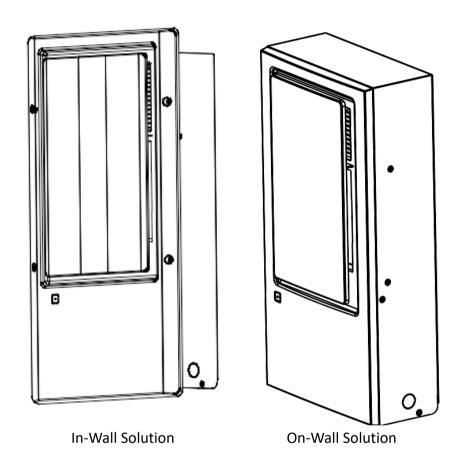
Installation and Operation Manual

IW-25-4 Dehumidifier



Please Read and Save These Instructions



Innovative Dehumidifier Systems, LLC.

6260 Ocean Highway 17 West Ocean Isle Beach, 28469 910-579-DEHU 910-579-3348

www.HumidityHappens.com

Table of Contents

Safety Notes	2
Identification	3
Electrical Supply	3
Principle of Operation	3
Dehumidifier Diagram	4
Dimension Diagram	5
Dehumidifier Installation General	6
In-Wall Solution Only	8
On-Wall Solution Only	9
Optional Condensate Pump Installation	11
Operating Instructions	12
Maintenance	13
Wiring Schematic	14
Troubleshooting	15
Warranty Information	16

Safety Notes

- The **IW-25-4** Dehumidifier must always be connected using a grounded electrical connection as required for all electrical appliances. The warranty is voided and all responsibility for the operation is born by the owner if non-grounded wiring is utilized.
- The **IW-25-4** Dehumidifier must only be installed, maintained and serviced by a qualified technician. Follow all state and local plumbing and electric codes.
- The IW-25-4 Dehumidifier is intended only for operation when the unit is wall mounted or in wall and level. Any other orientation could cause water to contact electrical components.
- If any water may have spread throughout the unit, the unit should be opened and allowed to dry thoroughly before reconnecting to electric and restarting.
- For proper operation, no obstruction should be located within 36" of the discharge of the unit
- Do not insert any objects or fingers into the inlet or discharge. If service is required, call a qualified technician. All work on unit should be done with the unit "off" and unplugged or the breaker turned "off."

- Do not use water to clean the unit exterior. Only use a damp cloth to clean the exterior and always unplug or disconnect the power of unit first.
- The drain hose must be installed to ensure the proper flow of condensate water to a drain source.

Identification:

For future reference, write down the model, serial number, date of purchase so you can identify your unit when seeking assistance in the future. The data label on the side of your unit has key characteristics of your specific unit.

Model Number	IW-25-4
Serial Number	
Date of Purchase	

For additional questions concerning the operation of your dehumidifier, please:

- Contact your installing contractor
- □ Please call Innovative Dehumidifier systems, LLC. Support Team at 910-579-3348

Electrical Supply:

Power Supply: 120 V, 60 Hz AC, Single Phase

Outlet Requirement: 3-Prong, GFCI

Circuit Protector: 15 Amp Time Delay Fuse or Circuit Breaker

WARNING: 120 Volts AC may cause serious injury from electric shock.

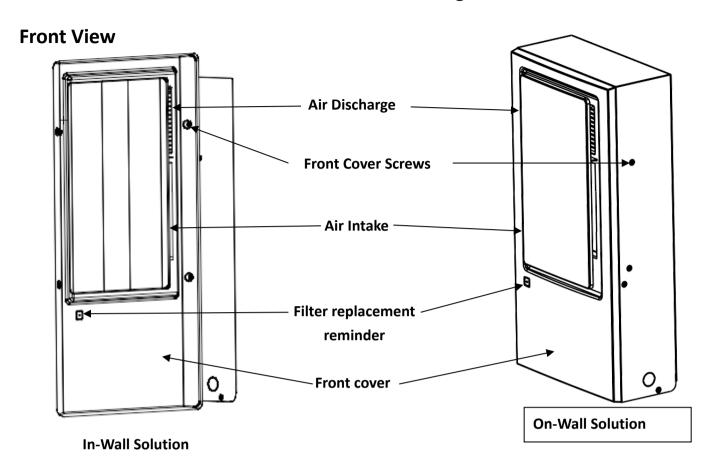
To ensure safety:

