

Installation, Operation & Maintenance Manual

DM-2™



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



Thank you for purchasing a DM-2™ air ionization system from GPS Air.

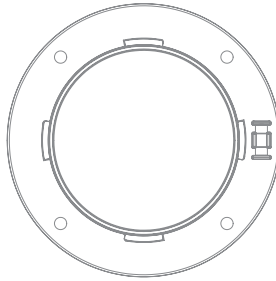
What's Included

Before you start, confirm the contents of your shipment. Each DM-2 will consist of the following:

1. DM-2 Air Ionization System (1)
2. Mounting ring (1)
3. Self drilling sheet metal screws (4)
4. Expanding anchors with screws (4)



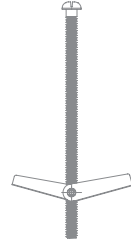
(1)



(1)



(4)

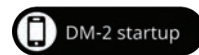


(4)

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 DM-2
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.



Location

For best results install the DM-2 as close to the conditioned space as possible. This will minimize losses throughout ductwork.

NOTE: Use temperature - Maximum ambient temperature in which unit shall be used: 140°F/60°C.

For VAV and other mixing box installations, install on discharge/supply side of box.



Installation

For a video demonstration on how to install the DM-2 on flat wall duct, or in conjunction with the DM-S on round duct, visit www.gpsair.com/downloads or scan the appropriate QR code.



WARNING: Make sure power is disconnected to the HVAC equipment before installation.

Step 1.

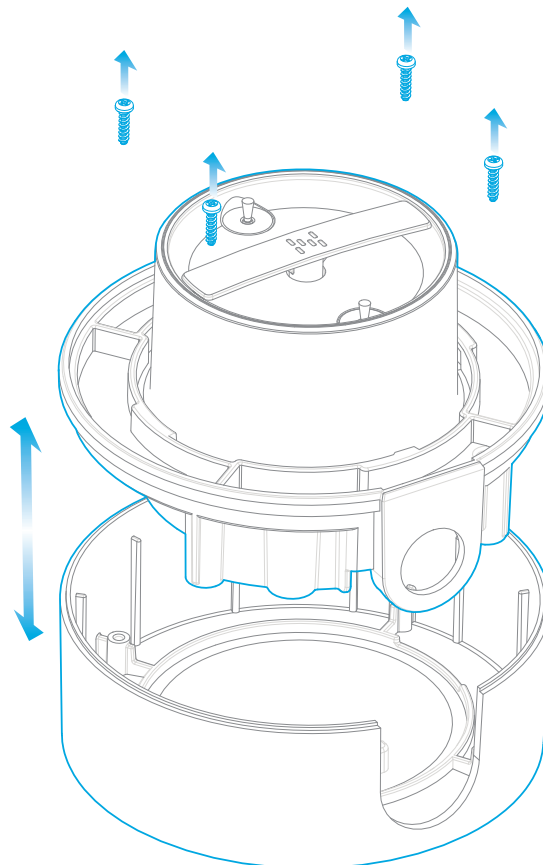
- Ensure power to HVAC equipment as well as the DM-2 has been disconnected. Follow all local and national electrical and building codes.

GPS recommends the DM-2 is powered constantly and NOT switched with the system or blower.

The DM-2 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

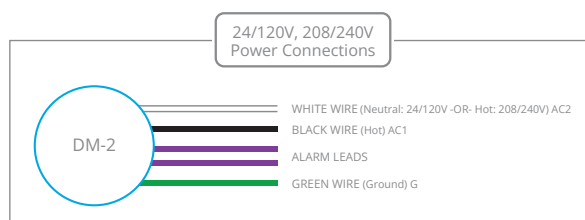
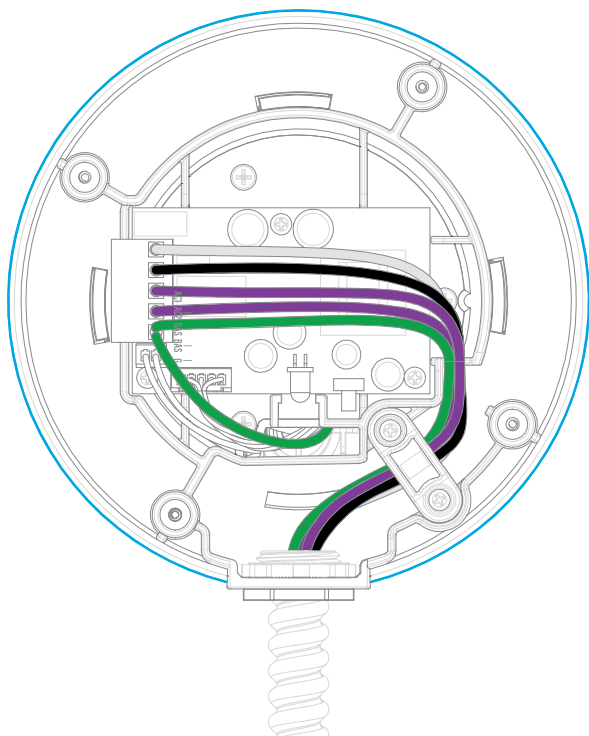
- Open the device after removing the four fasteners as shown.



