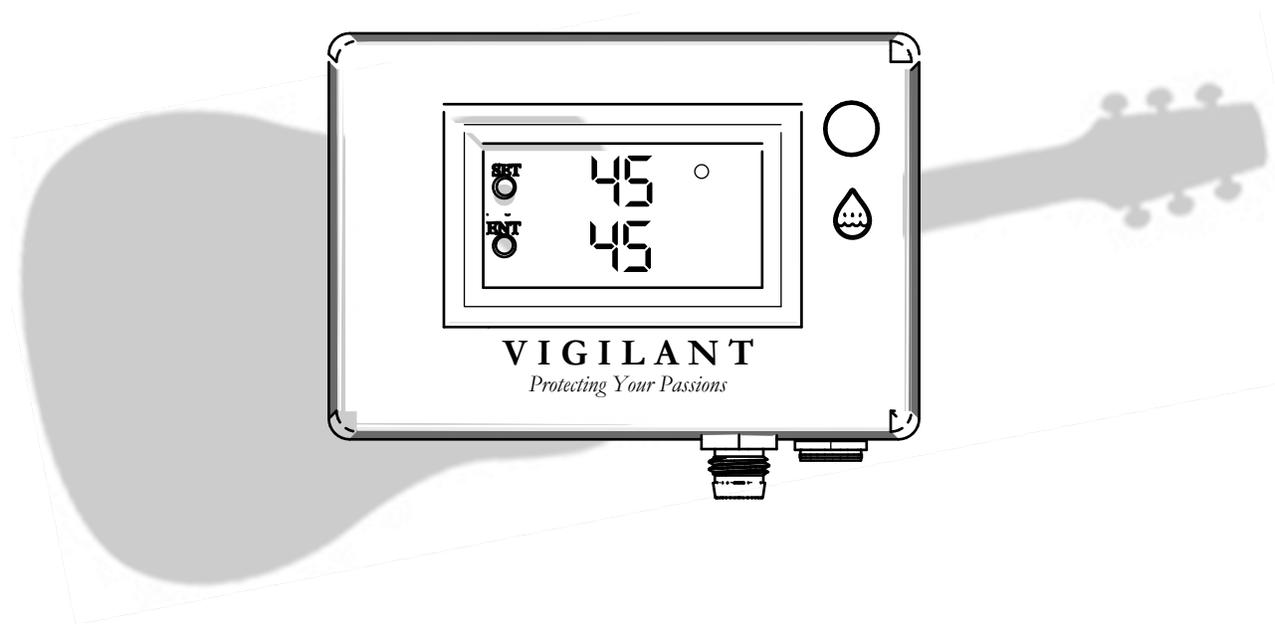




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Guardian Humidification Systems For Guitars

Operating Instructions





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Guardian Humidification Systems

Operating Instructions

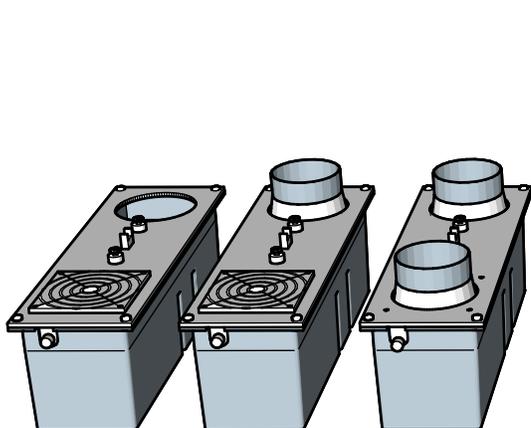
Congratulations! You have purchased the finest humidification system ever created for the preservation of guitars. The Guardian Humidification System is designed to provide your premium guitars with the optimal storage environment. The Guardian microprocessor constantly monitors the humidity level of your cabinet interior and will maintain the relative humidity (RH) to within 2% of your desired setting.

Should you have any questions regarding the installation or operation of Vigilant's Guardian Humidification System, please call us at 888-812-4427 and we will be happy to assist you.

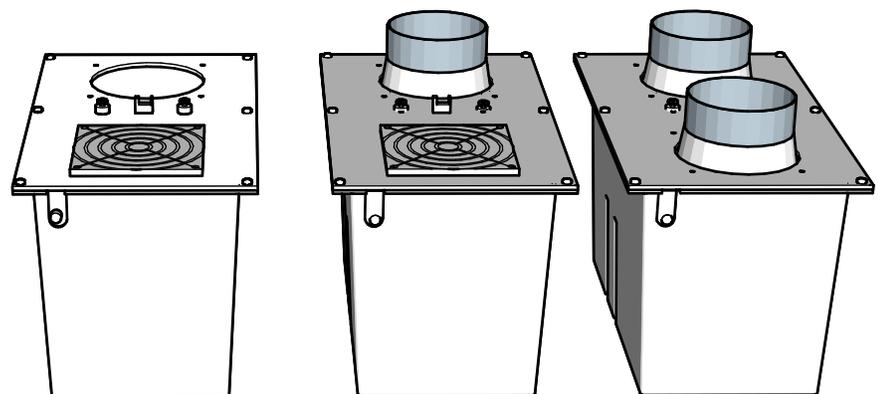
Please read this entire manual before operating your Guardian Humidification System. By following these instructions, you will guarantee the proper conditions for your prized guitar collection.

Parts

- Humidification system – consists of water reservoir, controller, and sensor
- Zip ties (2)
- Wire anchors (5)
- 24-volt wall adapter
- Wicking filter (located inside system)



Guardian 10 model



Guardian 100/150 model



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Installation and Start-Up Operation

IMPORTANT:

- DO NOT OVERFILL THE RESERVOIR AS OVERFILLING WILL CAUSE DAMAGE TO YOUR CABINET!
 - DO NOT POUR WATER ON THE FAN THIS CAN CAUSE DAMAGE TO THE ELECTRONICS.
 - DO NOT MOVE CABINET WITH WATER IN IT.
1. Remove all packing material from the reservoir area and make sure the parts list is complete. Leave the white mesh wicking filter in the reservoir.
 2. Place the Guardian Humidification System in the bottom of your cabinet.
 3. Insert the small end of the power cord through a hole in your cabinet and plug it directly into the power jack on the side of the controller of your system.
 4. Placement of sensor: Determine a suitable location for the sensor, preferably two-thirds up from the back panel or side wall, and/or as close to the horizontal center of the back panel as possible.
 5. Extra support for the sensor can be gained using the included wire anchors and zip ties.
 6. Slowly fill the reservoir with distilled water to the max fill line. The reservoir is outfitted with an overflow vent that will prevent damage to your system. Make sure that the white mesh wicking filter is sitting vertically upright in your reservoir.
 7. Plug your humidification system into a surge protector that is attached to a grounded outlet. The digital display will activate within 6 seconds.
 8. Next, the unit will automatically begin to operate at the **factory set point of 47% relative humidity**. Allow the unit to run at the factory set point for **at least 24 hours** before making adjustments.
 - The system will use large amounts of water during the first several days of operation. Once the humidior has been seasoned (3 – 4 days), water use will greatly diminish.
 - It is recommended that you do not set the humidity level above 55%, as guitars stored at humidity levels higher than 55% can swell, causing finish damage, failed joints and neck angles to go bad.
 - If you choose to make an adjustment to the humidity level, limit the change to no more than 2% in a 10-day period.



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Adjusting the Humidity

Your Guardian Humidification System has been pre-set at 47% relative humidity and operates on a range (hysteresis) of approximately 2%. The system, therefore, will operate between 45% and 49%, as set. As the controller system is fully automatic, the only controller feature you need to be familiar with is the set point adjustment.

PLEASE NOTE: Your humidifier system cannot remove excess moisture without special options. If you choose to make an increase, limit the change to no more than 2% in a 10-day period to prevent overshoot.

The digital display will indicate the actual humidity level inside of your humidor. To view and/or adjust the set point, read this manual completely before proceeding then simply follow these steps:

1. Tap the **SET** Key. The current setting will flash.
2. To adjust humidity upward, tap the **SET** key.
3. To adjust humidity downward, tap the **ENT** key key.

