Installation, Operation & Maintenance Manual
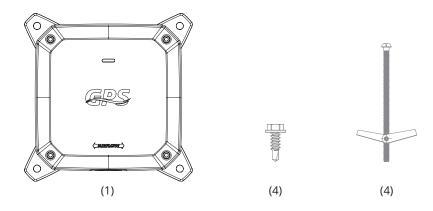
PF-e™

GPS®

Thank you for purchasing a PF-e™ air ionization system from GPS Air.

What's Included

Before you start, confirm the contents of your shipment. Each PF-e will consist of the following:

1. PF-e Filter Enhancement System (1)
2. Self drilling sheet metal screws (4)
3. Expanding anchors with screws (4)

(1)   (4)   (4)

Supplies Not Included

1. 4-inch hole saw or snips
2. Sealant to make duct air/water tight after installation, if required
3. Electrical junction box to bring power into the vicinity of the PF-e
4. Appropriate conduit and wiring as detailed below in step 3

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.

PF-e startup

Location

Install the PF-e a minimum of 1' from the filter rack. For best results install the PF-e 3' or further from the filter rack. See the application guidance document for more information.

NOTE: Use temperature - Maximum temperature in which the unit shall be installed: 140°F/60°C.
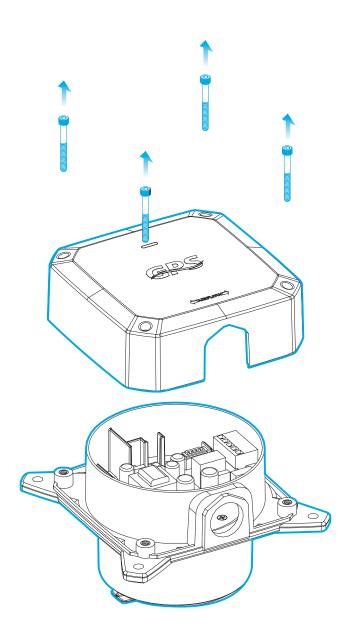
Step 1.

- Ensure power to HVAC equipment as well as the PF-e has been disconnected. Follow all local and national electrical and building codes.

  GPS recommends the PF-e is powered constantly and NOT switched with the system or blower.

  The PF-e will self adjust to voltages from 24V to 240VAC. Output and performance will not be affected by choice of input voltage.

Step 2. Remove Cover

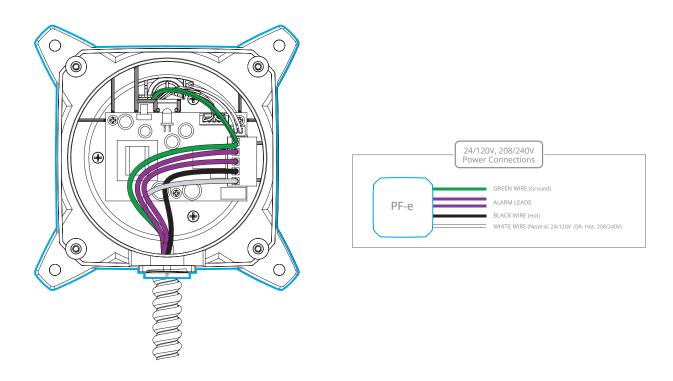- Open the device after removing the four fasteners as shown.

Step 3. Wiring

NOTE: Metallic conduit shall be properly bonded in accordance with the national electric code article 250.

· Connect the appropriate conduit and fitting as necessary for the application.

· Route the wires as shown and make connections according to the label located on the product.

· Tighten the strain relief clamp sufficiently to hold the wires being careful to not damage them with excessive torque.

24/120V, 208/240V Power Connections

PF-e

GREEN WIRE (Ground)
ALARM LEADS
BLACK WIRE (Hot)
WHITE WIRE (Neutral: 24/120V -OR- Hot: 208/240V)

For your convenience and flexibility of installation the Pf-e is supplied without an electrical conduit and wire. It has a hole sized for ½" trade size conduit fittings (1/2" NPT) and an internal strain relief clamp.

For plenum applications, the PF-e is approved for use with UL recognized flexible metallic conduit from UL category DXUZ,7.

For other applications, non-metallic flexible conduit is recommended. This conduit should be a UL recognized component from category DWTT,7.