- 1. Disconnect electrical power before servicing
- 2. Only plug unit into grounded electrical circuit
- 3. Do not use extension cord
- 4. Do not use plug adapter

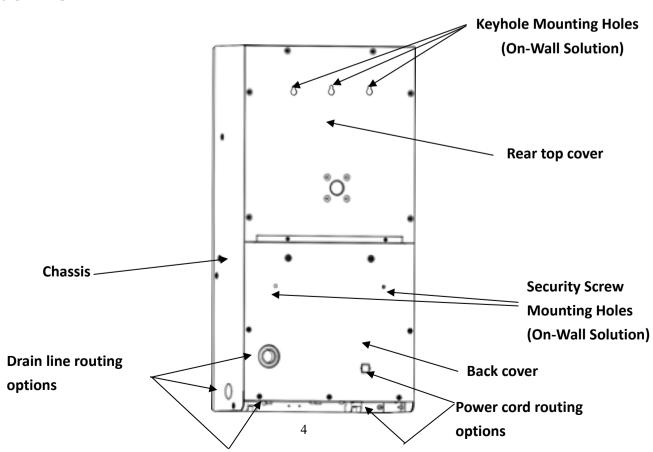
Principle of Operation

The IW-25-4 Dehumidifier utilizes its integral humidistat to monitor the conditioned space. When the relative humidity goes above the selected set point, the dehumidifier will energize. Air is drawn across an evaporator coil, which is cooler than the dew point of air. This means moisture will condense out of the air. The air is then reheated through the condenser coil and distributed back into the room.