Maintenance of Reservoir and Wicking Filter

When the low water indicator illuminates, it is time to fill the water reservoir. Frequency of filling will vary depending on climatic conditions and cabinet size.

As the reservoir and wicking filter(s) are constantly exposed to moisture and dirt collected from the circulating air, they must be cleaned periodically. We recommend that you clean the reservoir and filter each time you add distilled water.

1. Unplug the system from its power outlet before you begin cleaning the reservoir and filter.
2. Remove the humidification system from your cabinet, being careful not to spill any water on your humidor. Remove the thumbscrews, lift the cover off and remove the filter.
3. Wipe the walls of the reservoir with a damp paper towel
4. Wicks should be changed every 90-120 days and can be ordered directly from Vigilant's online store at <https://store.vigilantinc.com/>.
5. Insert clean filter into the reservoir and return it to your cabinet.
6. To fill the reservoir, add DISTILLED water through grommet opening. Never overfill the reservoir. Watch the water level carefully while filling. Slowly fill reservoir to the MAX FILL line.



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Suggestions

The installation and maintenance of your Guardian Humidification System will directly affect its performance. Here are some factors to consider:

- Do NOT block the system airflow. Shelves, bins or drawers should be perforated or spaced accordingly to induce good airflow.
- Do NOT block the sensor or control.
- Keep the water reservoir and wicking filter clean by servicing at least every 90-120 days.
- Avoid frequent opening of your cabinet door(s). If the humidifier is used for commercial environments, nighttime recovery will be crucial for maintaining an optimal environment.

TROUBLESHOOTING

Cabinet appears not to maintain desired humidity level

- Check the set point adjustment. If the set point is not at your desired relative humidity level, reset by following the “Adjusting the Humidity” instructions.
- Check the seal(s) of the door(s) and drawer(s) of your cabinet. The system may not be able to maintain adequate humidity levels in a cabinet that is not well sealed.
- Check the water level in the reservoir. If it is empty, the red LED should be lit. If not, carefully fill your reservoir to the MAX FILL line or approximately 1" below the overflow hole.
- Be certain that fan and airflow intake are clear of any obstructions that could impede air circulation.
- Verify that the wicking filter is vertically positioned inside the reservoir.

Cabinet is too moist or too dry

- Your humidity set point is too high or too low.
- Remember that the system will run up to 2% above the set point. It is recommended that the system is started at the pre-set level of 47% RH to maintain an interior humidity level between 46-48%.

Fan does not work

- Check power source and connections.
- If the set point is below the humidity level of the cabinet’s interior, the fan will not run.
- Press the far-left button on the control panel to check set point.

If these troubleshooting recommendations do not correct the problem, call Vigilant at 888-812-4427 and a service representative will gladly assist you.



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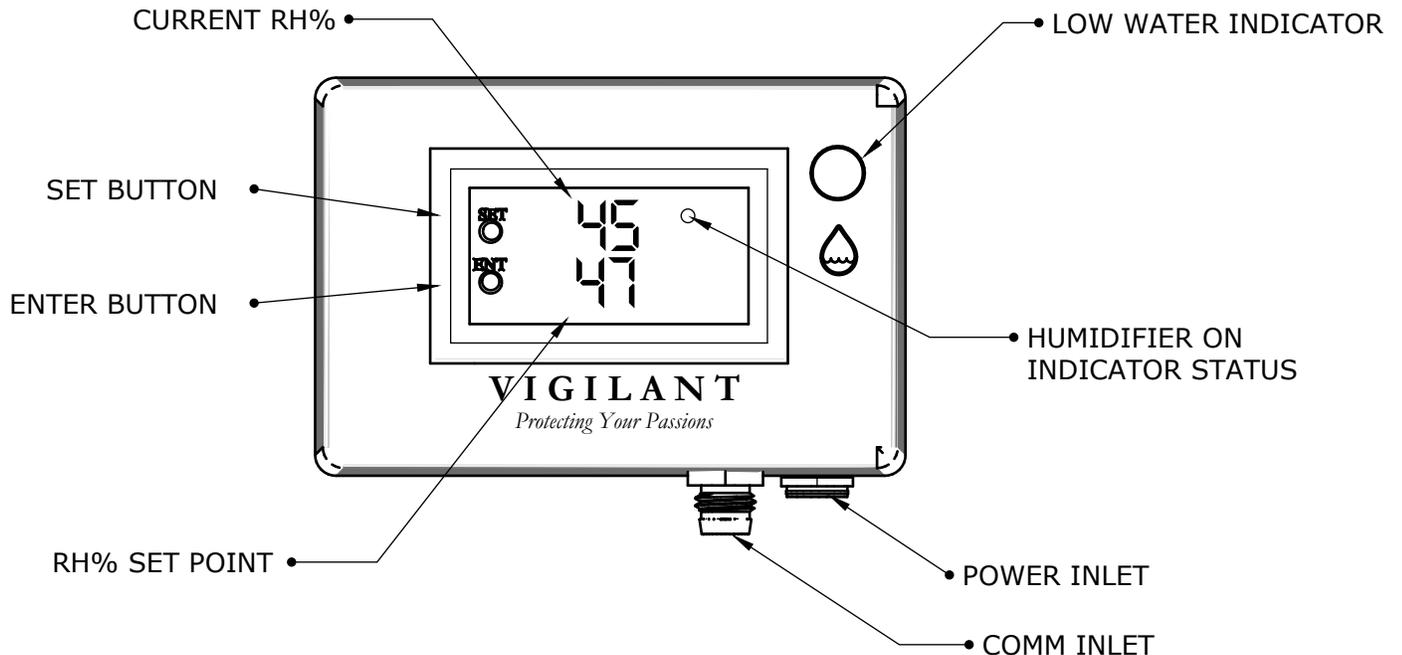
Control Overview

The Guardian control is a high-precision digital control designed for the long-term preservation of Premium Guitars.

The control is pre-set specifically for your individual application and will automatically start as soon as the humidifier is connected to power.

Response is nearly instant, and no pre-stabilization is required.

Please see the following pages for setting instructions.

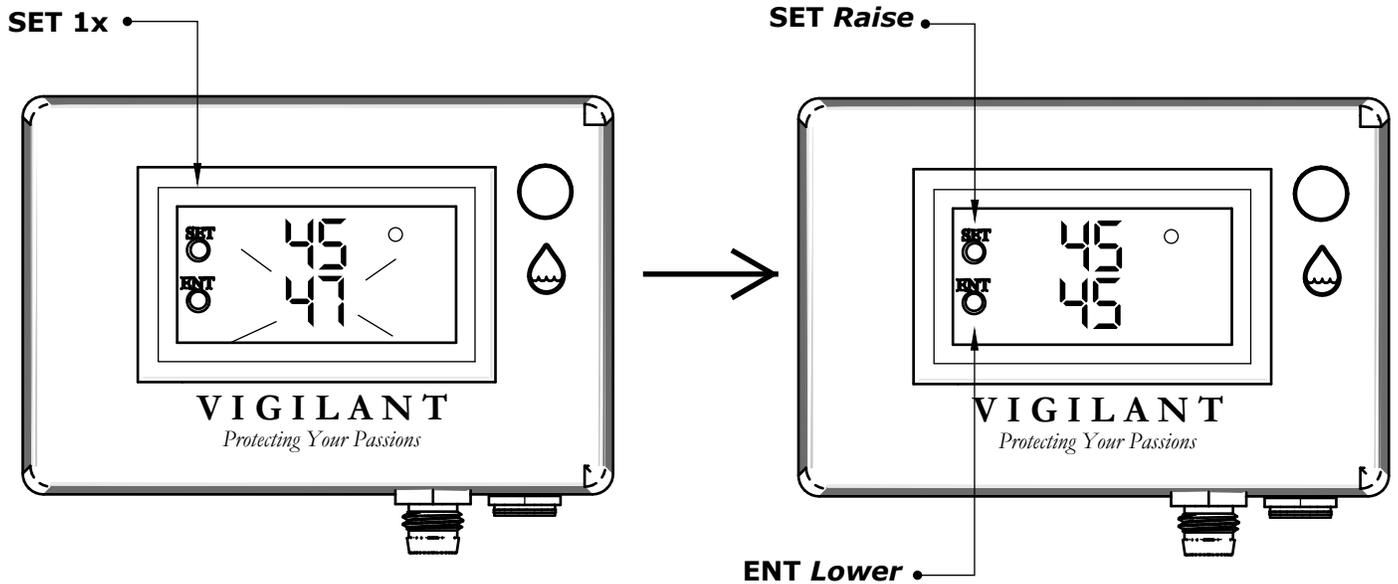


- **SET** The Set button is for setting the RH%. Once pressed, it also acts as the \uparrow Raise button when adjusting the RH% value.
- **ENT** The ENT button is the \downarrow Lower button once Set is pressed. It also acts as the power ON/OFF button when pressed and held.



