

AIO® Wall Mounted (Gen 3)

Installation Guide



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DISCLAIMER



IMPORTANT: Installers must complete an INNOVA training session before installation. This document does not replace required training. Failure to complete training may result in improper installation and may void the warranty.

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Illustrations may not be to scale, and all information and dimensions stated herein are subject to change at any time at the sole discretion of INNOVA. Benefits described herein apply only to the extent that the product is installed correctly in the correct application and used for its intended purpose.

INNOVA is constantly innovating and improving its products and reserves the right to modify product design and specifications without notice and without incurring any obligations.

CERTIFICATION

The AHRI Certified® participation in the verification of individual units is available at www.ahridirectory.org

ETL Listed. Control Panel
60335-2-40:2022 Edition
Ed.4 | UL 60335-1:2016
Ed.2

MODEL NUMBER

The code identifies the unit type, voltage, accessories, and options. See the diagram below for more details.

Figure 1. AIO® Model Numbering



* 8" Vents : Just generation
6" Vents : Generation
** Field convertible to 90°
*** AIO® Vertical Stack X

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1. ABOUT THIS MANUAL

This manual outlines the procedures for safely installing the unit. Following these instructions reduces the risk of equipment damage, improper installation, and potential safety hazards.

Important: Read the installation manual and user manual in full before beginning any installation tasks. Pay close attention to all safety warnings and notices.

1.1 Specific language

Some language and symbols in this manual have specific meanings.

Reference to the product

Any reference to “the unit” is meant to refer to the AIO® Wall Mounted (Gen 3) unit.

Unit orientation

All directions in this guide (left, right, top, and bottom) are given from the perspective of facing the unit.

Role definitions

This guide is primarily intended for installers. The roles of end users and service technicians are also defined here for reference.

- **User:** a non-expert who can safely operate the unit and perform basic diagnostics and maintenance.
- **Installer:** a trained and certified HVAC installation technician responsible for the correct installation of the unit as indicated in the installation guide and in accordance with all applicable local and national codes.
- **Service technician:** a trained and qualified HVAC professional who performs service or maintenance in compliance with Occupational Safety and Health Administration (OSHA) safety requirements, recognized industry best practices, and all applicable federal, state, and local codes and standards.
- **Trained HVAC technicians:** a group term for both installation and service technicians.

Illustrations and diagrams in this guide

All illustrations and diagrams in this guide represent installations utilizing INNOVA-approved accessories. Actual field installations may vary; additional components, adjustments, or modifications may be required to comply with project-specific requirements, applicable codes, and standards.

1.2 Safety notices, icons, and symbols

Warnings, Cautions, and Attentions are included throughout this manual. Read each carefully and follow the stated instructions.

Safety notices

Each Safety Notice represents the level and immediacy of risk. Each warning panel displays a

background color and a signal word. They may include a pictogram to specify the topic.

DANGER

The red notice with the **DANGER** title indicates an imminent hazard that, if not avoided, will result in death or serious injury.

WARNING

The orange notice with the **WARNING** title indicates a potential hazard that, if not avoided, could result in death or serious injury.

CAUTION

The yellow notice with the **CAUTION** title indicates a hazardous situation that, if not avoided, could result in minor to moderate injury or property damage.

Warning pictograms

The warning pictograms are used in conjunction with the warning panels.



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Annotation icons

Annotations are provided throughout this guide. It is essential to read each carefully and follow the instructions stated.



Indicates prohibited actions or conditions that could result in equipment damage and may void the warranty if not avoided.



Indicates important information required for proper installation and operation. Failure to follow these instructions may result in reduced system performance.



Indicates supplemental information, tips, or useful background information.

2. SAFETY GUIDELINES – READ BEFORE INSTALLING

This guide outlines the steps to safely and securely install the AIO® Wall Mounted unit. By following these instructions, installers can significantly reduce the risk of equipment damage.

The installer is responsible for ensuring that the unit is installed safely and securely, in full compliance with all applicable federal, state, and local codes.

The precautions in this guide supplement, rather than replace, established safety practices. If there is a conflict, always follow the more stringent requirement.

Only a trained and certified HVAC installation technician may install this unit.

Read the entire installation guide before installing the unit. Follow all safety notices, warnings, and labels carefully. Failure to do so may result in property damage, serious injury, or death.

2.1 Fire/explosion hazards

**WARNING**

- Do not store the unit in a room with continuously operating ignition sources (e.g., open flames, operating gas appliances, or electric heaters).
- Do not use any means to accelerate defrosting or clean the equipment other than those recommended by the manufacturer.
- In the event of abnormal conditions (such as a strange or burning smell, noise, or smoke), turn off the unit and disconnect it from its power source immediately. Report the issue immediately to your INNOVA representative or distributor.
- Servicing shall be performed only as recommended by the manufacturer.

2.2 Refrigerant hazards

**DANGER**

- Flammable refrigerant is used. Only qualified HVAC technicians are authorized to handle refrigerant charging, recovery, or disposal.
- Do not pierce or burn refrigerant copper tubing. Be aware that refrigerants may not contain an odor.
- Do not puncture the refrigerant copper tubing.
- Do not expose the refrigerant copper tubing to heat sources, sparks, or open flames.
- Do not use an open flame or high-heat sources for leak detection (for example,



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2.3 Hot surface hazards

 **DANGER**

- Only trained HVAC technicians may access internal components while the system is hot.
- Hot parts: do not operate the unit with the cover removed. Certain components (compressor, coils, discharge piping, and other parts) may reach high temperatures during operation.

 **CAUTION**

- Allow sufficient time for surfaces to cool before handling or servicing. Contact with hot parts can cause burns or damage to equipment.
- Keep flammable materials away from hot surfaces at all times.
- Use appropriate PPE (such as gloves and protective clothing) when handling or working near hot components.

2.4 Electrical hazards

 **DANGER**

- Employ a qualified electrician to perform all electrical wiring and connections. These must comply with the National Electrical Code (NEC) and any applicable state and local codes.
- Before installation, maintenance, or servicing, disconnect power to the entire system, including remote disconnects, peripherals, third-party devices, power backup systems, and other devices operating on the network, and turn off breakers or switches located remotely, such as at the fuse box.
- Follow all OSHA-compliant lockout/tagout (LOTO) procedures.
- Do not open access panels until the power has been fully disconnected.
- Do not tamper with or modify the unit, because this could create unsafe operating conditions.

 **WARNING**

- A certified electrician must make all connections.
- Wiring and grounding must comply with the National Electrical Code (NEC) and all applicable state and local codes and regulations. Improper wiring or loose connections may cause overheating, fire, or electric shock.
- Connect only to a dedicated branch circuit of proper ampacity, protected by a correctly sized overcurrent device (per unit nameplate and wiring diagram).

 **CAUTION**

- Follow OSHA-compliant Lockout/Tagout (LOTO) procedures.
- Use only standard circuit breakers and fuses rated for the unit.



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- Do not connec... lightning rods...
- Ensure electr... secured befor...
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2.5 Moving parts



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- Do not remov... covers, guar...



- Only trained... to service the...
- Reinstall all p... your hands o... injury.

2.6 Handling and mechanical hazards

 **CAUTION**

- Only a qualified HVAC professional may install this unit. The installer must be licensed, insured, or bonded, as required by state and local regulations.
- Protect control panel surfaces from being pressed with tools or sharp objects; use only your fingers to prevent damage.
 - The unit is heavier on the right side (compressor side) and may be unbalanced when lifted.