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.



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

For plenum applications, the DM-2 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)

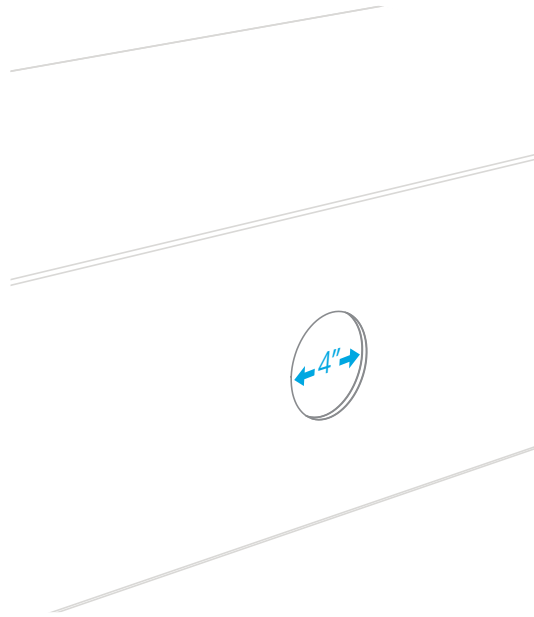
Green x 1 (Ground) G

Purple x 2 (BAS contacts if utilized)



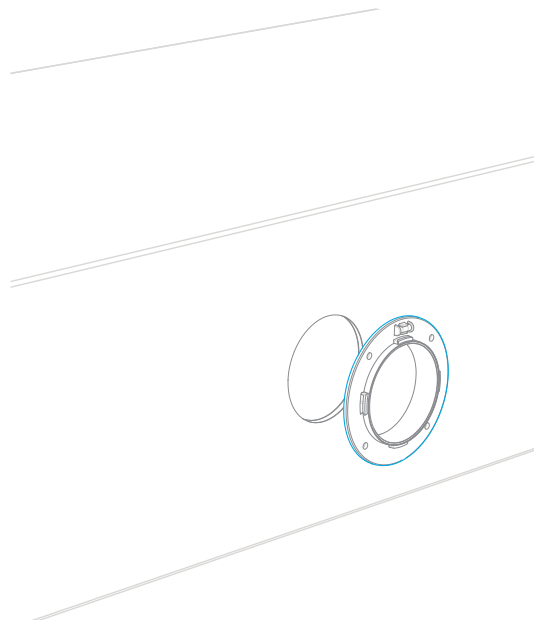
Step 4. Cut Hole

- Find an appropriate location for the DM-2 and cut a 4" hole.



Step 5. Mounting Ring

- Insert the mounting ring in the 4" hole.
- Correctly orient the mounting ring using the integrated bubble level for horizontal and vertical duct runs.

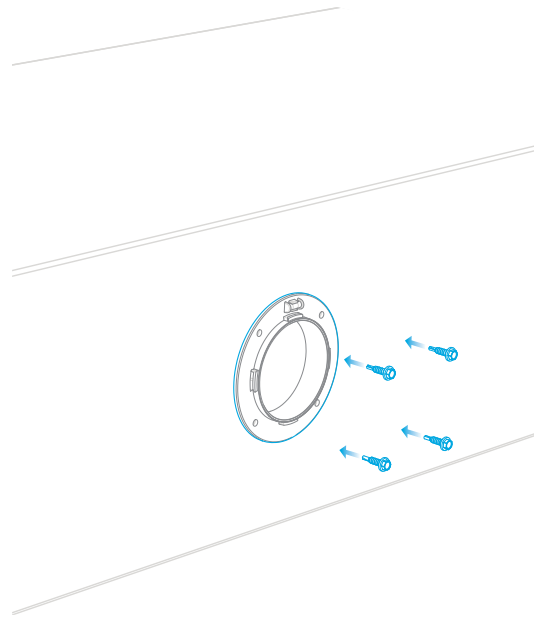


For applications where the duct is not horizontal or vertical place the ring such that the air flows in the direction indicated on the device front cover.