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Adjusting the Set Point



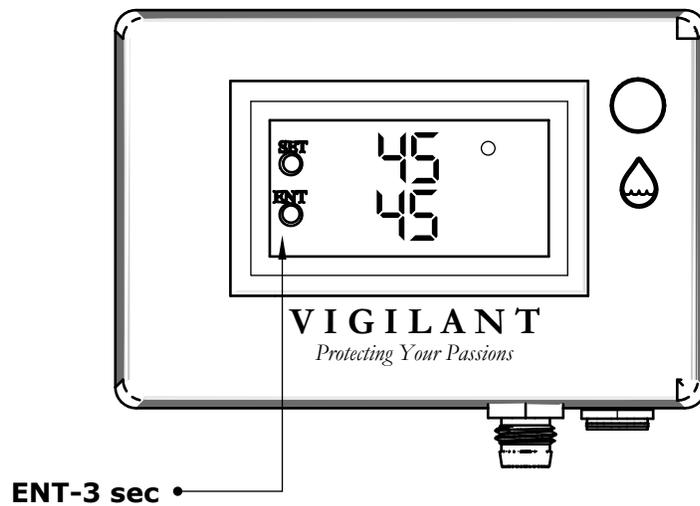
1. Tap the **SET** button once. The bottom value will flash.
2. While the bottom value is flashing, use **SET** button to ↑Raise the Set Point and the **ENT** button ↓Lower the Set Point.
3. When done, the control will automatically lock the setting in after 3 seconds.

***Vigilant recommends a Set Point of 47% initially. Once the Humidor has stabilized, feel free to adjust to taste. Please only make small adjustments (1-2%) allowing the Guitars to equalize for several days between adjustments and until the desired moisture level is achieved.**



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Powering the Control ON/OFF



While the control should never be Powered off when actively conditioning Guitars, the function is available if needed.

1. Press and hold the **ENT** button for 3 seconds to Power the control ON/OFF.

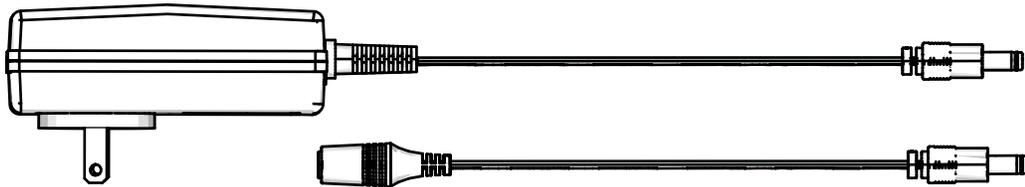


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CABLES

CORD	TYPE	LENGTH	INCLUDED
A	Power supply w/ Extension	72", 36"	YES
B	Remote Interface Cable	72"	OPTION
C	Digital Sensor	72"	YES
D	International Blade Kit	N/A	OPTION