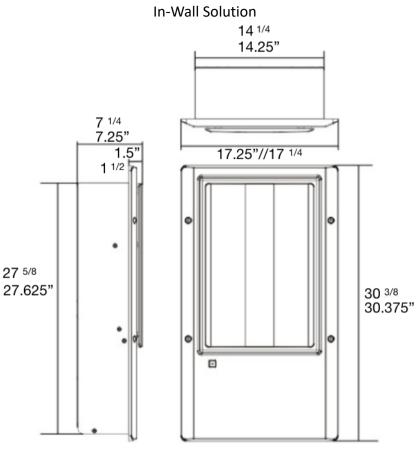
IW-25-4 Dehumidifier Diagram



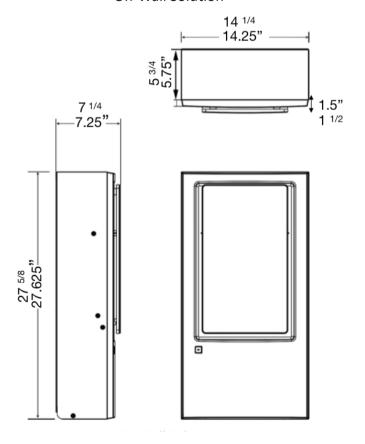
Back View



Dimension Diagram

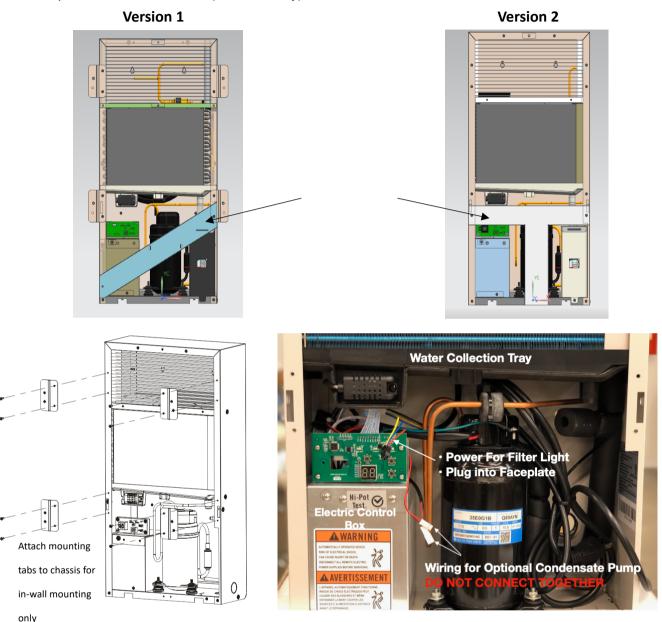






Dehumidifier Installation

Step 1. Cut the two zip ties, and remove the shipping bracket. Fasten mounting tabs (4) with screws provided to the chassis (In-Wall Only)



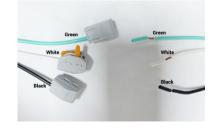
Step 2. Connect power to unit using either included 10' power cord or the unit can be hardwired. WARNING!

SHUT OFF BREAKER / POWER / Make sure power cord is unplugged BEFORE Wiring Unit.

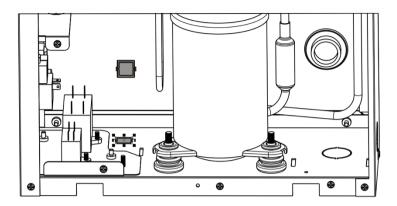
There are two reserved power cord holes, one on the back and one on the bottom of the unit.

Remove appropriate knock out as needed. Complete electrical connections:

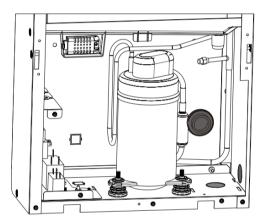
- White to White (L)
- Green to Green (GRN)
- Black to Black (N)



After complete electrical connections, slide electrical connection inside unit, fasten the strain relief to the power cord and then snap it on the selected power cord holes. All state and local electrical codes must be adhered to for proper unit operation and warranty compliance.

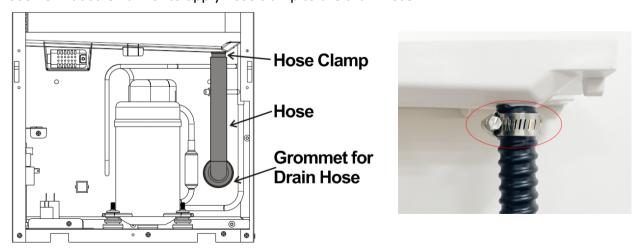


Step 3. The drain hose can be routed through the back, side, or bottom of the unit. Remove the appropriate knock-out or plug for your application.



Pipe Connection (No Pump):

Step 4. Slide the grommet over the drain hose and snap into place at the selected drain location. Use hex nut screwdriver to apply hose clamp to the drain hose.

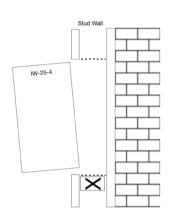


IN-WALL ONLY - SEE PAGE 9 for Balance of ON-WALL Installation Instructions

NOTE: If mounting unit to drywall, position mounting template so that 1 of the keyhole mounting locations is on a stud.

- **Step 5.** Select mounting location between two studs.
- **Step 6.** Using the mounting template on the front cover box, mark install location on wall.
- Step 7. Cut hole. (Rough Opening Dimensions: 28.0" x 14.5" 5.75")
- **Step 8.** Lift the unit and place it near the wall opening to route electrical wires and drain hose through appropriate knockouts.
- Step 9. Once electrical and drain hose are routed through the unit, set the unit into the wall.



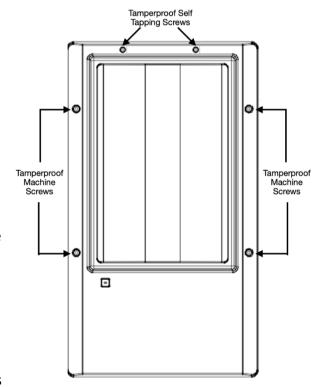


Step 10. The chassis of the units slips in the wall from the front and is secured by the four mounting tabs with screws (not provided). **Ensure the unit** is level and the bottom of the unit is supported before screwing through the drywall and into the studs.

