



# GPS-DM48-AC Duct Ionization System Instruction Manual

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GPS Air  
Start-up Checklist  
GPS-DM48-AC  
Complete 1 Checklist Per Ionizer



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## EQUIPMENT + INSTALLER DATA

### MODEL VERIFICATION

1. Record Manufacturer: GPS
2. Record Model Number: GPS-DM48-AC
3. Record Serial Number of Ionizer:

### INSTALLATION DATA

1. Record Name of Install Company and Technician:
2. Record Date of Installation/Startup:
3. Record ID of nearest HVAC system component:
4. Record Incoming Power Level:
5. Record Voltage Output at GPS-DM48-AC Emitters:

## INSTALLATION

### MECHANICAL MOUNT | Standard Installation

1. Confirm the GPS-DM48-AC is installed downstream of all filters in the system
2. Confirm a 4" hole was cut into the wall where the product is installed
3. Confirm there was at least 8" clearance into the duct to allow clearance of the emitters
4. Confirm that the air in the duct flows directly between the emitters as indicated by the sticker on the ionizer body. (Note, the level orientation of the unit face should not be used as an alignment method as it is rotationally offset).
5. Confirm the minimum of 4 fasteners have been used to secure the unit using the tabs on the ionizer body

## ELECTRICAL INSTALLATION

1. Viewing through the clear housing faceplate, confirm the electrical wires are routed through the appropriate conduit and the conduit is secured to the GPS-DM48-AC main housing
2. Confirm the electrical connections are routed and wired in accordance with the installation manual
3. Confirm the electrical wires are secured by the strain relief within the main housing and the terminal connections are also secure
4. Confirm the electrical supply is terminated in an appropriate fashion at the supply end and all local and national

electrical and building codes are complied with

5. Use a soft cloth with isopropyl alcohol to wipe debris off the GPS-DM48-AC emitters
6. Allow any residual alcohol to evaporate off the emitters prior to turning the ionizer on for the first time

## STARTUP

### UNIT STARTUP

1. Power on the GPS-DM48-AC
2. Confirm the GPS-DM48-AC is continuously powered and not configured to cycle with the HVAC duty
3. Once powered on, confirm the green power LED is illuminated
4. Confirm that the cleaning cycle frequency is set to 1 day as detailed in the IOM
5. Confirm the clear faceplate is reattached and secured by the four provided fasteners
6. Measure the voltage at the GPS-DM48-AC emitters (both polarities) and confirm it is above the minimum target level of 3kV
7. Visually confirm there is no dust or dirt on the carbon fiber emitters after they were cleaned with isopropyl alcohol during installation
8. With the GPS-DM48-AC operational, verify ion density output. Confirm it meets the combined polarity target of 200M ions/cc using the AIC2 ion meter ions/cc for each polarity measured 1" away with air handler fan off (no airflow)
9. Confirm the final configuration is securely attached to the duct wall and operational in accordance with the installation manual

For instructions on how to measure emitter voltage, scan the QR code.



<https://qrco.de/voltagemasurement>

For the latest applicable version of the GPS-DM48-AC installation manual, visit [www.gpsair.com/downloads](http://www.gpsair.com/downloads) or scan the QR code.



Register your products at [www.gpsair.com/product-registration](http://www.gpsair.com/product-registration) or scan the QR code.

By registering your order, the standard limited warranty on eligible products from your purchase is automatically extended to 3 years, at no additional cost.



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## Documents / Resources

	<a href="#">GPS GPS-DM48-AC Duct Ionization System</a> [pdf] Instruction Manual GPS-DM48-AC Duct Ionization System, GPS-DM48-AC, Duct Ionization System, Ionization System
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## References

- [Air Ionization Case Studies & Research](#)
- [Product Registration | GPS](#)