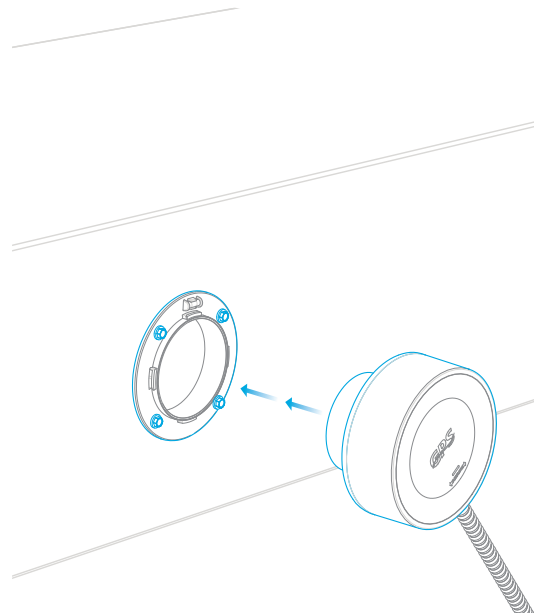
Step 6. Attach Mounting Ring

- Using the supplied fasteners attach the mounting ring to the duct.



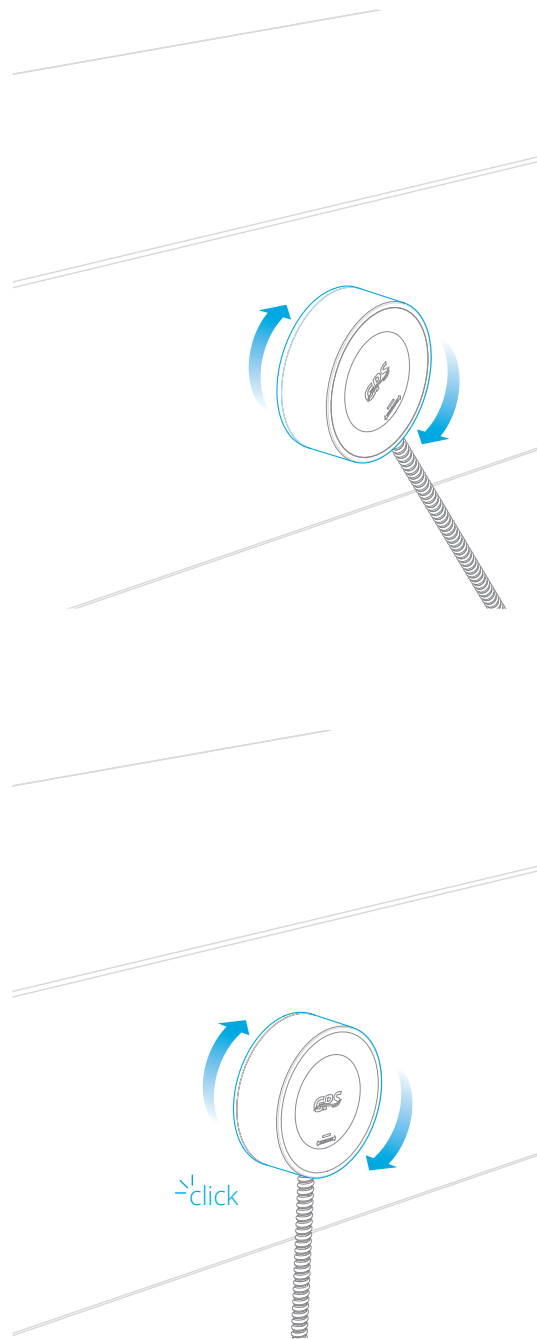
Step 7. Insert DM-2

- Turn the DM-2 counter clockwise from the final installation orientation and insert into the mounting ring.



Step 8.

- Rotate the DM-2 clockwise.
- Turn until you hear and feel a “click”. This ensures the DM-2 is properly seated on the ring.