Step 11. Connect the drain line to the drain source making sure to have adequate slope on the drain hose.

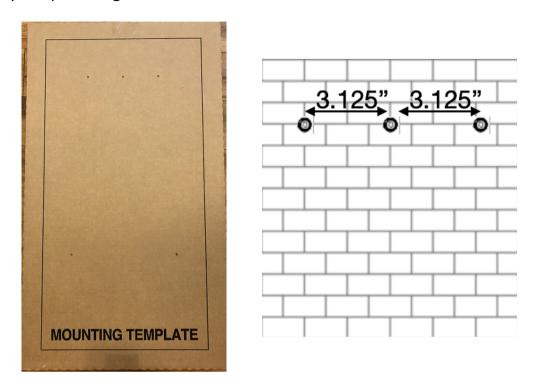
- **Step 12.** Turn breaker/power back on.
- **Step 13.** Set the digital controller to desired RH. See Operating Instructions (Page 12)
- **Step 14.** Plug filter light wire from control board into diffuser cover.

Step 15. Install diffuser cover by aligning the lower tabs first, then setting the cover back against the wall. Insert the included six tamper-resistant screws to secure the diffuser cover.

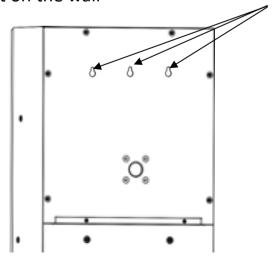


ON-WALL ONLY (SEE PAGE 8 for IN-WALL Specific Instructions)

Step 5: Using the mounting template to locate holes, install 3 screws on the wall (Select appropriate hardware based on application). Leave screw head 3/16" out from the wall surface to allow the unit to be slipped over the screws into the teardrop shaped hanger holes on the rear of the dehumidifier.

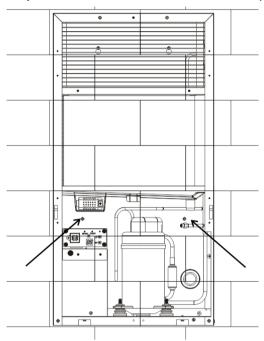


Step 6: Hanging the unit on the wall



Position keyhole mounting slots over screws in wall. Ensure center keyhole hits stud. Allow unit to drop onto screws.

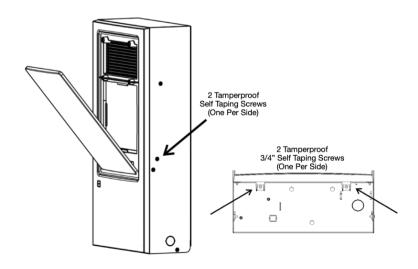
Step 7: Secure the unit with the 2 safety mounting screws (not supplied).



Step 8. Turn breaker/power back on.

Step 9. Set the digital controller to desired RH. See Operating Instructions (Page 12)

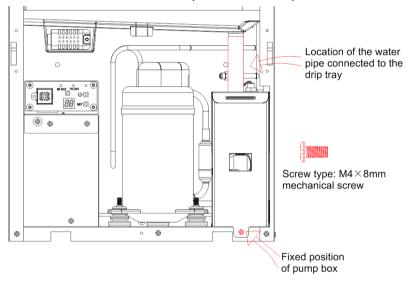
Step 10. Install diffuser cover by aligning the lower tabs first, then setting the cover back against the wall. Insert the included four tamper-resistant screws (2 tamper-resistant screws on the left and right sides and 2 tamper-resistant screws on the bottom) to secure the diffuser cover.



