Installation, Operation & Maintenance Manual

GPS-FC24™-AC

NOTICE: This product is to be used only as directed. Read entire manual before use. Do not use unless properly installed.

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Thank you for purchasing a GPS-FC24-AC air ionization system from GPS Air.

Hardware Provided by GPS

Before you start, confirm the contents of your shipment. Each GPS-FC24-AC will consist of the following

1. GPS-FC24-AC with in line power switch.
2. Rare earth magnets (2).
3. Machine screws and nuts (2 each) for mounting magnets.

Hardware by Others

1. Electrical wiring, junction box, or receptacle to provide power to the GPS-FC24-AC.
2. Self-tapping screws (optional) if not using magnet mount.
3. Zip ties.

As part of the installation process, a Startup Document should be completed. For the latest version of the document, visit our website or utilize the QR code.

GPS-FC24-AC startup

Installation Location

⚠️ **WARNING:** MAKE SURE POWER IS DISCONNECTED TO THE HVAC EQUIPMENT BEFORE INSTALLATION

⚠️ **AVERTISSEMENT:** ASSUREZ-VOUS QUE L'ALIMENTATION EST DÉCONNECTÉE DE L'ÉQUIPEMENT CVC AVANT L'INSTALLATION

GPS recommends mounting the GPS-FC24-AC after the filtration system and after the coil(s) section(s) in the HVAC system. In ductless mini-split ceiling cassette applications, it is suggested to mount the unit to the fan inlet. The emitter brushes should be no closer than two inches from any wiring or metal objects.

Care should be taken to avoid mounting in locations that are heavily moisture laden and/or dead air spots where there is no flow of the air stream over the ionizer.

NOTE: *Use Temperature - Maximum Ambient temperature in which unit shall be used: 140 degree F/ 60°C*

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Mechanical Installation

1. Ensure power to the HVAC equipment and the circuit the GPS-FC24-AC will be connected to has been turned off.
2. Find an appropriate location. Verify the carbon fiber emitters have a 2" clearance from wires or other metal objects.
3. Mount the magnets to the GPS-FC24-AC using included hardware. See FIGURE 1.
4. When mounting in a ceiling cassette use zip ties to secure GPS-FC24-AC to fan inlet screen or grid. NOTE: if mounting in a ceiling cassette that has a self cleaning filter, the unit must be mounted behind the screen and self cleaning system, but before the fan inlet.
5. Install the GPS-FC24-AC so that airflow is passing by both emitters at the same time (like a football through goalposts). Make sure the unit is positioned so it obstructs as little airflow as possible.

Figure 1

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Wiring

1. Confirm the power is off prior to wiring. Follow all local and national electrical and building codes.
2. GPS recommends the GPS-FC24 be powered constantly and NOT switched with the system or blower.
3. The GPS-FC24-AC will self-adjust to voltages from 24VAC to 240VAC. Output and performance will not be effected by the choice of input voltage. Connect the power wires as follows:

   Black 24 - 240VAC
   White Neutral or L2
   Green Ground
   Brown Dry Contacts/BAS Alarm

4. Wire in BAS terminals (optional) The GPS-FC24-AC is equipped with a set of dry contacts that are normally open and close when the GPS-FC24-AC is on and has no faults. The contacts are rated up to 250VAC and 1A.

Operation

⚠️ **CAUTION!** NEVER TOUCH BRUSHES WHILE OPERATING, SHOCK MAY OCCUR

⚠️ **MISE EN GARDE!** NE JAMAIS TOUCHER AUX BROSSES PENDANT LE FONCTIONNEMENT, UN CHOC PEUT SE PRODUIRE

Once powered and the inline switch is in the on position, the unit initiates an internal check of all systems. If the auto cleaning wiper blade is not in the "home" position, it will move to the home position in series with the airflow.

Cleaning Cycle

The GPS-FC24-AC comes with a preset cleaning cycle designed to clean the brushes once per day. The cleaning process may be activated by pushing the clean button located on the side of the unit. To change the cycle frequency, press the cleaning cycle button once. While cleaning is in progress press and hold the cleaning cycle button for 5 seconds. The LED will start flashing. Pressing the cleaning cycle button again will begin to cycle through the settings for number of days between cleaning cycles. The speed of flashes increases with number of days (slowest = 1 day, next = 3days, next = 5 days, fastest = 10 days).

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Troubleshooting

1. Unit will not power up, LED not illuminated:
   a. Confirm proper voltage is applied to the correct terminal(s).
   a. Try an alternate power source. If using 24v try using 120v or vice versa.
2. Wiper sticks or stops on emitters:
   a. Adjust height of emitters: loosen screw at base of emitter gently push or pull emitter to a height where wiper just contacts emitter. Hold the emitter in place and tighten screw. Verify correct height after tightening screw.
3. Wiper does not clean/ contact emitters:
   a. Adjust height of emitters: loosen screw at base of emitter gently push or pull emitter to a height where wiper just contacts emitter. Hold the emitter in place and tighten screw. Verify correct height after tightening screw.
   b. If the emitter is worn to the point where there is no adjustment, replacement emitters can be ordered from GPS. Remove the screw and the emitter base, unplug the emitter from the connector. Plug the new emitter in, reinstall base, adjust emitter height and tighten screw.
4. If unit does not operate properly after verifying the above instructions please contact GPS for additional assistance.

Product Registration

By registering your order, the standard limited warranty on eligible products from your purchase is automatically extended to 3 years, at no additional cost.
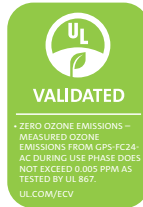
Register your products at www.gpsair.com/product-registration or scan the QR code.

REGISTER

The information provided in this manual is up to date at the time of printing.
Any revisions to this document will supersede the content included. For the latest applicable version of this manual, visit our website or utilize the QR code.

GPS-FC24-AC IOM

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VALIDATED

• ZERO OZONE EMISSIONS –
MEASURED OZONE
EMISSIONS FROM GPS-FC24-
AC DURING USE PHASE DOES
NOT EXCEED 0.005 PPM AS
TESTED BY UL 867.
UL.COM/ECV

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please visit www.gpspatents.com

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