Installation by anyone other than a trained and certified HVAC installation technician voids the unit's warranty.

 **CAUTION**

- Edges inside the unit may be sharp; wear hand protection when handling sheet-metal parts to prevent cuts.

 **WARNING**

- The AIO® unit is packed with plastic materials that pose a suffocation risk to small children and infants. In addition, some packing materials may have sharp edges or parts that can cause injury.
- It is the installer's responsibility to remove all packing materials from the installation site and dispose of them properly, in accordance with all relevant regulations.

 **CAUTION**

- The unit must remain upright at all times.
- Tipping the unit — whether on its side, back, or at an angle can damage the compressor welds, causing refrigerant leaks.
- The package must be transported upright. If it was not, notify your INNOVA representative or contractor immediately.

 **DANGER**

- Disconnect all electrical power before making any electrical connections. This includes turning off breakers or switches located remotely, such as at the fuse box.
- Follow all OSHA-compliant lockout/tagout (LOTO) procedures.
- Employ a qualified electrician to perform all electrical wiring and connections. These must comply with the National Electrical Code (NEC) and any applicable state and local codes.
- Do not open access panels until the power has been fully disconnected.
- Do not tamper with or modify the unit, because this could create unsafe operating conditions.
- Use copper conductors only.

 **WARNING**

The unit contains capacitors that may retain an electrical charge after the power is disconnected. To avoid electrical shock or serious injury:

- Wait at least 5 minutes after disconnecting power.
- Confirm that all indicator lights are off.
- Verify with a voltmeter that capacitors are fully discharged before service.
- Do not begin any servicing or disassembly until all conditions above are met.

 **WARNING**

The AIO® unit contains a pressurized refrigeration system:

- Do not puncture, heat, or incinerate the unit.
- The system contains refrigerant and refrigerant oil under high pressure. Before performing any service on the refrigeration system, the refrigerant must be safely recovered to relieve system pressure.
- The type of refrigerant used in this unit is listed on the unit's nameplate.
- Use only manufacturer-approved refrigerants and additives. Use of non-approved substances may damage the unit and void the warranty.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerants can produce toxic gases if exposed to fire or high heat.
- Do not use an extension cord to power the unit.

 **CAUTION**

Make sure all louvers are closed or comply with the manufacturer's instructions for pressure drop and airflow. Blocked louvers or grilles that do not close properly may cause:

- Overheating
- Water damage
- Reduced performance
- Voiding of the warranty



Install the unit in a location that avoids impacts that could damage the unit.



This unit contains a refrigerant classified as A2L, which is highly flammable. The following safety instructions must be followed:

- Do not release refrigerant into the atmosphere. The unit has a Global Warming Potential (GWP) of 1.
- Install the unit in a well-ventilated area to prevent refrigerant buildup.
- Take reasonable precautions to ensure the unit is not exposed to open flames.
- The use of leak detectors is not allowed.
- Make sure the refrigerant concentration is below the permissible exposure limit (PEL) of 1,000 ppm.
- Refrigerant leaks can cause a fire or explosion. Follow ASHRAE 15, ARI 750, and all applicable safety regulations.
- Use only manufacturer-approved refrigerants with ASHRAE A2L classification. Refrigeration components must be re-fabricated or replaced with A2L-compatible components.
- If required, install a refrigerant leak detector that detects leaks and shuts down the unit.
- To prevent fire, wear safety glasses and gloves and use proper handling techniques for R-32.
- Store R-32 cylinders in a cool, dry space, away from sunlight, or other heat sources.
- Attach R-32 cylinders to the unit and keep them from swinging.



The unit must be installed in a location that is accessible only by trained and certified HVAC technicians. Grilles must be closed after installation.



- The unit must be certified either by an INNOVA technician or through the approved self-certification process before use.
- If the unit is used without certification, the warranty will not be activated.
- If the unit operates for more than 30 days without certification, the warranty will be permanently void.
- It is the installer's responsibility to ensure that certification is completed.

2.7 Installation environment hazards

⚠ CAUTION

- Do not operate the unit in or near an environment under construction or renovation. Dust and debris can enter the unit, causing malfunctions and reduced performance.
- Do not install above an elevation of 8,858 ft (2,700 m) unless specifically approved by the manufacturer — reduced air density may impair safe operation.
- Indoor installation only. Do not install outdoors or in locations exposed to rain, snow, or direct weather.
- When working at heights, follow all applicable fall protection regulations and guidelines. Use guardrails, harnesses, and barricade the area below to protect against falling objects.
- Verify the supporting structure can carry the full unit weight and operating loads, including vibration and dynamic loads.
- Install using proper anchors and fasteners, and apply the correct torque.
- Keep the unit horizontal at all times; never lift it by its covers, panels, or refrigerant copper tubing.
- Protect the unit from impact, vibration, tipping, dust, and corrosive atmospheres during installation and operation.
- Do not install or store the unit in rooms with continuously operating ignition sources (e.g., open flames, gas appliances, or electric heaters).
- Maintain required service clearances and ensure ventilation openings remain unobstructed. Obstruction can cause malfunction or overheating.
- Dispose of all packaging materials safely to prevent suffocation, tripping hazards, or fire hazards.
- Follow all manufacturer instructions and applicable local building codes.

⚠ WARNING

- Improper installation environments can result in fire, explosion, refrigerant leakage, equipment damage, or personal injury.
- Do not operate the unit in or near an environment under construction or renovation. Dust and debris can enter the unit, causing malfunctions and reduced performance.
- If the unit must be operated during construction or renovation, the air filters and accessible coil surfaces must be inspected and cleaned daily before operation.
- Failure to perform daily cleaning during construction use may result in damage and will void the warranty.

⚠ CAUTION

- Units installed in coastal, shoreline, or saltwater environments must be ordered with factory-installed corrosion protection.
- Failure to use a factory-protected unit in such environments may result in accelerated corrosion and will void corrosion-related warranty coverage.

2.8 Installer responsibilities

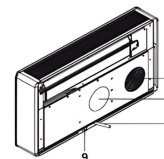
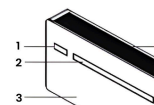
- Install the unit safely and in accordance with all applicable federal, state, and local codes and regulations.
- Ensure that you fully understand the product and the installation procedures before beginning the installation. Installation activities involve greater risk than normal system operation.
- Provide the customer with the information necessary to operate the system safely after installation.

The safety precautions in this guide supplement recognized industry best practices. If a conflict occurs, follow the more stringent safety requirement.

3. AIO® WALL

3.1 Components

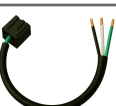
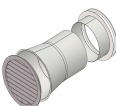
Figure 2. Unit Components



1	Onboard Touch Control
2	Supply Air Outlet
3	Front Cover Panel
4	Return Air Grille
5	Decorative Side Panel
6	Outdoor Air Intake
7	Outdoor Air Exhaust
8	Rubber Drain Hose
9	Anti-Lift Bracket
10	Electrical cover
11	Return Air Filter

3.2 Optional accessories

Table 1. Accessories list.