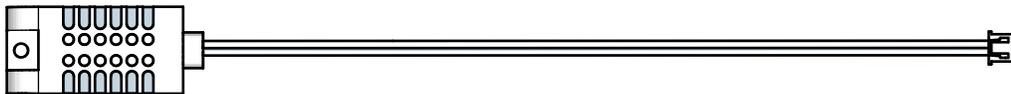
A



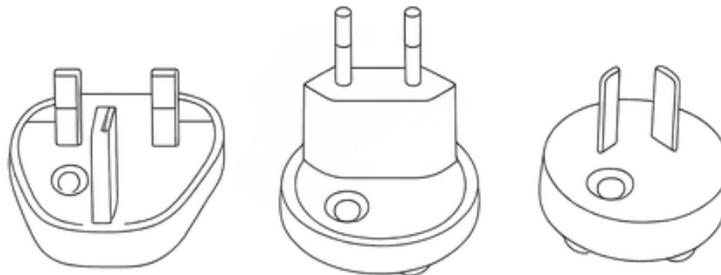
B



C



D

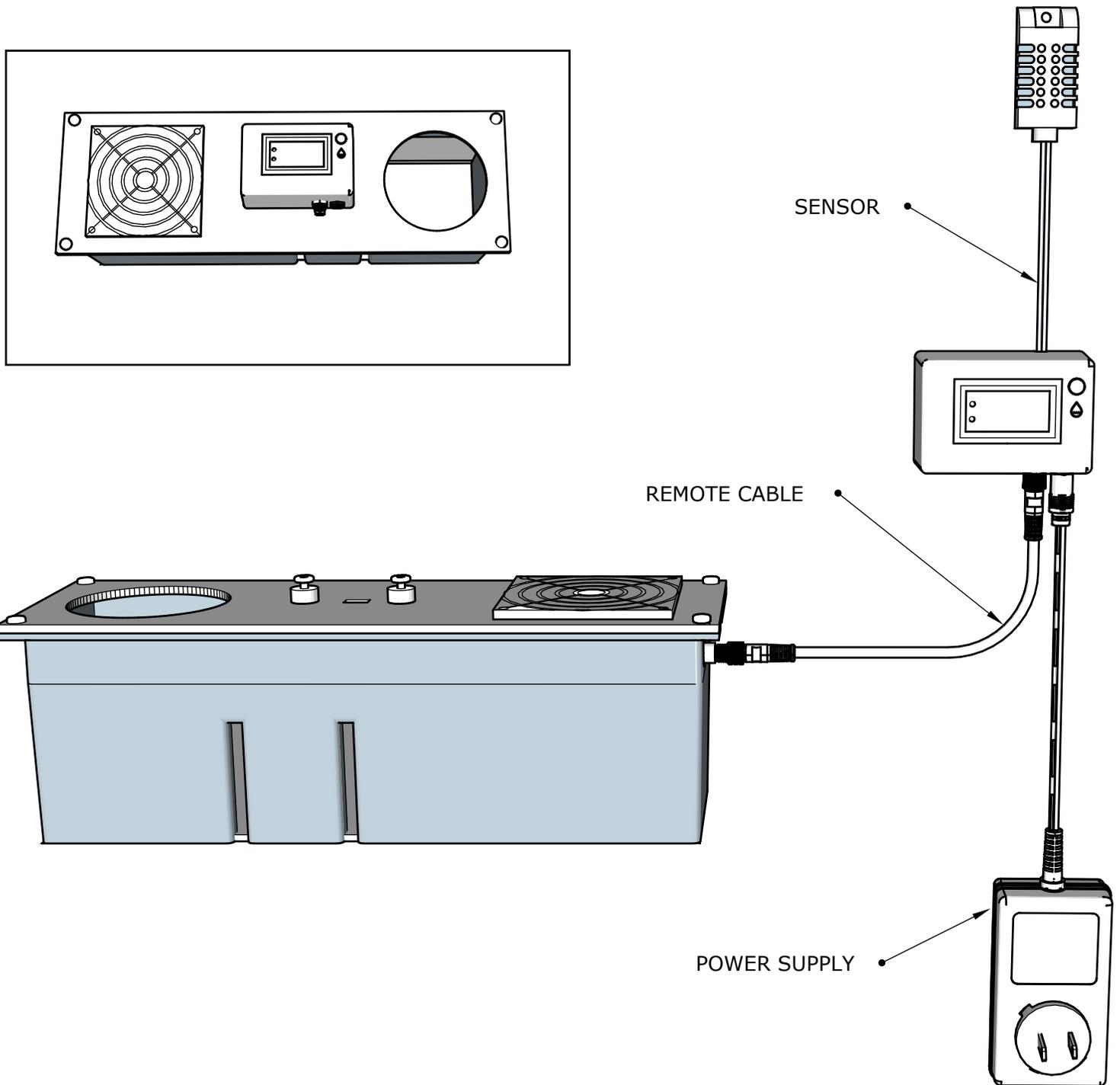




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DETACHING THE CONTROL

The Control may be detached and relocated using the optional Remote Control Wire



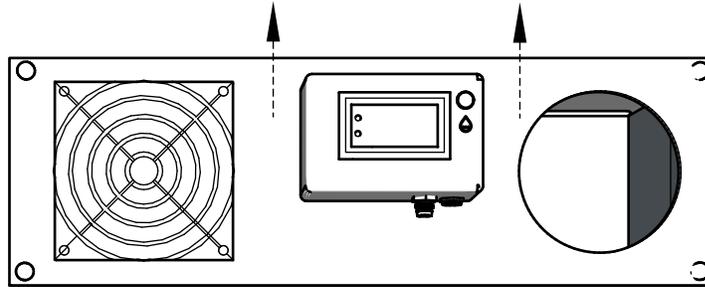


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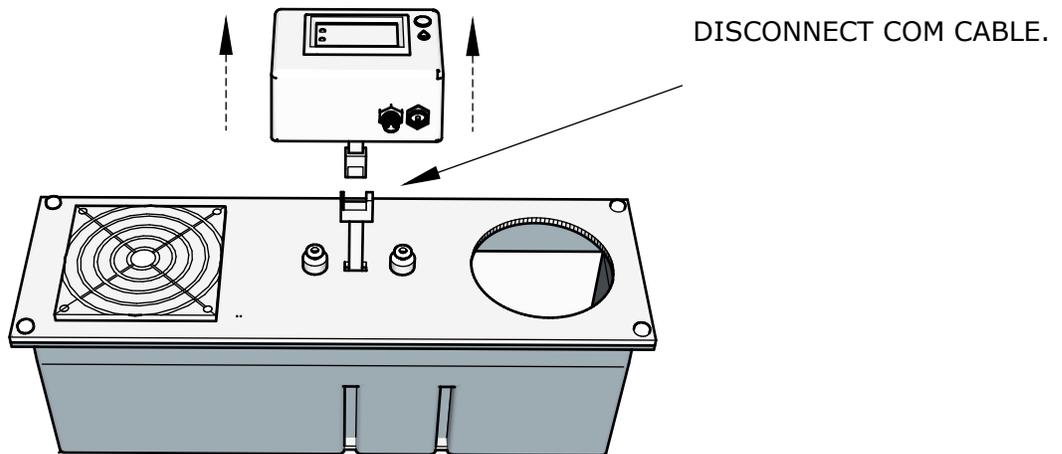
DETACHING THE CONTROL

The Control may be detached and relocated using the optional Remote Control Wire

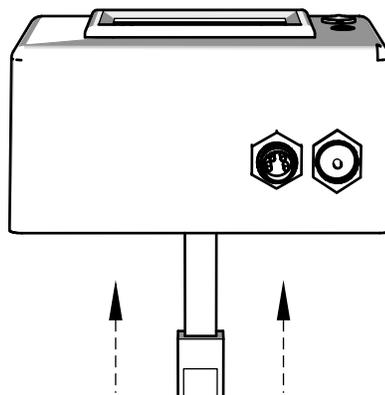
1 SLIDE BACK.



2 LIFT OFF.



3 TUCK COM CABLE INTO BACK OF CASE.

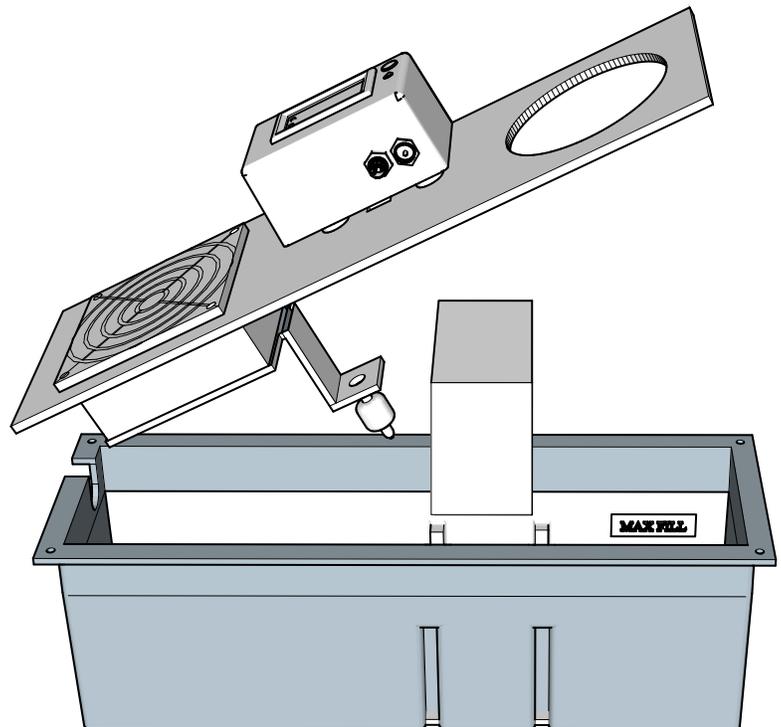
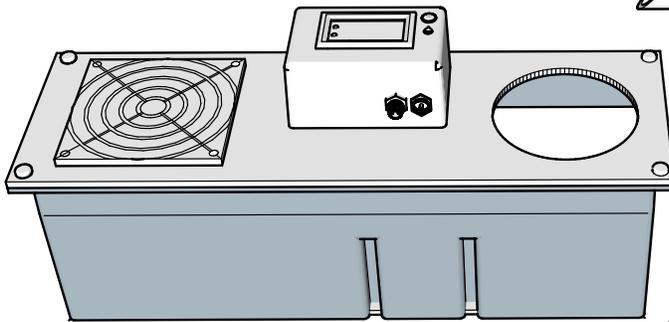




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FILLING AND MAINTENANCE

- Remove cover or fill directly into the supply opening
- DO NOT fill beyond the **MAX FILL** Tab.
- *If overfilled, excess water will vent from the Humidifier.
- DO NOT pour water on the fan



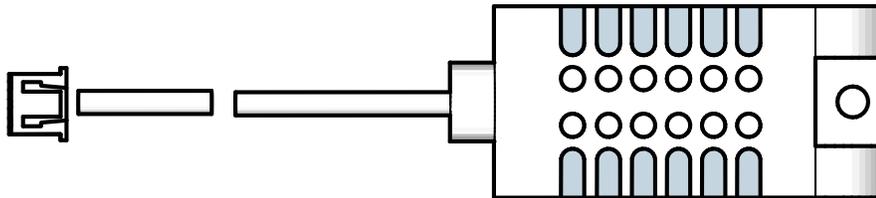
Remove the thumb screws and lift cover off of reservoir for cleaning and Wick access



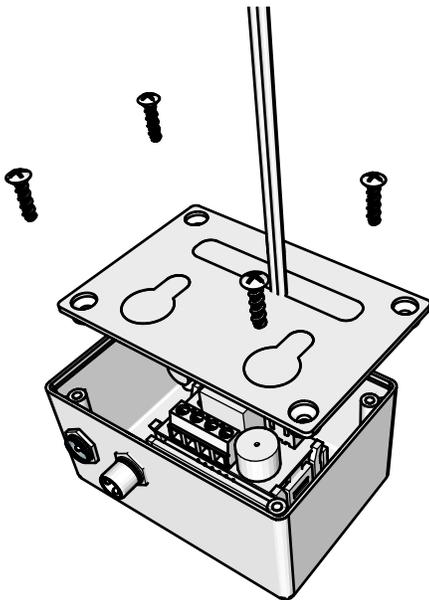
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DETACHING THE SENSOR

