA systems have 1 activated Carbon "OA Cartridge" in place of the HEPA filter. (up to 5 Lbs.)

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General Guidelines for Replacing Filters

Series	350, 500	350, 500	350, 500
	Pre-filter	Carbon Filter	HEPA Filter
Residential	3 Months	4 Months	2.5 Years
Commercial	Monthly	2 Months	Yearly

****Chemically sensitive customers should use the Commercial guidelines****

Pure Air Systems Limited Warranty

Your Pure Air Systems product has been manufactured, tested, and inspected according to carefully specified engineering requirements. Under the terms and conditions set forth below, it is warranted to be free from defects and workmanship.

Duration of Warranty and To Whom Extended

This Limited Warranty covers the motor for one year and the other electrical components and blower for three years. It does not cover the system filters, as they are a standard maintenance item.

Exceptions and Exclusions from Warranty

Those products that incorporate an electrical motor must be used on electrical current as indicated on the rating plate. This Limited Warranty does not apply to products that have been subject to use on electrical current other than indicated on the rating sticker of the product.

This Limited Warranty does not apply to products subject to improper, unreasonable, or negligent use, abuse, or the use of parts or accessories not approved by Pure Air Systems.

If your equipment is repaired by anyone other than those designated as authorized to perform such work, Pure Air Systems, at its sole option, may determine that this Limited Warranty will not apply.

Procedure to be taken to obtain Performance of Warranty

To secure repair of the product or any warranted parts under the Limited Warranty, the following procedures shall be taken:

- Contact Pure Air Systems or the dealer that installed your system.
- It is essential to provide Pure Air Systems with the system's model and serial numbers to ensure the product falls within the warranty time frame.
- The inoperative component (s) or warranted parts and satisfactory evidence of the purchase date must be delivered to Pure Air Systems, with shipping and delivery charges prepaid.
- Upon compliance with the above procedure, all warranted defective parts will be repaired or replaced. Pure Air Systems will pay for return shipping and replacement parts.

NO REFUND OF THE PURCHASE PRICE

Pure Air Systems will not refund the customer's purchase price as part of its Warranty Policy. This limited warranty gives you specific legal rights, which may vary from state to state.

NO CLAIMS FOR CONSEQUENTIAL OR OTHER DAMAGES WILL BE ALLOWED, AND NO OTHER EXPRESS WARRANTIES EXCEPT THOSE EXPRESSLY STIPULATED HEREIN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. THEREFORE, THE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

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