Picture	Part	SKU	Factory Installed	Field Installed
	1.8 kW set of electric heat strips	AWE09N3H1-3 AWK09N3H2-3	✓	
	ERV module	AWERV30-3		✓
	External Nebulizer Drain Pan Kit	C0657001B6 C0657001B7		✓
	Quick connect whip cord	W224A W226A		✓
	LCDI power cord (available in four sizes)	L159A L221A L229A L259A		✓
	Sunvent Louvers	LLA8		✓
	Thermaduct RLA8	RLA8		✓
	GWN Gateway - for LTCH20, TFTH20, and Modbus	GWN		✓
	GWX Gateway - LTCH20, TFTH20, MODBUS, BACnet, and third-party thermostats	GWX		✓
	LTCH20 Controller	LTCH20		✓
	TFTH20 Controller	TFTH20		✓
	LCD Infrared Controller	LCDW		✓
	Wireless Wall Mounted Infrared Controller	WRCH		✓
	Heat trace wire kit	GB1120		✓
	Underbody cover plate	GB0737II		✓
	Underbody cover plate (for unit with ERV module)	GB0744YU		✓

Picture	Part	SKU	Factory Installed	Field Installed
	Sidewall Adapter (Right/Left)	L01074II(R) L01075II(L)		✓
	Rubber Reducer Flange	RN300270A		✓



INNOVA, Inc. participates in the AHRI Unitary Small Heat Pump Equipment (USHP) Certification Program in accordance with the latest edition of ANSI/AHRI Standard 210/240. Products listed in the AHRI Directory of Certified Product Performance may be identified as "AHRI Performance Certified." Certification confirms that published performance ratings have been independently verified in accordance with AHRI requirements.

3.3 Unit rating

The unit's rating plate information, including model number, electrical markings. Refer to the unit, registering it, and the rating plate is located on the upper



Do not remove rating plate. If removed, warranty is void.

4. RECEIVING & HANDLING THE UNIT

4.1 Shipping configuration

The unit and wall bracket are shipped in a single carton. Other accessories are shipped separately.

4.2 Carton dimensions and weight

Figure 3. Carton illustration

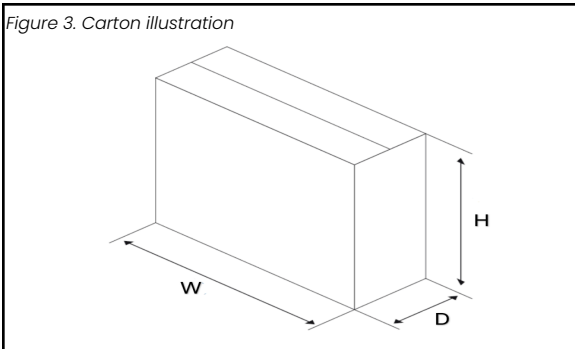


Table 2. Carton dimensions and shipping weight

Width (W)	43.30 in (1100 mm)
Height (H)	26.38 in (670 mm)
Depth (D)	10.04 in (255 mm)
Weight	99.21 lb (45 kg)

4.3 Handling the unit

⚠ CAUTION

- The unit must remain upright at all times.
- Tipping the unit — whether on its side, back, or at an angle can damage the compressor welds, causing refrigerant leaks.
- The package must be transported upright. If it was not, notify your INNOVA representative or contractor immediately.

To unpack the unit:

1. Inspect the packaging

- Upon delivery, check all cartons for visible damage.
- If there is damage, take clear photographs of the damage before opening the carton.
- If the unit was delivered on its side, note this on the delivery receipt and notify your INNOVA representative or contractor.



If the unit was delivered on its side, place the unit upright and wait at least 24 hours before operating to allow the refrigerant oil to settle.

2. Remove the unit from the carton.

- Carefully remove the unit from the carton while keeping it upright. The unit is heavier on the right side (compressor side) and may be unbalanced when lifted.

⚠ WARNING

- When lifting the unit, do not exceed the [Recommended Weight Limit \(RWL\)](#) defined by the National Institute for Occupational Safety and Health (NIOSH), and comply with all applicable national and local regulations for heavy-weight lifting.
- Always use two people to lift and install the unit.
- **Failure to use proper lifting techniques can result in back injury or other physical harm.**

- Check the interior of the carton for signs of refrigerant leakage using an electronic leak detector compatible with R-32.



If refrigerant leakage is detected inside the carton:

- Do NOT install the unit.
- Report the issue immediately to your INNOVA representative or distributor.

3. Perform basic functional testing (if necessary)

If the carton was damaged but the unit appears physically intact, after unpacking, test the unit in both heating and cooling modes. Report any irregularities or operational issues immediately to your INNOVA representative or distributor.

4. Verify package contents

Verify the contents of the carton against the [components list](#) to ensure that all components are present. If any items are missing, contact your INNOVA representative or distributor immediately.



- When removing the unit, handle it carefully to avoid damage to the wiring connections.
- Use extra care when handling the display/controls as it contains fragile components.
- Do not pull, twist, or bend the unsupported panel carefully to avoid damage to the connectors.
- Failure to follow these instructions may result in damage to the unit.

4.4 Inspecting the unit

After unpacking the unit, proceed to the next steps.

- Access the unit from the side of the unit and ensure it is secure. Refer to the documents.
- Inspect the unit for damage that occurred during shipping. If the unit appears damaged, contact your distributor.
 - Remove the unit from the underlying unit.
 - Photograph the unit to support your claim.
 - Clearly document the damage on the bill.
 - Notify your distributor immediately.



Report the issue immediately to your distributor.

Drain tube clearing

Before installing the unit, clear the drain tubes and pan.

- Open the front panel to access the interior of the unit.
- Locate the two drain tubes. The drain pan is located at the bottom of the unit, directly below the indoor heat exchanger. There is one drain tube for each heat exchanger.
- Check whether the drain tubes are blocked against the interior of the unit's upper (indoor) heat exchanger. If a tube is pressed against the plate, it may prevent proper drainage.
- If necessary, tilt the unit to relieve the pressure.

the tube remains securely connected to the drain pan after trimming.

5. TOOLS AND MATERIALS NEEDED

Ensure that you have the following tools and supplies on hand before you start the installation:

- Power drill (and hammer drill, if necessary) with assorted bits, paddle bits, and hole saws.
- Screwdriver set (for hand tightening components).
- Impact driver with assorted driver bits.
- Fastener tool.
- At least four 1/4" (6 mm) load-bearing wall anchors, each capable of supporting at least 50 lbs (22.7 kg) and removable without damaging the wall.
- Level (preferably a digital level).
- Silicon sealant with applicator (for sealing around external wall penetrations).
- UL-compliant air sealing tape and/or HVAC mastic or sealant (for airtight sealing of ducts and penetrations, as required by code).
- Wiring tools.
- Insulated foam board panels (for PTAC replacement with the AIO® Wall Mounted unit).
- PVC piping (required for external drain installations, long enough to extend beyond the exterior wall at the installation site).
- Mirror (for visual inspection behind the unit).
- Printed template for mounting the bracket. See [Section 6.1](#)

6. SITE PREP

The AIO® Wall Mounted unit consists of the following components:

- AIO® unit
- Two anti-lift brackets to assist in bracket movement (see [Section 6.1](#))
- Wall-wall bracket (see [Section 6.1](#))

6.1 Pre-installation

Before installing the unit, review the pre-installation checklist. Make sure you have the following items:

- ☐ Verify that the installation location meets the acceptance criteria in the AIO® Wall Mounted Unit Installation Sheet for the unit. The installation location must meet the following criteria:
 - A ground surface capable of supporting the unit.
 - The wall is made of a material capable of supporting the unit.
- ☐ Make sure you have the correct venting. Use only venting that meets the requirements for the unit. Use of venting that does not meet the requirements will void the warranty. The venting must be installed according to the louver specifications.
- ☐ Download and review the AIO® Wall Mounted Unit Installation Sheet for the louver you are installing. The louver may require holes to be drilled in the wall to accommodate the louver. Download the templates by clicking on the louver icon in the AIO® Wall Mounted Unit Installation Sheet. If you need help finding the correct louver, contact your distributor.
- ☐ Ensure that there is sufficient clearance around the unit. The clearance requirements are listed in the AIO® Wall Mounted Unit Installation Sheet.
- ☐ Check that the unit is properly aligned. The unit must be aligned with the wall and the ceiling. The unit must be aligned with the wall and the ceiling. The unit must be aligned with the wall and the ceiling.
- ☐ Confirm that the unit is properly aligned. The unit must be aligned with the wall and the ceiling. The unit must be aligned with the wall and the ceiling. The unit must be aligned with the wall and the ceiling.