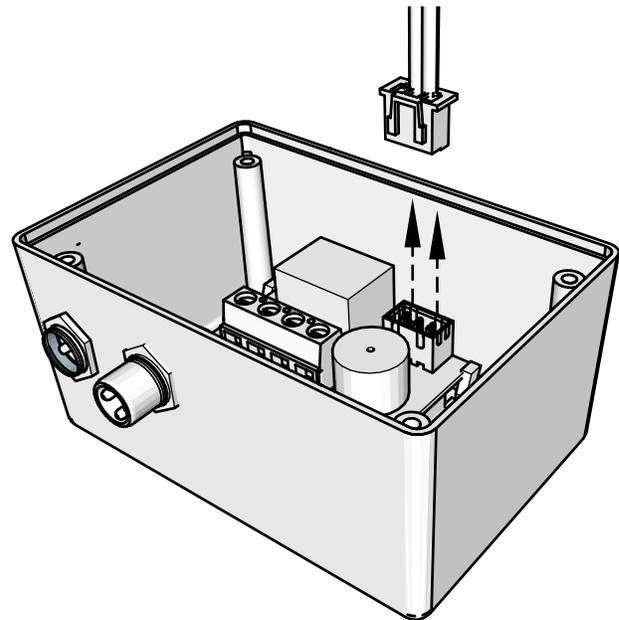
The Sensor may be detached if needed. This allows the Sensor to be routed easily.



- 1** Remove the (4) screws from the rear of the case



- 2** Disconnect the Sensor lead by pulling up the white connector.
DO NOT pull by the lead itself.



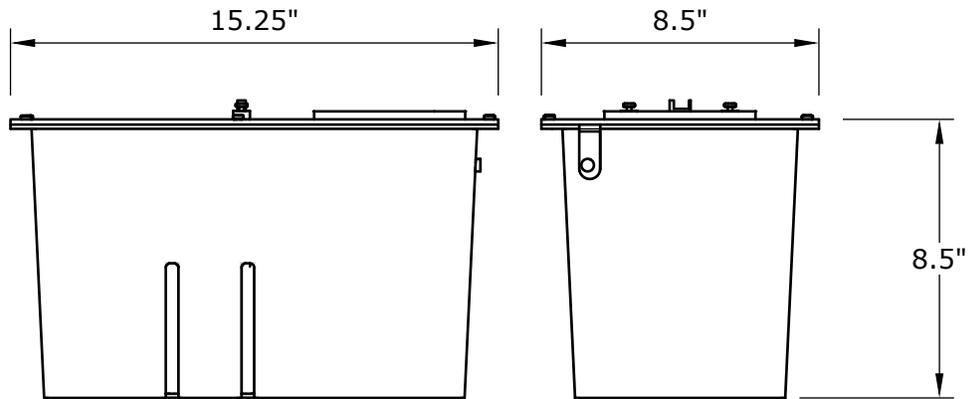


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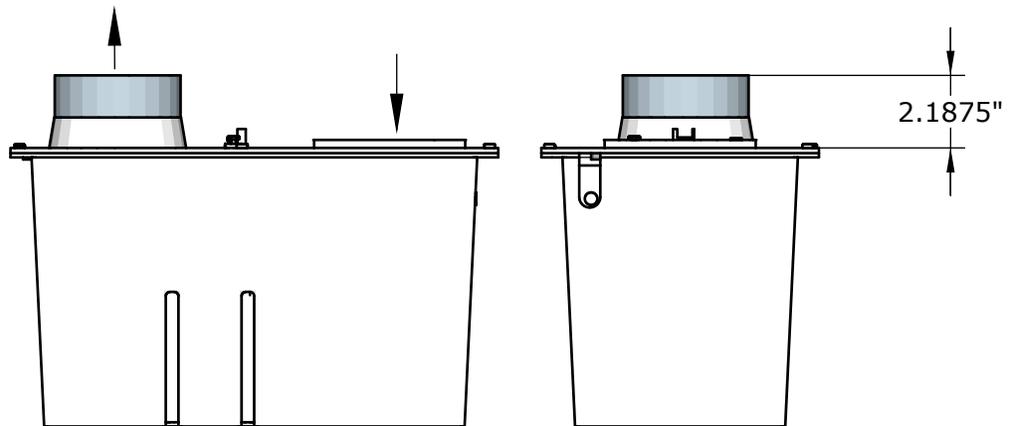
RESERVOIR DETAIL

G/S-100/150 RESERVOIRS

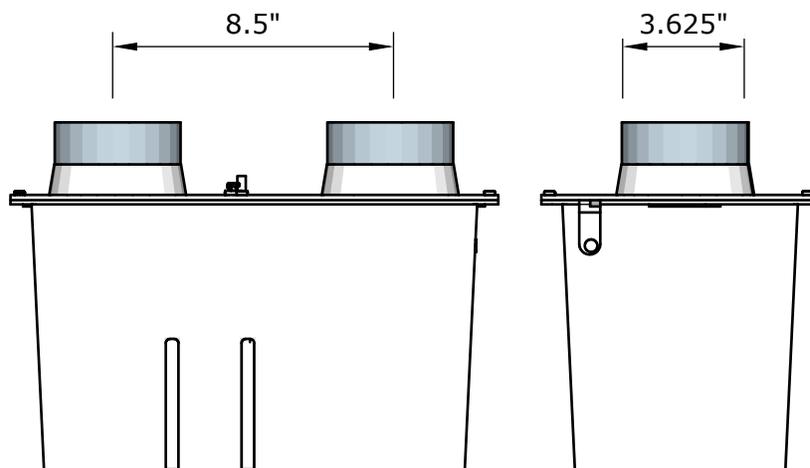
STANDARD



DUCTED SUPPLY



FULLY DUCTED



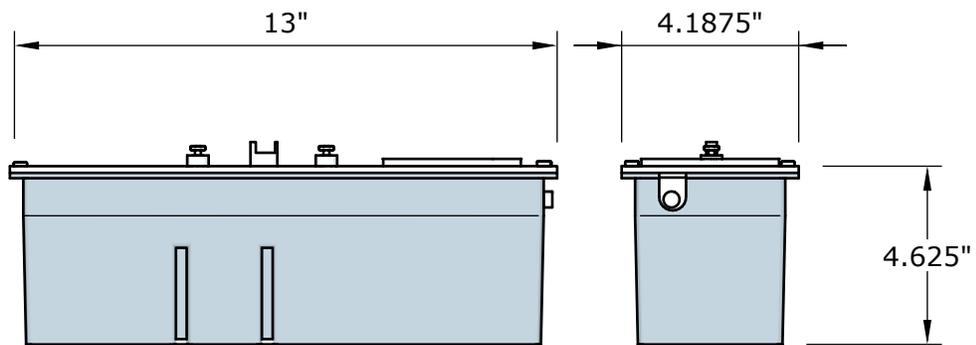


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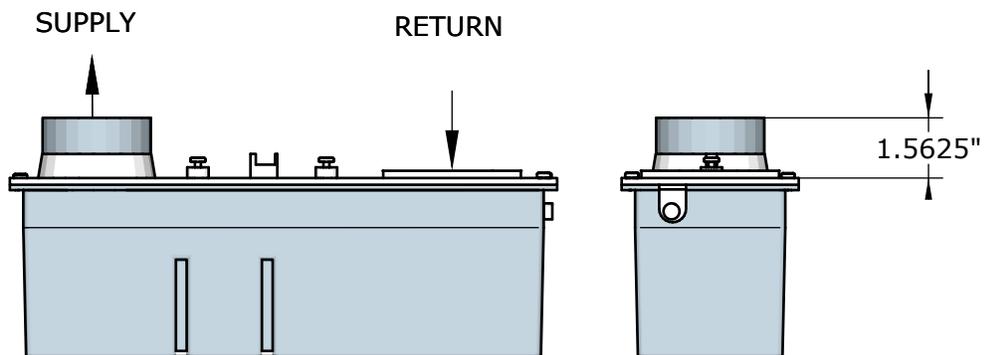
RESERVOIR DETAIL

