

INSTALLATION MANUAL

WIRELESS SYSTEM



GRIGNARD PURE, LLC

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You will receive a complete Grignard Pure System with everything needed for installation of your Wireless Sensor and Control units.

STEP 1: INSTALL ANTENNA UNIT

- The dispersal unit should only be running if the fan in your HVAC is running in order to move the product through the duct work.
- The HVAC fan should be set to run during introduction of the product to ensure proper dispersal in the space being treated.
 - Many systems offer only two options for the operation of the fan 24x7 or when the thermostats call for hot or cool air.
 - The easiest way to ensure that there is airflow when the Dispersion unit is active is to set the fan to run 24x7.
 - If you have an option to schedule the fan's run cycles, set the fan to run in the same time window that the Grignard Pure system is active.
- If you can't run the fan 24/7 install the Antenna Unit, "Hall Effect C Clamp"
 - Close the "C" clamp end of the antenna around the power line running to the fan.
 - When the power is on, the clamp will detect the electro-magnetic field from outside the cables covering and signal the dispersal unit that it's OK to run.
 - This is called the "Hall Effect"
 - Do not cut into the power cable during installation.
 - Leave small square tile with green circle outside of the air handler.
 - This is the wireless antenna.
 - Plug antenna unit into power source fan.

STEP 2: CONNECT SENSOR RECEIVER UNIT TO DISPERSION UNIT

- This is the unit without air vents in the base faceplate.
- The volume knob or dial on the dispersal unit must be set to "OFF" in order for the unit to take commands from the wireless monitoring and control system.
- Connect black plug on the receiver to the DMX IN outlet on the face of the Dispersal Unit.
- Plug receiver unit into power source.
- The light on the front of the unit will blink briefly.

STEP 3: THREE SENSORS ARE INCLUDED IN THIS INSTALLATION

- The sensor units have air vents in the faceplate
- All sensors need to be at least 4 feet off the floor
 - Thermostats are usually 4.6 feet off the floor
 - We want to be measuring the air where the people are.
- All sensors need an outlet for power
- All sensors must be placed so that vents are not blocked
- Sensors must be placed in an area with good air flow
 - Sensor “A” is placed in the vicinity of the first ceiling register from the Dispersal Unit.
 - Sensor “B” is placed in the vicinity of a ceiling register about halfway from the dispersal unit to the end of the duct run.
 - Sensor “C” is placed in the vicinity of a ceiling register at the end of the duct run.
- Each sensor will report back readings every second to the control units and to our web portal.
 - Incoming readings can be visually monitored, in real time, via the web portal.
 - The web portal can be used to set or adjust the product dispersal via:
 - Time and Date settings
 - Dispersal Unit - Fan Speed
 - Dispersal Unit - Product Application Levels
 - Feedback from sensor readings in the treated areas

STEP 4: FIND A CENTRALLY-LOCATED POSITION FOR THE SYSTEM MANAGEMENT UNIT (SMU)

- The SMU talks to all the modules you have installed.
- The SMU will need a power source.
- The SMU ships with a wall mounting kit but can also just rest on a table, desk or shelf.
- When functioning properly the SMU will glow solid green on top.
- The SMU should be within 50 feet of the sensors and controller units.
 - If you have an installation that requires more than 50 feet of distance you will need a repeater unit to extend your range.
- Plug in the SMU to a power source.
- Check for pairing:

- Press the bottom of the three buttons on the front of the SMU and hold for 12 seconds to pair with the local WI-FI.
- Plug in each sensor and check for pairing, once the whole system is powered up, sensors and SMU.
 - Insert a small pin or paper clip end into the little hole on the top of the sensor for 1 second or less.
 - If the light flashes Green - Red – Green you are paired.
 - If the light stays red you are not paired

STEP 5: CONNECT TO GRIGNARD PURE CLOUD APPLICATION

- Connect to the internet via a local WI-FI Signal
- Once connected to the internet you will need to setup your portal
 - Log into Grignard Pure Cloud
 - Register system and set passwords
 - Hit Reports on the left-hand side of the screen
 - Choose Sensors
 - Choose PM Sensor to view the real-time sensor readings

STEP 6: SET CUSTOMER-SPECIFIC CONTROL SETTINGS

- Your system will have shipped with generic settings related to the square footage you are trying to protect.
- All spaces and HVAC setups are unique in some way. These differences will have an effect on the air patterns of the space you are trying to protect. As a result, you may need to adjust the control settings accordingly.
- In Administrator mode check sensor levels and set Dispersal Unit to desired levels to balance system out.
 - Run the system for 30 minutes with the default settings.
 - After 30 minutes you should be able to tell where there are dispersion issues by reading the sensor data or by a visual examination of the space.
 - Via the portal you can adjust the various control features until you've reached appropriate levels of coverage.
 - It is OK to move sensors around to various areas of concern; all workspaces have different layouts and air patterns. Adjust to the space in order to get an accurate treatment reading.
- If you are seeing readings that indicate little or no product in specific areas, there is likely to be an issue in the HVAC itself.
 - Dampers closed
 - Filters in the path

- Holes in the conduit
 - Or some other blockage that has been introduced to your duct work
 - Do not use or attempt to calibrate if the space you are protecting has open doors or windows. These will let fresh air in and the product out making reliable readings impossible.
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24-HOUR CUSTOMER SERVICE: (855) 642-PURE (7873)

CUSTOMER INFORMATION: www.GPcustomer.com