To check for stud location, use the following steps:

Position the mounting template on the wall and check whether studs are located behind the holes marked A, where the bracket will be attached.

- ☐ Check if there is a drain hole in the wall aligned with the drain marking on the template (marked **D**). If there is not, ensure that drilling a drain hole in the correct location through the wall is safe.
- ☐ Ensure that all [clearance requirements](#) are followed.



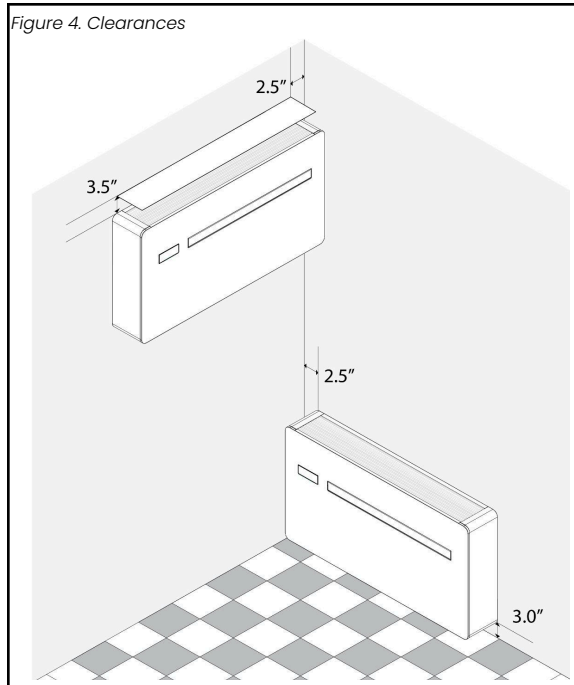
- Before installation, remove all panels and visible covers and verify that all components are present and undamaged.
- Take clear photographs of the unit with panels removed and submit them to the designated sales representative for verification before installation.
- Failure to document the unit condition and components before installation may affect warranty claims.

⚠ CAUTION

- Do not use impact drivers or power impact screwdrivers when installing or fastening components of the unit. All screws must be hand-tightened using appropriate manual tools. Over-torquing fasteners may damage panels, brackets, or threaded components.
- Where practical, avoid installing the unit in direct sunlight. Solar heating may cause the room-air temperature sensor to provide inaccurate readings, resulting in improper unit operation.

6.2 Minimum clearance requirements

The AIO® Wall Mounted unit's clearance requirements depend on how the unit is mounted. The following criteria detail the required clearances:



• Top Clearance

A minimum of 3½" (89 mm) clearance is required between the unit and any surface above it, including the ceiling or a shelf. Space is needed for the return airflow. However, to ease cleaning the filter and servicing the unit, 8" (203 mm) of clearance is recommended.

• Bottom Clearance

A minimum of 3" (76 mm) clearance is required between the unit and the floor to:

- Prevent any vibration noise from the unit.
- Allow the floor under the unit to be cleaned.
- Allow for proper drain maintenance.
- Avoid compressing the condensate line.

• Side Clearance

The AIO® Wall Mounted unit requires a minimum of 3.5" (89 mm) clearance on both sides to prevent vibration noise. However, for ease of cleaning, a clearance of 8" (203 mm) is recommended.

• Front Clearance

A minimum of 3" (76 mm) clearance is required in front of the unit to ensure proper airflow. The unit is located on a wall and should not inhibit performance. Ensure to keep the unit clear of plants, or any other objects that may restrict airflow.

• Rear Clearance

The rear of the unit should be at least 2.5" (64 mm) from the wall, with no other objects on the wall surface. A minimum of 2.5" (64 mm) clearance is required to enter the unit for service. Reduced efficiency may occur if the unit is not properly controlled. Any proper transition component is required to maintain the required clearance.

• Exterior Clearance

A minimum of 3" (76 mm) clearance is required in front of the unit, and 2.5" (64 mm) clearance from the building. The unit should be clear of the louvers.



- All external louvers should be properly sealed to prevent rainwater from entering the unit.
- Louvers should be properly maintained and cleaned to ensure proper airflow. Provisions should be made to ensure any debris is properly removed from the assembly is not obstructed.
- Failure to properly maintain the drainage mechanism may result in equipment damage or coverage.

7. INSTALLING THE AIO® WALL MOUNTED UNIT

To install the AIO® Wall Mounted unit:

1. [Affix the template to the wall.](#)
2. [Affix the wall bracket to the wall.](#)
3. [Prepare the vents.](#)
4. [Attach the exterior louvers.](#)
5. [Prepare a condensate drain.](#)
6. [Prepare the electrical connection.](#)
7. [Mount the AIO® unit on the wall bracket.](#)
8. [Fasten the Anti-Lift Bracket.](#)
9. [Check for air leaks.](#)
10. [Connect the unit to the building's power supply.](#)
11. [Connect the unit to the condensate drain.](#)
12. [Follow condensate drain protection and maintenance instructions.](#)
13. [Configure the AIO® Wall Mounted unit.](#)
14. [Test the unit.](#)
15. [Certify the installation.](#)

7.1 Affixing the template to the wall

Before beginning the installation, affix the appropriate template to the wall to mark the correct placement for the wall bracket and vent holes.



For some louver assemblies, it is necessary to drill holes in different locations.

To download the template as a PDF, click the link below:

[AIO Wall Mounted \(Gen 3\) Mounting Template \(V...](#)

To affix the template:

1. **Verify that you have downloaded and printed the correct template.**
If you are unsure whether you have the correct template, please contact your distributor or INNOVA.
2. **Tape the template to the wall.**
 - a. Position the template in the exact location where you want to install the unit.
 - b. Using a spirit level, ensure the template has a 1.25–2% downward slope towards the right.
 - A digital level is recommended for greater accuracy.
 - If using a spirit level, confirm the bubble is slightly off-center to the left. Use a ruler to verify that the total slope does not exceed 3/4" (20 mm).
 - c. Use painter's tape to affix the template to the wall.



The unit must be sloped toward the right side to operate properly. An incorrectly sloped installation may cause water leakage, especially in humid conditions.

7.2 Affixing the bracket to the wall and preparing the Anti-Lift Brackets

The wall bracket supports the full weight of the AIO® Wall Mounted unit. It must be securely installed to ensure both safety and proper operation.

WARNING

The AIO® Wall Mounted unit must be securely mounted according to the instructions below.