G/S-10 RESERVOIRS

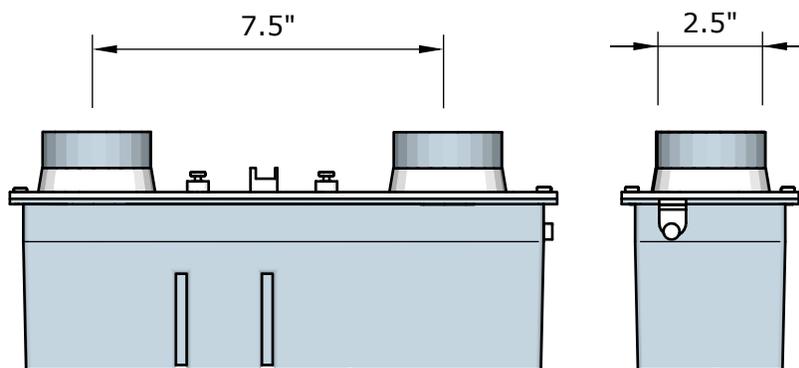
STANDARD



DUCTED SUPPLY



FULLY DUCTED





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APPLICATION

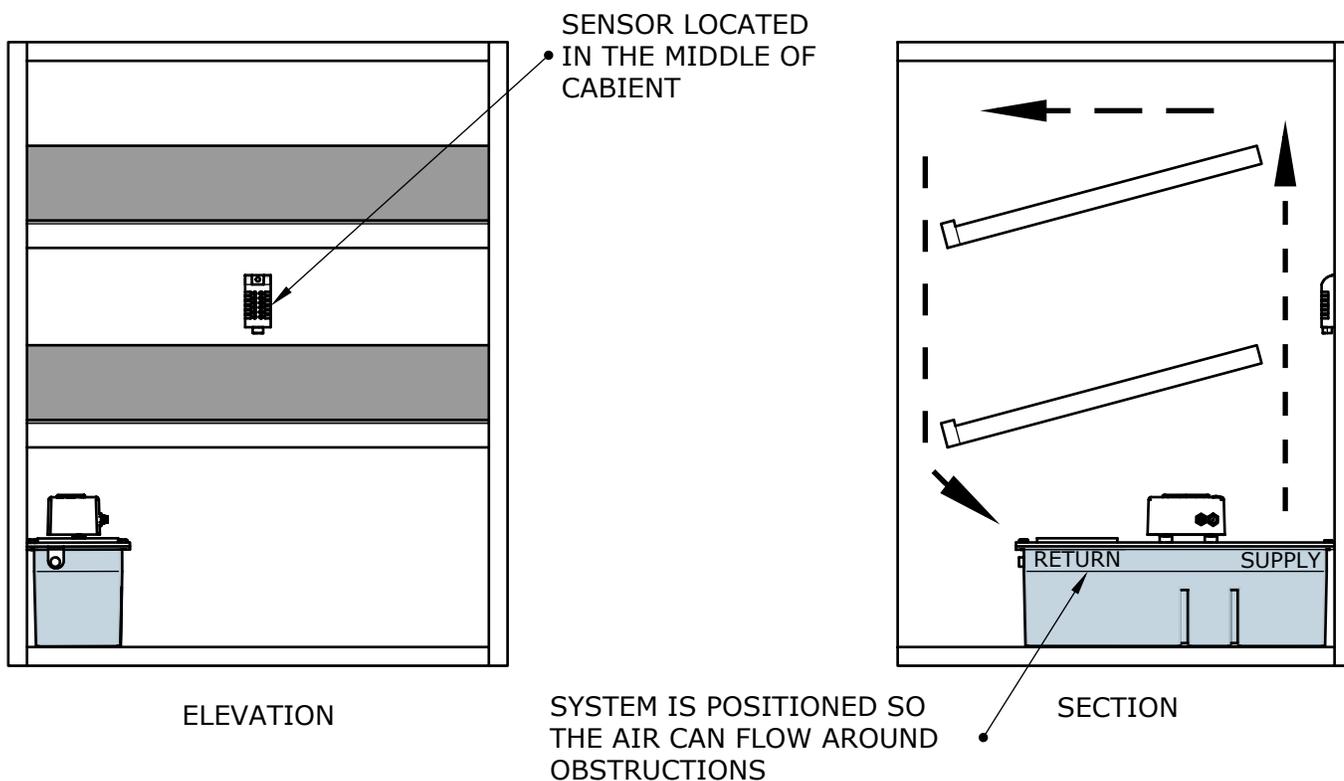
Typical system application

With the standard system configuration, it is very important to position the Humidifier so that it will not be obstructed and can circulate air throughout the Humidor.

Note that the fan draws dry air into the Humidifier and pushes moist air out of the supply side opening.

In the example below, the humidifier is pushed to the back of the cabinet and takes advantage of the gap behind the shelves providing a clear vertical path for the supply air.

If your configuration has other common features like drawers or bins and or no gaps for airflow, have them fabricated or modified with perforations to provide this requirement.

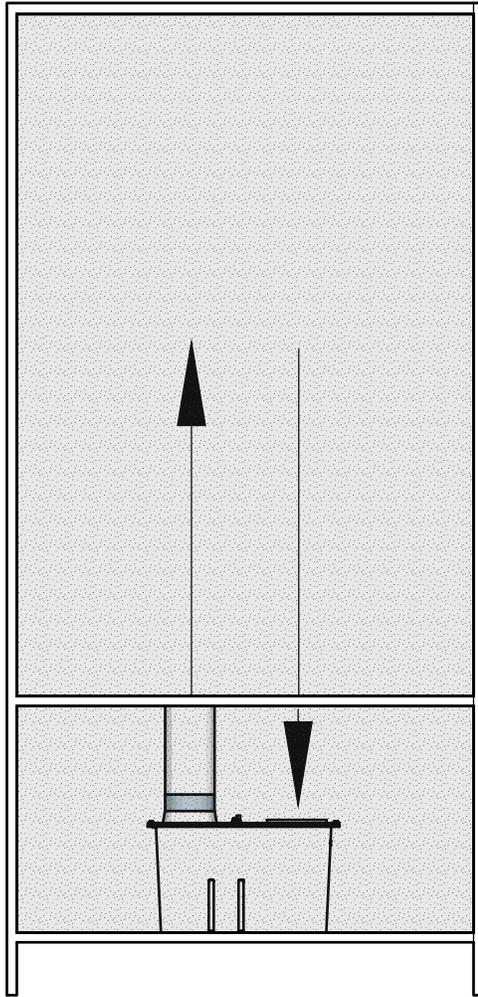


The Sensor should be positioned in the center of the Humidor. If mounted too high, the RH levels may be elevated at the bottom of the humidifier. Likewise, if mounted too low, the RH may be reduced at the top of the Humidor.

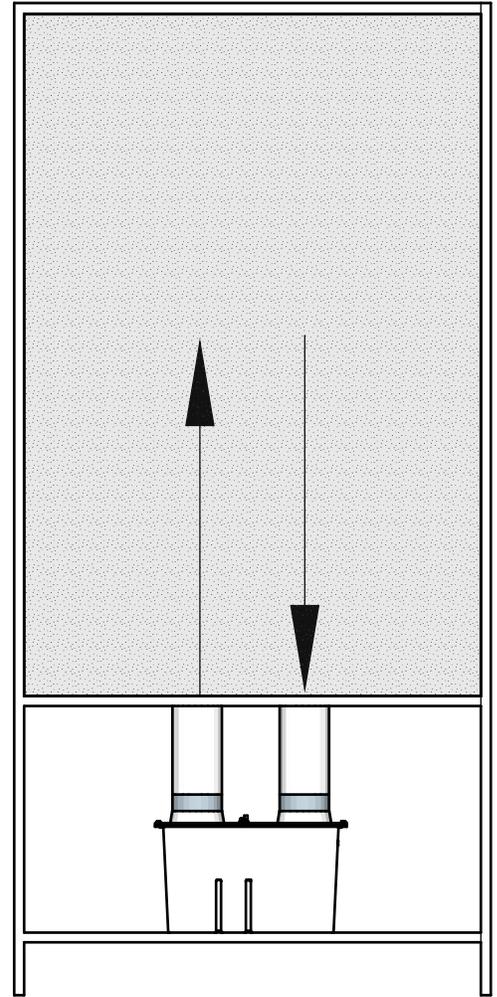


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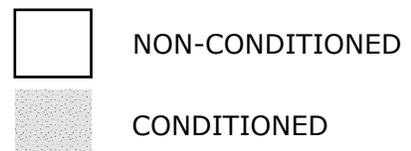
DUCTING OPTIONS



The Ducted Supply Only option is a simple way to provide a powerful directional airflow for even conditioning over long runs or to simply direct the supply beyond obstructed areas.