Optional Condensate Pump Installation:

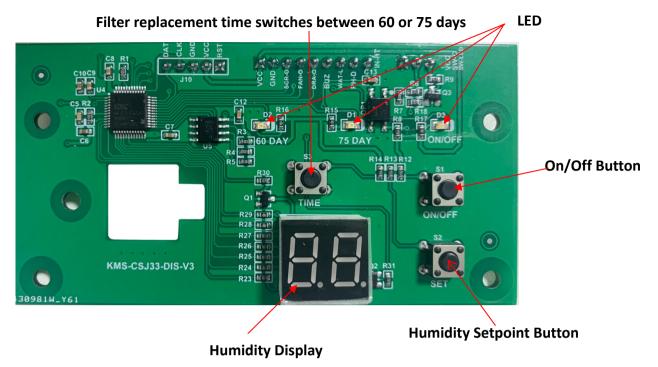
SHUT OFF BREAKER / POWER BEFORE BEGINNING INSTALLATION.

- 1. Remove the shipping to prepare for installation of pump assembly.
- 2. Insert included ¾" DIA short drain line into pump reservoir. This drain line will eventually connect to water drain tray.
- 3. Insert condensate pump into chassis while routing attached drain line and check valve through desired chassis drain hole location (back, bottom, side).
- 4. Attach pump to chassis with included screw.
- 5. Connect other end of short $\frac{3}{4}$ " DIA drain line to drain on drain tray just about pump reservoir insuring that other end of $\frac{3}{4}$ " DIA line remains in pump reservoir.
- 6. Connect power supply line from circuit board to power line from condensate pump
- 7. Connect float switch line from circuit board to switch line from condensate pump
- 8. Connect included long condensate line to check valve connected to pump. Route condensate line to desired drain. NOTE: Pump can pump up approximately 10'. After initial vertical rise, condensate line must flow down to drain without any additional loops or vertical rises.





Display Board



Operating Instructions



Plug the unit in and the display will show the current room relative humidity. Press the on/off button, and the machine will beep twice indicating it is ready for automatic service. If the humidity is below setpoint, it will remain in standby condition. The on/off led will flash indicating the unit is in standby mode. If the humidity is above setpoint, the unit will turn on and begin to remove moisture from the room. The on/off led will be in constant on mode while the dehumidifier is in on mode.

Press the on/off button again, and a single beep will indicate that the unit is turning off. No room conditioning will occur until the unit is turned on again. The on/off LED will be turned off.



2. Setting the Humidity Level

Press the SET button to set indoor humidity. The humidity display will shift from displaying the actual room humidity level to the current setpoint. The humidity can be in 1% increments from 36-90%. Pressing the SET button increases the setpoint by 1% unit you reach 90%, then rolls over to "CO" and increases from there.



3. Time TIME

Used to adjust the filter replacement time (selection of 60 days or 75 days).

Maintenance

WARNING: 120 Volts AC may cause serious injury from electric shock. Be sure the unit is powered off and unplugged or circuit breaker is turned off before removing front cover to service unit.

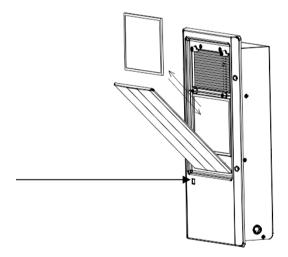
1. Unit Maintenance

Once a month, complete the following:

- A. Clean or change the reusable filter. Reset the filter maintenance light
- B. Lightly wipe or vacuum the grill, humidity sensor, and coil fins
- C. Spray the coils with self-rinsing, foaming coil cleaner
- D. Check the airways and drain hose to make sure they are unblocked

2. Filter Maintenance Reminder

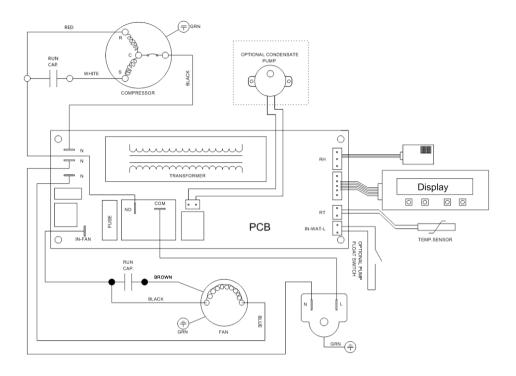
- A. When the filter maintenance red light on the front panel lights up, open the front panel and wash or replace filter as necessary. Light is off during normal operation
- B. After the filter replacement is completed, press the filter reminder reset button to reset the filter replacement time.