To install the wall bracket:

1. **Position the bracket:**
 - a. Align the wall bracket with the mounting template.
 - b. Use the markings at the top right of the template to position the bracket correctly.
 - c. Confirm that the holes on the wall bracket align precisely with the corresponding hole markings on the template.
2. **Select a mounting method:**

There are two approved methods for securing the wall bracket:

 - Stud and Anchor Combination Method (Recommended)
 - Full Anchor Method

To secure the bracket using the Stud and Anchor Combination Method:

- a. **Attach one side:**
 - Secure one side of the bracket to a wall stud.
 - Using a spirit level, verify that the bracket is aligned with the slope of the template before proceeding.
- b. **Attach the other side:**
 - Secure the second side of the bracket to another wall stud.
 - Confirm that the bracket remains properly aligned with the template.
- c. **Secure the bracket to the wall:**

Use a minimum of six screws to secure the wall bracket to the wall:

 - Two of the screws must penetrate the wall studs. These provide the primary structural support.
 - Use the two outermost holes on the wall bracket. Screwing these down prevents the bracket from shifting.
 - The remaining four holes may be fastened to drywall using four 1/4" (6 mm) load-bearing wall anchors that support at least 50 lbs (22.7

kg) and a wall.

d. Make sure the wall with no v

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When using the the anchors can unit.

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b. Make sure the wall with no v



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Uncertified installations will void the warranty.

4. Seal the bracket.

Apply a continuous bead of silicone sealant around the outer edge of the bracket where it meets the wall.

5. Install the anchors for the Anti-Lifting bracket.

Select four anti-lift bracket mounting locations on the template. If possible, select locations with studs. If attaching to studs is not feasible, install ¼" (6 mm) load-bearing wall anchors suitable for the wall. Mark the studs or properly install the anchors.

7.3 Preparing the vents

To prepare the vents:

1. Make vent holes
2. Install vent sleeves (if not integrated with louver)

Drilling vent holes

WARNING

Before drilling any vent holes, you must verify that there is no electrical wiring in the path of the boreholes. Drilling into live electrical wiring can result in **death, serious injury, and/or property damage**.

To drill the vent holes:

1. **Inspect the borehole path to ensure it does not intersect with any of the following:**
 - Live electrical wiring.
 - Load-bearing structural components.
 - Exterior architectural features that may be damaged or obstructed.
2. **Select the appropriate drilling equipment based on the wall material.**
3. **Choose the correct borehole diameter—8" (203 mm),** in accordance with the standard for all Gen 3 Wall Mounted units.
4. **Align the drill with the hole locations** as indicated on the template. Double-check positioning before drilling.
5. **Drill the boreholes with a slight downward pitch (2°–4°) toward the exterior.**

This helps prevent water from entering the unit through the vent openings.



Although the downward pitch reduces the risk of water intrusion, INNOVA does not guarantee complete protection under extreme conditions, such as hurricanes.

To install the vent sleeves:

1. **Insert the vent sleeves into the boreholes if they are not already integrated with the selected louver or vent assembly.**

Refer to the sleeve manufacturer's instructions for proper fit and alignment.
2. **Ensure the sleeve edges are flush with the interior wall surface or wall bracket.**

Use silicone sealant to fill any visible gaps between the sleeve and the borehole.
3. **Seal all around the sleeves to eliminate any air gaps.**

Seal both the inside and outside edges with a bead of silicone to ensure no leakage. The silicone on the interior of the sleeve, along the inside edge, and on the bottom half of the sleeve acts as a dam, preventing water from entering the unit.

CAUTION

If the vent sleeves are not properly sealed, the unit's fan may draw in insulation or exterior air, potentially causing performance issues or damage.

7.4 Attaching venting solutions

This section defines the requirements for use with the AIO® venting solutions for performance and selection, and provides instructions to ensure proper airflow and compliance.

While many venting solutions, including louvers or grilles, can be used with AIO® Wall Mounted units, only those that have been tested and approved for use with AIO® units are listed here.

Approved Louvers

The following louvers are approved for use with AIO® Wall Mounted units:

- Sunvent
 - LLA/F 8W
 - LLA/C 8W
- Thermaduct
 - RLA8



Using any louver not approved for use with AIO® units may result in unit failure, and void the warranty.

Selection considerations

When selecting a louver for use with AIO® heat pumps, several factors must be considered to ensure proper performance:

- **Pressure Drop:** The louver creates a pressure drop that reduces airflow is reduced, which increases condenser coil temperature and compressor temperature. The total combined pressure drop for intake and exhaust (62.3 Pa).
- **Leakage:** If a louver is not properly installed, the louver and unit may experience restriction and reduced performance. Refer to the specifications for more details.



The supply air must have a minimum velocity of 10 ft/min (3 m/s) as the air enters the unit. The return air must not exceed 10 ft/min (3 m/s).

- **Free Area:** The louver must have a free area that allows air to flow between slats.

For proper airflow, each intake and exhaust louver used with the AIO® Wall Mounted unit must provide a **minimum free area of 0.21 ft² (0.02 m²)**.

If using a more restrictive louver design, you can compensate by increasing the overall size of the louver and plenum to meet the required free area. Always refer to the louver manufacturer's specifications to verify the free area.

To install the exterior louvers:

1. Make sure that there are no obstacles in front of the louver installation.

- Maintain a minimum of 36" (914 mm) of free space in front of the louvers. Follow stricter code if local rules differ.
- Ensure that there is a minimum of 84" (2134 mm) between the louvers and any other external exhaust sources, such as kitchen hoods, bathroom vents, dryer exhausts, etc. If local mechanical and building codes require a greater distance than 84" (2134 mm), the stricter standard applies.

2. Install the louvers.

Follow the manufacturer's installation instructions.

3. Seal the louver installation.

- Provide continuous flashing and weatherproof sealing at all exterior penetrations and connections to prevent moisture intrusion and protect the building from water-related damage.
- Seal the louver sleeve tightly to the wallboard inside the room. Failure to do so may cause the unit's fan to suck insulation or other foreign material into the unit, causing damage.

⚠ CAUTION

Ensure that the vents and flashing are installed according to the manufacturer's specifications and properly sealed to prevent water damage.

7.5 Preparing a condensate drain

⚠ CAUTION

- For installations in regions subject to **freezing winter conditions**, drain line piping must strictly adhere to the following pitch (slope) requirements to prevent ice blockages, water backup, and potential property damage:
 - **Direct Outdoor Drainage:** Any drain line routing directly to the outside environment **MUST maintain a minimum 30% pitch (approximately 3.6 in. per 12 in. / 300 mm per 1 meter)**. This steep slope ensures rapid, complete water

⚠ CAUTION

evacuation before freezing can occur within the pipe.

- **Internal Riser Drainage:** Drain lines routed into an internal building riser **MUST maintain a standard minimum pitch of 2% (approximately ¼ in. per 12 in. / 20 mm per 1 meter)**.
- Do not allow sags, traps, kinks, or low points where water can collect and freeze.
- The installer must verify proper condensate drainage during commissioning before operating the unit.
- Failure to follow these pitching guidelines in freezing environments will void the warranty for water damage caused by frozen or blocked drain lines.

This section provides information about condensate drain options and how to prepare a condensate drain for the AIO® Wall Mounted unit.

Condensate drain options

The AIO® Wall Mounted unit features an integrated condensate management system. This system includes a pump and a misting head that disperses condensate onto the heat exchanger coil while cooling. The heat from the coil evaporates the moisture, eliminating the need for a traditional drain under these conditions.

However, in heating mode—or during cooling in low ambient temperatures (below 64.5°F / 18°C)—this evaporative system does not function effectively. In these scenarios, a dedicated condensate drain is required.