Utilize the Full Ducting option to remotely locate the system away from the conditioned space or to hide the Humidifier, save space or to provide a directional airflow.

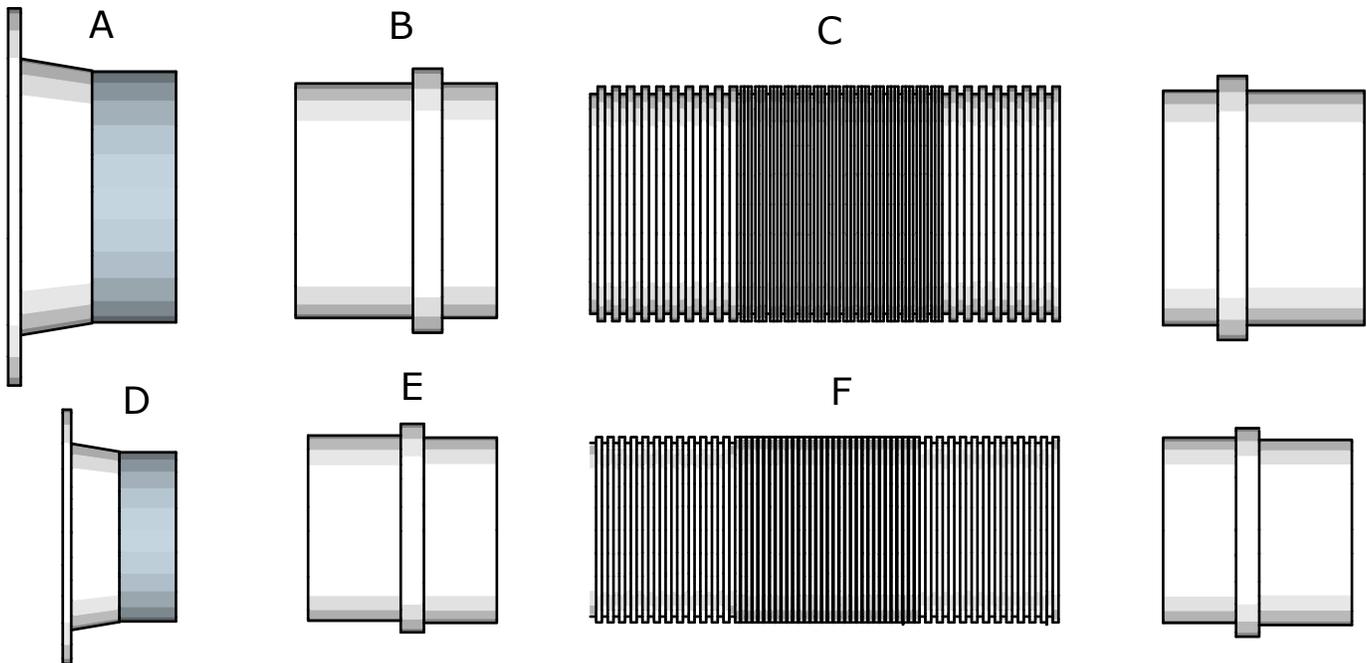




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FLEXIBLE DUCTING

PART	DESCRIPTION	QTY. DUCTED SUPPLY	QTY. FULLY DUCTED
A	4" Mounting Flange	1	2
B	4" Duct Collar	2	4
C	4"x 36" Flex Duct	1	2
D	2.5" Mounting Flange	1	2
E	2.5" Duct Collar	2	4
F	2.5" x 36" Flex Duct	1	2





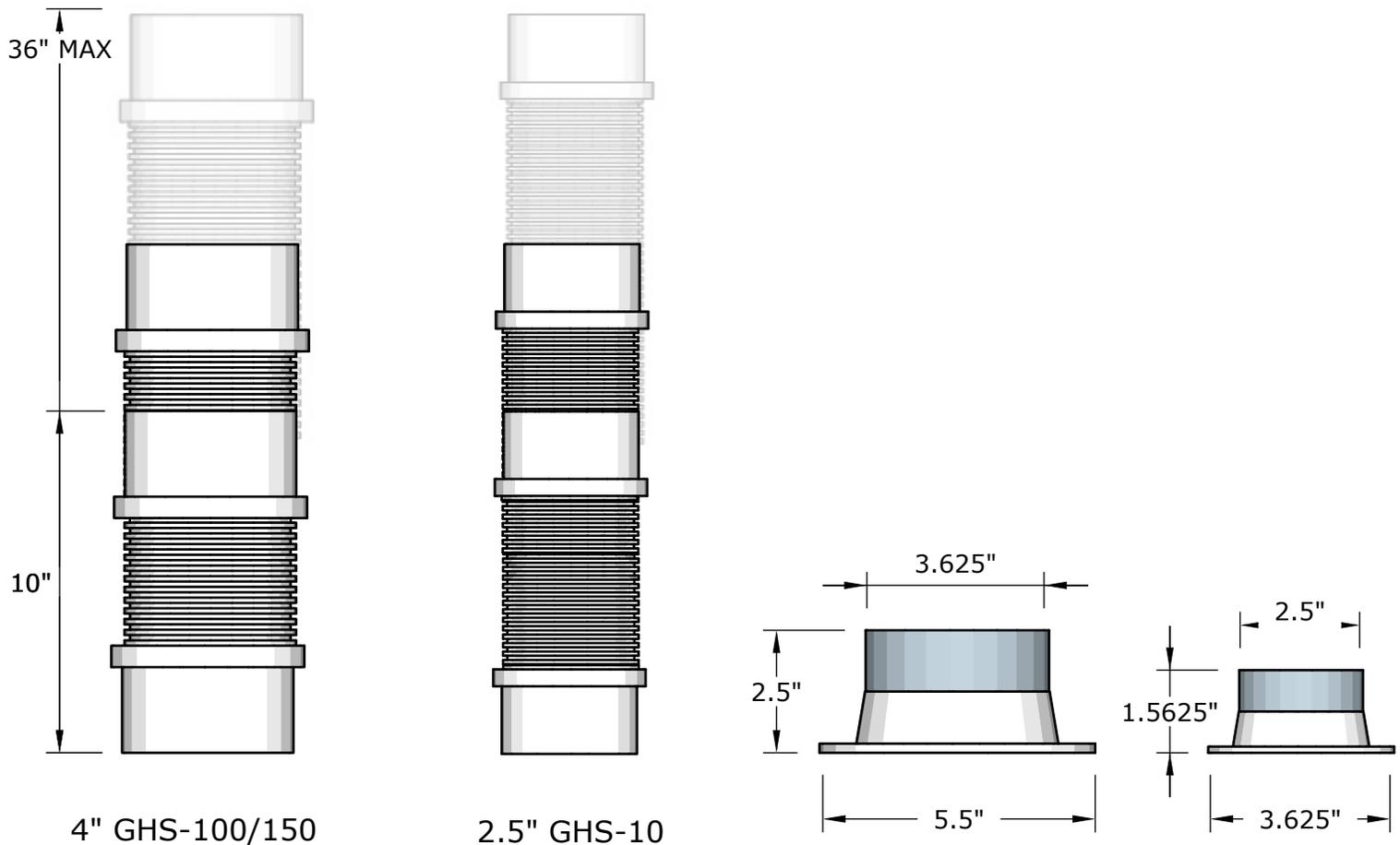
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FLEXIBLE DUCTING

Flexible ducting can be cut to length. *Be sure that the cut length is adequate to allow for compression and expansion for installation or removal.