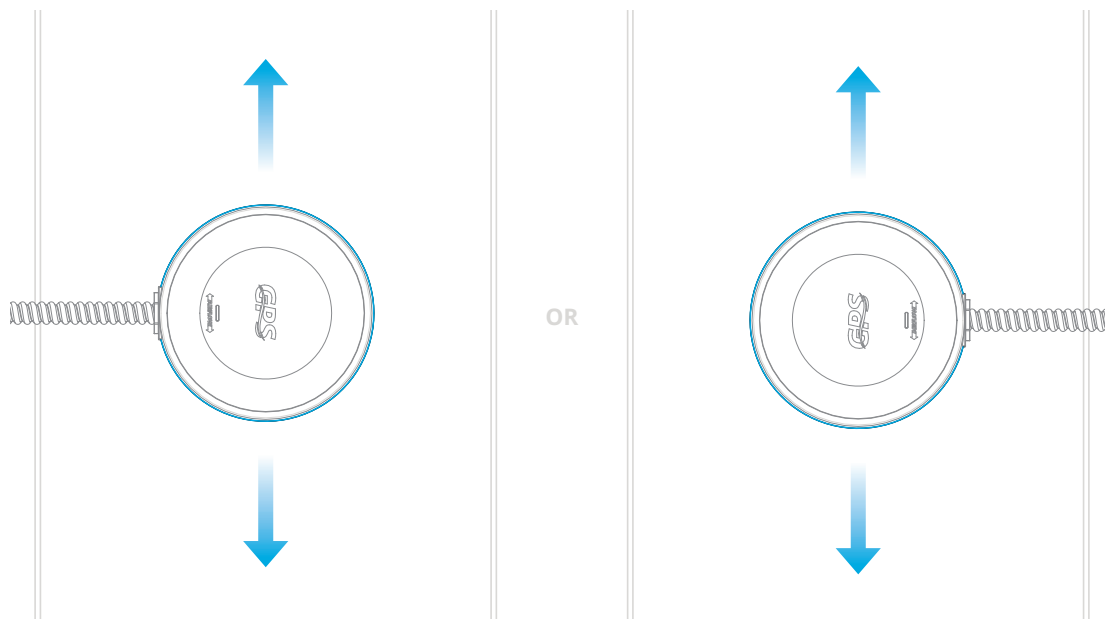
Pull back lightly on the device to ensure proper installation.



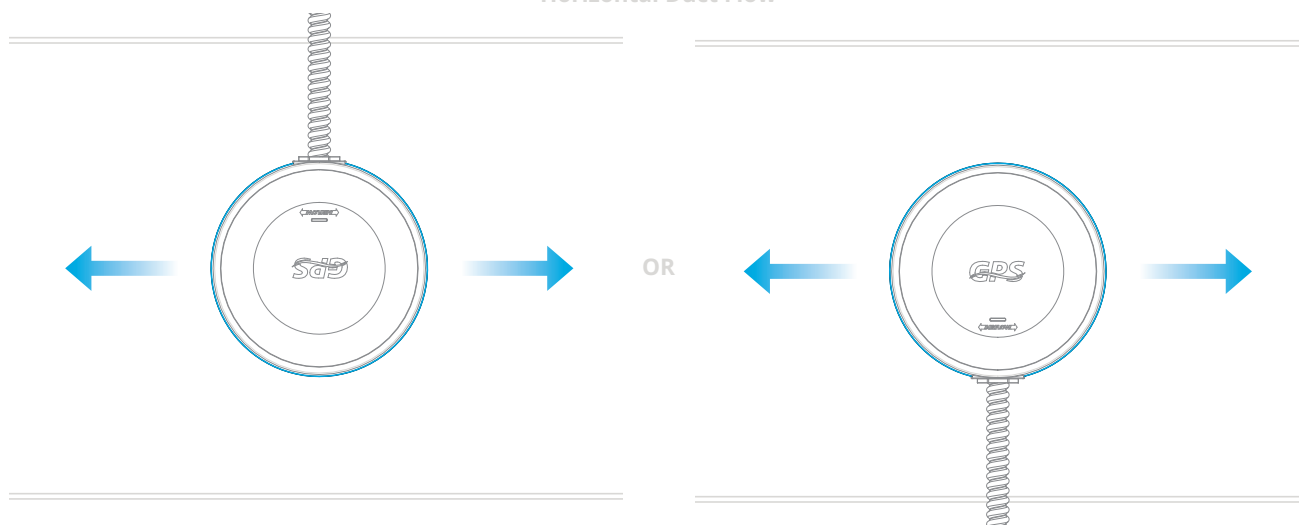
Air Flow Direction

Ensure the device is oriented according to the air flow indicator on the DM-2.

Vertical Duct Flow



Horizontal Duct Flow



For horizontal and vertical applications the DM-2 can be installed in one of two positions shown.



Operation

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

Cleaning Cycle

The DM-2 comes with a factory preset cleaning cycle designed to clean the emitters once every day.

 **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.globalplasmasolutions.com/product-registration or scan the QR code.



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.



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