3. Drain Maintenance

- A. Mix a 6 ounce solution of vinegar (2 oz vinegar + 4 oz water)
- B. Remove diffuser and filter from face plate so you have access to the drain tray
- C. Disconnect power to the unit
- D. Pour the cleaning solution into the drain tray at the base of the coils. If any cleaning solution gets on the coils, flush with water.
- E. Allow solution to soak 15 minutes.
- F. Reconnect unit to power
- G. Pour in 12 ounces of clean water to flush out the drain line. If optional pump is installed, it should cycle 2x.

Wiring Schematic



Troubleshooting

Symptom	Cause	Solution
Display is Blank	Poor Connection	Verify that both ends of the power cord are plugged in
	Power Outage	Reset power
Loud Noise	Machine is not level	Reposition unit so it is level
	Filter jammed	Replace filter
	Machine not supported by blocking	Blocking is required
	Unit not Installed with 4 screws or poor quality screws	Unit MUST be installed with 4 screws
	Machine is Touching/rubbing an Unrelated Item	Isolate items to eliminate noise/ vibration
No Airflow	Filter is Dirty	Clean the filter
	Air Inlet or Outlet is Blocked	Clear the blockage
Error Code: E1	Humidity Sensor or Communication Error	Check to ensure that the sensor wire is connected at both ends. if no issues are visible, the sensor may be faulty.
Error Code: E4	Problem with Pump	Verify that the pump is properly installed and functioning. If so, unplug the unit for two minutes, then restart.
Error Code: LO	Room Temperature is below 33°F	Increase the room temperature so it is within operating range (above 33°F). If error still displays, check sensor.
Error Code: HI	Room Temperature is above 105°F	Decrease the room temperature so it is within operating range (below 105°F). If error still displays, check the sensor

Warranty

Innovative Dehumidifier systems, LLC. warrants the equipment to be free from defects in workmanship and materials for a period of 60 months after shipment. This warranty is limited, however, to the repair or replacement of defective equipment at the manufacturer's discretion. This does not apply to optional condensate pump, which has a 1 year warranty. The optional exterior sleeve is also excluded from the 5 year warranty.

If it is necessary to return unit for service, customer is solely responsible for proper packaging and transportation costs to and from the service center. Customer must initiate warranty process by contacting IDS. Do not send any component or product back to IDS without a Return Material Authorization.

This limited warranty does not apply to any part or component that is damaged in transit or when handling, during installation, has been subject to misuse, has not been installed, operated or serviced according to the Seller's instructions, or has been operated beyond the seller's – rated capacity or has been altered in any way. Routine maintenance is not covered by this warranty. Lack of proper maintenance voids this warranty.

This warranty does not cover corrosion, freezing or acts of nature – flooding, fire, water damage, power surges, and hurricane or storm damage.

Seller's liability is limited to replacement of defective parts or components and does not include any cost of labor (including, but not limited to, labor to remove and/or reinstall any defective part), refrigerant or piping. Customer may elect to have unit fixed locally with prior authorization in which case required replacement parts will be sent to customer at customer's expense.

IDS shall not be responsible for loss of use of any product, loss of time, inconvenience, or damage to other equipment, or any other indirect or consequential damage with respect to property whether as a result of breach of warranty, neglect, or otherwise.

THE WARRANTIES AND LIABILITIES SET FORTH ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. IDS total liability, regardless of nature of claim shall not exceed original purchase price of the product. If a product or component is replaced while under warranty, the applicable warranty period shall not be extended beyond the original warranty time period.

The foregoing shall constitute the total liability of seller in the case of defective performance of all or any of the equipment or services provided to Buyer. Buyer agrees to accept and hereby accepts the foregoing as the sole and exclusive remedy for any breach or alleged breach of warranty by Seller.