The unit includes a rubber drain hose at the bottom. This hose must connect to an appropriate drainage system, which can be one of the following:

• In-the-wall drain (recommended)

In this setup, the rubber hose connects to a drainpipe hidden inside the wall. The drainpipe carries the condensate to a code-compliant disposal method, including but not limited to floor drains, laundry drains, or indirect waste.

• Nebulizer

In this setup, the optional External Nebulizer Kit manages condensate from the unit's drain pan. It collects condensate water, vaporizes it through a nozzle with an integrated heater, and discharges it safely outdoors through a heated tube.

• Direct exterior drain



Note: Exterior drains should be a last-resort option.

In this configuration, the system conveys condensate directly to the exterior using the

condensate hose, in accordance with local drainage best practices.



Using exterior drainage is recommended for the following hazards:

- In winter, discharges can freeze, causing slips and falls.
- In warmer months, leaks can encourage mold and create slippery surfaces.

• Installation requirements

- The drain line must have a minimum 2% slope (2%) along its entire length to extend to the disposal point. Do not make sharp turns or use elbows with a minimum 90° bend. A downward slope of 2% (2%) is required instead of a 1% (1%) slope.
- Pipes run through walls must be wrapped in insulation.



Avoid using a barbed pipe into a wall. This can cause performance issues. Insert a pipe into the pipe.

CAUTION

Any portion of the condensate drain hose that may be exposed to warm, humid air should be insulated with closed-cell, vapor-impermeable insulation to prevent surface condensation. Uninsulated drain tubes may experience condensation due to the temperature differential between cold condensate and ambient room air, resulting in dripping water that can damage interior finishes and flooring.

To prepare an in-the-wall drain:

1. Install a drainpipe in the wall.

- Employ a qualified plumber.
- The drainpipe must have a minimum inner diameter of $\frac{3}{4}$ " (19.1 mm).
- The drainpipe must be topped with a 45° fitting.
- The opening of the 45° fitting must line up with the external condensate hole (marked **D**) on the template.
- If the drainpipe is routed via an external wall, wrap it in insulation and heat tape.

CAUTION

Only use self-regulating heat tape or heat tape designed for use under insulation. Use of other types of heat tape may result in a fire and void the unit's warranty.

2. Test the drain.

- Pour water into the drainpipe.
- Check for leaks.

To prepare an external drain:

1. Drill a drain hole.

- a. Bore a drain hole through the exterior wall. The drain hole must have a downward slope toward the exterior of at least $\frac{1}{4}$ inch per foot.
- b. Ensure that the drain hole and assembly allow for a downward slope of at least $\frac{1}{4}$ inch per foot from the condensate drain under the AIO® Wall Mounted unit.
- c. Additional drain protection can be provided by inserting a drain pipe into the drain hole and using it as a sleeve for the drain hose.

2. Insert the rubber drain hose through the drain hole or pipe.

3. Test the drain.

- a. Pour water into the drain pipe.
- b. Check for leaks.

7.6 Preparing the electrical connection at the unit

The AIO® Wall Mounted unit can be connected to the building's main power supply in one of two ways:

- Using the Leakage Current Detection Interrupter (LCDI) power cord.
- Hardwiring the unit directly to the building's main power supply using a Quick Connect Cable or making a direct connection.

WARNING

Only a qualified electrician may prepare the electrical connection.

WARNING

To prevent electrical shock, fire, or serious injury:

- An electrician must install a dedicated circuit breaker for all connection types (LCDI or hardwired).
- For hardwired installations, an emergency disconnect switch is also required:
 - Use a double-pole disconnect for 230V units.
 - Use a single-pole disconnect for 115V units that disconnects only the live (hot) wire.



To avoid damage from power surges, the unit must be connected to a dedicated surge protection device. Failure to use surge protection may result in equipment failure.



Do not ground the unit because it may cause a local or global information system to malfunction.

LCDI Power Cord Connection

You can purchase a dedicated LCDI power cord for the AIO® Wall Mounted unit. The unit can be connected to the building's main power supply by plugging the cord into a dedicated electrical outlet.

The outlet must be grounded and be within 6 feet of the unit.

Figure 5. Plug definition



NEMA 1-15P for grounded receptacles

WARNING

- Do not alter the LCDI power cord or plug.
- Do not use an extension cord to connect the LCDI power cord to an outlet.

Pre-Connection Checklist

Before connecting the LCDI power cord to the power outlet, check that:

- ☐ The power supply voltage and frequency comply with the data plate on the AIO® Wall Mounted unit.
- ☐ The power outlet is a grounded connection and is rated for the maximum wattage indicated on the data plate of the AIO® Wall Mounted unit.
- ☐ Power is supplied only through a power outlet compatible with the LCDI power cord's plug.
- ☐ The power supply has suitable protection against overloads and/or short circuits. Use a time-delay fuse or an equivalent device rated for the appropriate current.

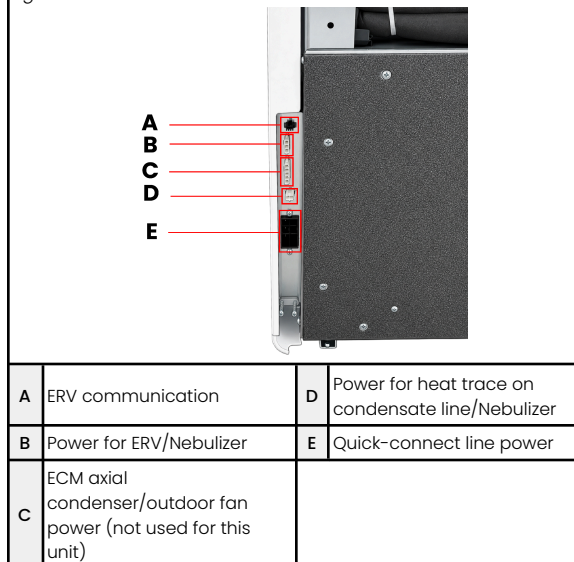
WARNING

The power supply cable (LCDI power cord) may be replaced only by a trained and qualified HVAC professional in compliance with current federal, state, and local codes.

To make an LCDI Power Cord connection:

1. Disconnect power at the main fuse or breaker panel.
2. Connect the quick-connection end of the LCDI Power Cord to the socket on the back of the unit in the lower-right corner (while facing the front of the unit). See sections 6 and 7 of our [Product Data Sheet](#) for more information.
3. Connect the plug end of the LCDI Power Cord to a properly selected power receptacle.

Figure 6. External Connections



Hardwired connection

The AIO® Wall Mounted unit can be hardwired directly to a correctly sized, dedicated circuit breaker. You can hardwire the AIO® Wall Mounted unit using a direct connection or a quick-disconnect whip cord, available from INNOVA.

All connections must be made in accordance with the National Electrical Code and any local code with jurisdiction. Only qualified electricians may perform this installation.

To prepare a hardwired connection:

1. Mount a junction box behind the unit

- For a direct connection, install the junction box at the location marked **H** on the [mounting template](#).
- For a connection using a quick-connect whip cord, install the junction box behind the lower right corner of the unit.
- A junction box provides a protected enclosure for electrical connections and is required by some electrical codes.
- Follow all applicable codes regarding flush, surface, or recessed mounting of boxes.

2. Wire the junction box

- Verify that the power to the breaker is off.
- Route the electrical wire from the breaker box to the junction box. Make sure that the wire is rated for the load.
- Terminate the wires within the junction box using listed connectors and install a cover to maintain enclosure integrity. If wiring directly to the unit, make sure that you have enough cable to reach the unit's electrical panel.