Duct ends add 5"

Duct ends press-fit into flanges 0.5"





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SYSTEM MENU

The Guardian control is equipped with a simple Menu system for System settings.

While all parameters are factory set the following guide may be used to access the Menu if needed.

CODE MENU QUICK REFERENCE TABLE

CODE	DESCRIPTION	RANGE	SETTING
P0	RH/DRH	H/C	H
P1	HYSTERESIS	1-50%	2
P2	SET POINT MAX	99	60
P3	SET POINT MIN	1	40
P4	CALIBRATION	+ - 10	0
P5	DEADBAND	0-10	0
P6	HIGH RH ALARM	ON-OFF	ON-62
P7	RESTORE FACTORY SETTINGS	ON-OFF	OFF



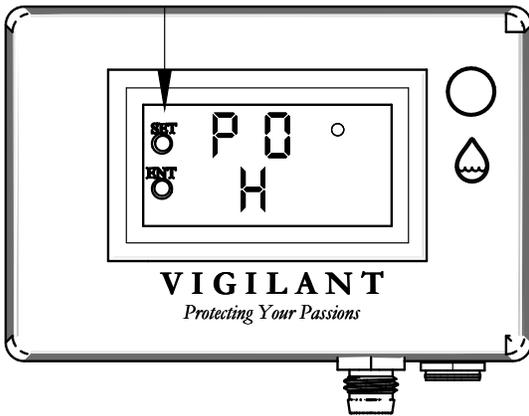
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SYSTEM MENU

MENU ACCESS

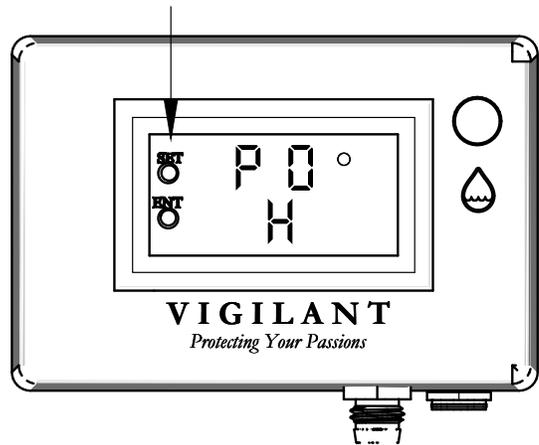
1

PRESS AND HOLD **SET** FOR 3 SECONDS
THE FIRST MENU CODE AND VALUE WILL BE DISPLAYED



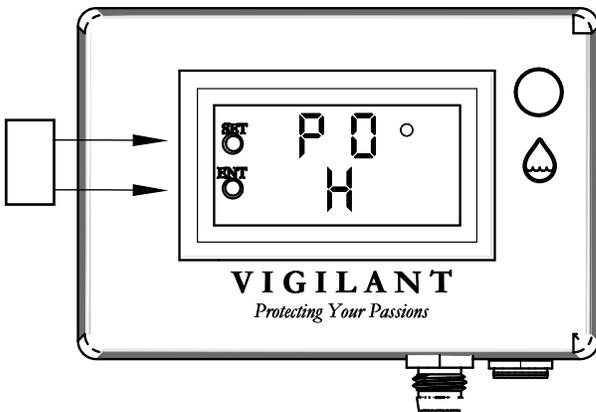
2

TAP **SET** TO SCROLL THROUGH THE MENU CODES



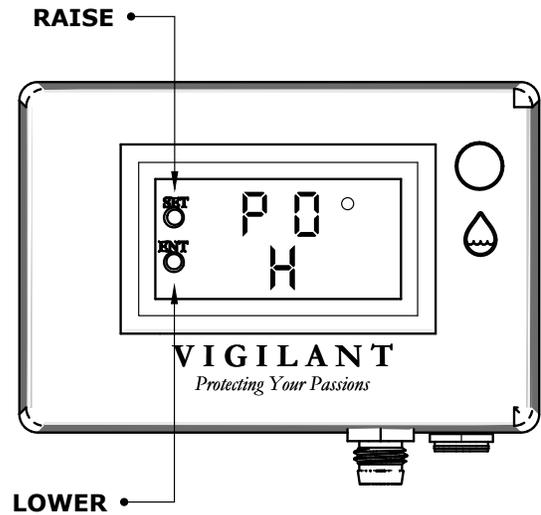
3

PRESS **SET** AND **ENT** AT THE SAME TIME
TO ENTER OR EXIT THE MENU



4

TAP **SET** or **ENT** TO CHANGE THE VALUE





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SYSTEM SPECIFICATIONS

SYSTEM	DIMENSIONS LxWxH	CONDITIONING CAPACITY FT ³	RESERVOIR CAPACITY	ACCURACY	NOISE dB	CFM	POWER
G-10	13"x4.1875"x4.625"	10	1.75 Qt.	2%	34	40	100-240 VAC 50-60 Hz
G-10-HIGH OUTPUT	13"x4.1875"x4.625"	15	1.75 Qt.	2%	40	53	100-240 VAC 50-60 Hz
G-10-DUCTED SUPPLY	13"x4.1875"x6.1875"	10	1.75 Qt.	2%	40	53	100-240 VAC 50-60 Hz
G-10-FULLY DUCTED	13"x4.1875"x6.1875"	10	1.75 Qt.	2%	40	53	100-240 VAC 50-60 Hz
G-100	15.25"x8.5"x8.5"	100	1.75 Gal.	2%	36	90	100-240 VAC 50-60 Hz
G-100-DUCTED SUPPLY	15.25"x8.5"x10.625"	100	1.75 Gal.	2%	41	115	100-240 VAC 50-60 Hz
G-100-FULLY DUCTED	15.25"x8.5"x10.625"	100	1.75 Gal.	2%	41	115	100-240 VAC 50-60 Hz
G-150	15.25"x8.5"x8.5"	120	1.75 Gal.	2%	36	90	100-240 VAC 50-60 Hz
G-150-HIGH OUTPUT	15.25"x8.5"x8.5"	150	1.75 Gal.	2%	41	115	100-240 VAC 50-60 Hz
G-150-DUCTED SUPPLY	15.25"x8.5"x10.625"	120	1.75 Gal.	2%	41	115	100-240 VAC 50-60 Hz
G-150-FULLY DUCTED	15.25"x8.5"x10.625"	120	1.75 Gal.	2%	41	115	100-240 VAC 50-60 Hz



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WARRANTY

Register your warranty online at vigilantinc.com/warranty

Limited 1-Year Electronics Warranty

Upon registering your system with Vigilant, your Vigilant electronics are covered under our limited one-year warranty. All Vigilant electronic products are guaranteed to be free from defects in materials and/or workmanship for up to one year from date of purchase. Vigilant, at its sole discretion, may repair or replace defective components or products within this one-year period.

Any and all component(s) determined to be defective by Vigilant, must be returned at the owner's expense to Vigilant along with a copy of the original sales receipt.

Conditions to Electronics Warranty

- Vigilant is not responsible for damage incurred during a product's return as a result of improper packaging. It is strongly suggested that all original packaging material from Vigilant be retained for returns.
- Vigilant is not responsible for any damage to property that results from the failure of a Vigilant product or product component.
- Warranty does not pertain to any customer-applied finishes, or any damage caused by neglect, abuse, misuse, improper operation, or unforeseen circumstances.
- Warranty is considered null and void if the online warranty registration is not completed within 60 days of receipt of your product.
- Warranty is non-transferable and valid for the original owner only.

Vigilant is a reseller for many fine products in the industry. Products resold by Vigilant carry the original manufacturer's warranty.

Please contact Vigilant at 888-812-4427 if you have any questions about your warranty. Learn more about our warranty details at vigilantinc.com/guarantee.