Conduits can be pre-wired with conductors or may be drawn during installation.

For full product implementation including BAS alarm contacts, five 18-gauge cores (UL recognized components) should be populated within the conduit.
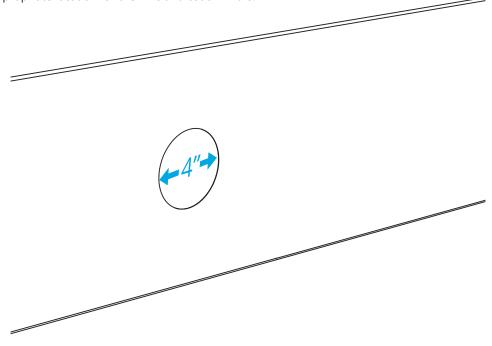   The colors are recommended as follows:
      Black x 1 (Hot/Live AC1)
      White x 1 (Neutral/Live AC2)
      Green x 1 (Ground) G
      Purple x 2 (BAS contacts if utilized)

Wire in BAS terminals (optional). The PF-e is equipped with dry contacts that are normally open and closed when the PF-e is on and has no faults. The contacts are rated up to 250VAC and 1A.
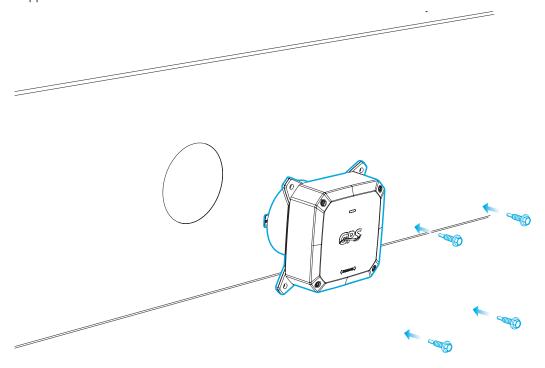
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Step 4. Cut Hole

· Find an appropriate location for the PF-e and cut a 4" hole.
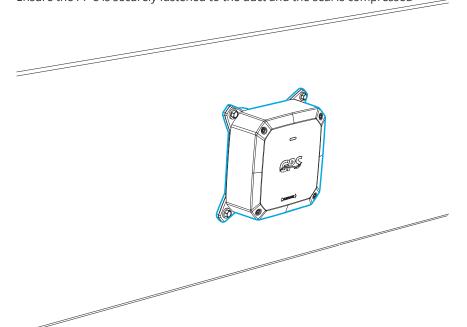
4"

Step 5. Install PF-e device

• Insert the PF-e product in the 4" hole

• Ensure the direction of airflow matches the airflow indicator on the PF-e.

• Using the supplied fasteners attach the PF-e to the duct.

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Step 6. Attach the PF-e product

· Ensure the PF-e is securely fastened to the duct and the seal is compressed

Operation

⚠️ **CAUTION!** Never touch brushes while operating - shock may occur.

Cleaning Cycle

The PF-e comes with a factory preset cleaning cycle designed to clean the emitters every 4 hours.

⚠️ **CAUTION!** *High Voltage.*

⚠️ **CAUTION!** *This product is suitable for mounting to duct of metallic construction only. Installation must be such that the structural integrity of the ducting is not compromised.*

⚠️ **CAUTION!** *Risk Of Electric Shock. Can Cause Injury Or Death: Disconnect All Remote Electric Power Supplies Before Servicing. To Avoid Risk of Fire and Shock, Use Only Flexible conduit.*

NOTE: The health aspects associated with the use of this product and its ability to aid in disinfection of environmental air have not been investigated by UL LLC.

Troubleshooting

1. Unit will not power up, no indicator light
   a. Confirm proper voltage is applied to the correct terminal(s).
   b. Remove power, wait 1 minute, and reapply power.
   c. If no light is still displayed, try an alternate power source. If using 24v try using 120v or vice versa.

2. If the unit does not operate properly after verifying the above instructions 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 below.

PF-e IOM

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VERIFIED
ZERO OZONE

MEETS UL 2998
DOES NOT EMIT MORE THAN
0.005 PPM AS TESTED
PER UL 867

CERTIFIED

To access a list of applicable patents, please visit www.gpspatents.com

PATENTS

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