To make a quick-connect connection:

- Disconnect power at the main fuse or breaker panel.
- Connect the quick-connect whip to the receptacle behind the bottom right corner (while facing the front of the unit).

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- side panel. Lift...
8. Remove the tv...
- electrical cover...
9. Disconnect th...
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11. Connect the n...

7.7 Mounting bracket

Mount the unit on the bracket is secured. The bracket is secured with a 1.25–2% slope down to the drain. Necessary electrical and drain preparations must be completed before installation.

To mount the AIO® bracket:

1. Lift the AIO® W...
- prongs on the...

To ease placement away from the wa...

2. Check that th...
- It is recor...
- level.
- The unit s...
- slope to t...

- All mounting bracket holes provided by the manufacturer must be secured with appropriate fasteners. Do not leave any bracket holes unused.
- Failure to fully secure all mounting points may result in vibration, noise, improper support, or detachment of the unit.

7.8 Fastening the Anti-Lift Brackets

Two Anti-Lift Brackets are provided to secure the AIO® Wall Mounted Unit in place during installation and operation. The installation location of the Anti-Lift brackets is marked **E** on the mounting template.

WARNING

- Verify that the brackets are fastened as instructed.
- Failure to properly secure the Anti-Lift Brackets may result in the unit detaching from the wall bracket, causing serious injury or property damage.

To fasten the Anti-Lift bracket to the wall:

1. **Position the Anti-Lift Bracket over the template.**
 - Ensure the brackets align with the marked studs or anchors installed in section 6.2.
2. **Secure the Anti-Lift bracket to the wall.**
 - Use a ¼" (6 mm) screw to attach the Anti-Lift Bracket to a stud.
 - If ½" (6 mm) load-bearing wall anchors were installed, use the screw that accompanied that anchor. Only use anchors that support at least 50 lbs (22.7 kg) and can be removed cleanly from the wall.

7.9 Checking for air leakage

Many walls are not perfectly straight. This can create a gap between the vent sleeves and the rear of the AIO® Wall Mounted unit.

After mounting the AIO® Wall Mounted unit on the wall bracket and fastening the Anti-Lift Bracket, check that the unit is tightly up against the wall on all sides.

To check for air leakage:

1. Ensure the unit is securely attached to the wall bracket.
2. **Darken the room.**
 - Close the curtains in the room.
 - If there are no curtains, use opaque material to cover the windows.
 - Turn off the lights in the room.
3. **Check for air gaps between the unit and the wall.**
 - Inspect the area where the AIO® Wall Mounted unit meets the wall.

- Check all sides to see if there is any light infiltration. Use a mirror to detect light from behind the unit.
- If there are no gaps, there should be no light infiltration.

4. To eliminate air gaps:

- a. Lift the unit off the wall bracket and set it aside.
- b. Build up the area around the vent openings. Use closed-cell foam tape of appropriate thickness.
- c. Ensure that:
 - No air can move between the intake and the exhaust.
 - Outside air cannot infiltrate the room.
 - Exhaust air cannot leak back into the room.

7.10 Connecting the unit to the building's power supply

The unit can be connected to the building's main power supply using an LCDI power cord or a hardwired connection.

To connect the unit with an LCDI power cord:

1. Plug one end of the LCDI power cord into the power connector on the bottom-right side of the unit.
2. Plug the LCDI power cord into the power outlet prepared for the unit.
3. Secure all wiring.

Connecting the unit with a hardwire

You can purchase a whip cord to connect the unit to the power supply or create your own power cable by following NEC guidelines.

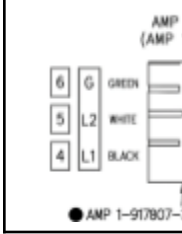


If you want to use your own wiring to connect the AIO® Wall Mounted unit to the junction box, verify that the wire gauge is appropriate for the voltage, amperage, and cable length.

To connect the unit using a whip cord:

1. Insert the male connector on the whip cord into the female connector on the unit's power terminal on the bottom right side of the unit.
2. Connect the wires on the other end of the cable to the junction box.
 - For 115V units:
 - Connect the black wire to the live.
 - Connect the white wire to neutral.
 - Connect the green wire to ground.
 - For 230V units:
 - Connect the black and white wires to the live phases.
 - Connect the green wire to ground.

Figure 7. Cord detail



To hardwire the unit
Watch the following

 AIO Wall Mount

7.11 Connecting



- For installation of winter condensation, strictly adhere to requirements for backup, and:
 - **Direct Condensation:** routing environmental 30% pit in. / 30% slope e. evacuat within t
 - **Internal Condensation:** routed mainta 2% (ap mm pe
- Do not allow where water
- The installer drainage du operating th
- Failure to fo freezing env for water da blocked dra



Perform is mou

This section provides the AIO® Wall Mounted condensate drain.

To connect the unit

1. **Prepare the unit**
Cut the end of make sure the (mm) of the h
2. **Connect the n**

- Gently push at least 4" (102 mm) of the rubber hose into the drainpipe.
- Be careful not to squeeze, crimp, or kink the rubber hose.
- Ensure that the rubber hose fits securely in the drainpipe and cannot pop out or come loose.

3. Insulate the rubber hose.

- Wrap the part of the rubber hose in the room with anti-condensation insulating material.

To connect the rubber hose to an external drain:

1. Insert the rubber hose into the drain hole or pipe.

- Gently push at least 4" (102 mm) of the rubber hose into the drain hole.
- Be careful not to squeeze, crimp, or kink the rubber hose.
- Ensure that the rubber hose fits securely in the hole or pipe and cannot pop out.

2. Seal the connection.

- Seal the area around the rubber hose to prevent air and water leakage from the drain hole into the room.
- Follow best practices based on the application and materials used.

3. Insulate the rubber hose.

- Wrap the part of the rubber hose in the room with anti-condensation insulating material.

4. Insulate any external piping.

- If you extend the drain with any exterior piping, wrap all the pipes with heat tape and insulation.

⚠ CAUTION

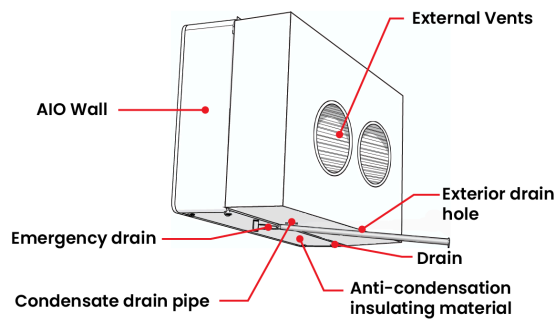
- All external condensate drain lines must be properly installed and routed in accordance with applicable plumbing codes.
- In cold climate installations where freezing temperatures may occur, external drain lines must be equipped with approved heat tape or equivalent freeze-protection measures. Heat tape installation must comply with all applicable local electrical codes.
- Failure to provide proper freeze protection may result in drain blockage, water damage, or equipment malfunction.
- In installations where ambient temperatures may fall below freezing (32°F / 0°C), external condensate drain piping must be equipped with approved heat trace cable to prevent freezing and blockage.

⚠ WARNING

Only use self-regulating heat tape or heat tape designed for use under insulation. Use of other

types of heat tape may cause a fire and could void your warranty.

Figure 8. Condensate drain



7.12 Condensate drain protection and maintenance

To reduce the risk of bacterial biofilm formation and maintain effective drainage, apply a coil-safe drain line cleaner (such as Valterra PowerMax) to all drain line components during installation. This helps inhibit early microbial growth within the system.

For ongoing maintenance, clean all condensate drain-line components, including drain pans, collection boxes, pumps, and associated tubing, at least once every 6 months. In more demanding environments, more frequent cleaning may be necessary.

Always use coil-safe cleaning products to protect system components and ensure long-term performance.

Approved drain pan cleaning products include Nu-Calgon [PowerZyme](#) and [Viper Pan & Drain Treatment](#), or equivalent coil-safe formulations.

8. SPECIAL

The AIO® Wall Mount is configured for the

- When the unit is
- When the unit is

8.1 Configuring installation

By default, the unit is installed with air conditioning. It performs better at high altitudes. The unit can be installed near the ceiling. The AIO® Wall Mount unit can be used in a variety of applications.

For a high-wall application, the unit can be reversed by adjusting the brackets. The unit can be installed downward rather than upward. Modifying the brackets is required for the unit.

Additionally, an unplug button should be installed near the AIO® Wall Mount unit.



When the AIO® Wall Mount is in the vertical position, voltage is applied to the electrical control panel. This can cause damage to the AIO® Wall Mount. The power to the control panel is one of the following:

- Unplug the power outlet, or
- Turn off the main fuse.

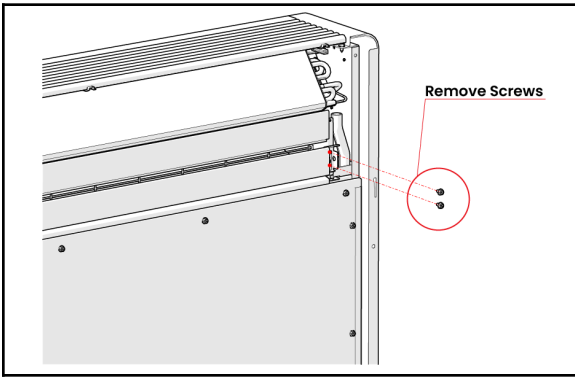
To configure the AIO® Wall Mount installation:

1. Change the location of the unit.
2. Program the unit.

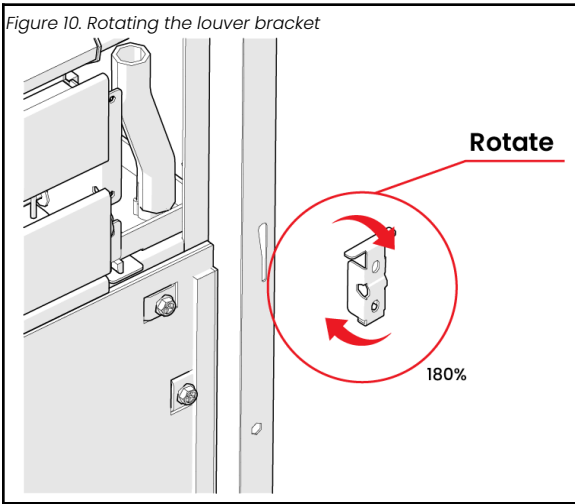
Changing the louver

1. Ensure that the unit is disconnected from power.
2. If the front cover is not removed, remove it.
3. Remove the screws that hold the louver bracket in place.

Figure 9. Removing screws



4. Rotate the right-side louver bracket 180 degrees.



5. Reinstall the right-side louver support bracket screws.
6. Reinstall the Front Cover Panel and grille.
7. Install the underbody cover plate (part GB0737II) on the bottom of the AIO® Wall Mounted unit.

For more information, see the [documentation](#) for the underbody cover plate.

Programming the louver direction.

After making the physical modifications to the AIO® Wall Mounted unit, including installing the lower body cover and changing the louver bracket direction, program the unit. The system stores the new settings. These are not lost during a power outage or when the power cord is disconnected.

To program the louver direction:

1. Reconnect the AIO® Wall Mounted unit to the power supply.
2. Press the  button on the Onboard Touch Controller to activate the display. The unit can be in any mode.
3. Press  and hold for about 10 seconds. The DN (low wall installation) icon will flash on the display.
4. Press  again. The UP (high wall installation) icon will flash on the display.



Do not touch the display. The display returns to normal after a few seconds.

The louver direction is now programmed for high wall installation.

8.2 Connecting a dry contact for remote on/off

The AIO® Wall Mounted unit supports integration with dry contact devices (voltage-free switch inputs used to control the unit's operation). These may include occupancy sensors, open-window switches, on/off remotes, or other compatible control systems. When used, these devices can automatically activate or deactivate the unit as needed.

When the dry contact opens, the unit enters standby mode and displays CP (Contact Present) on the screen.



To minimize electrical interference, use solid conductor wire for runs of up to 30 feet. For runs longer than 30 ft, use shielded solid four-conductor 18 AWG cable.



WARNING

- Turn off all electrical power before making any connections.
- All electrical connections and wiring MUST be installed by a qualified electrician and conform to the National Electrical Code and all applicable state and local codes.

To connect a dry contact:

1. Turn off the power.

De-energize the unit: Before accessing the filters, always switch off the unit's power to prevent accidental activation and ensure safety. Unplug the power cord or turn off the breaker. Then, wait at least five minutes before continuing to ensure that all capacitors have discharged.

2. Remove the air filter.

- a. Lift the grille from the unit and set it aside.
- b. Gently pull up on the plastic around the filter.

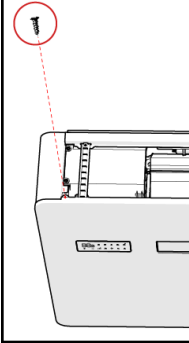


Note: Take care not to break the plastic or tear the filter.

3. Remove the front cover panel.

- a. Remove the two front screws on the top of the unit (circled in red in Figure 11).

Figure 11. Front screws



- b. Gently lift the plastic around the filter and remove it.



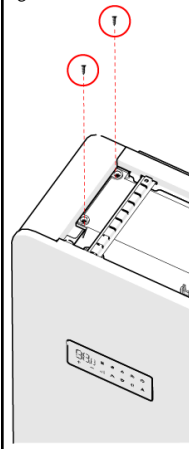
When removing the Front Cover Panel (G...)

- Do not pull the cover panel too far. It can tear the plastic around the Touch Controller.
- **Note:** The Onboard Touch Controller is located to the back of the unit. The wire harness is located on the back of the unit.
- Carefully disconnect the connector from the Cover Panel and the connector from the unit.

4. Remove the bottom cover.

- a. Remove the bottom cover. Hold the bottom cover in place.

Figure 12. Screws securing the bottom cover

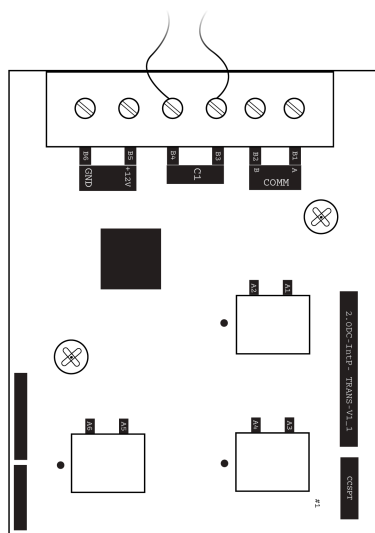


Keep the screws in a safe place.

- b. Remove the bottom cover. Remove the black plastic plate.

5. Connect the wires for the dry contact to the CP connections.

Figure 13. CP connections



Do not secure the cover with screws until the unit has been tested.

- a. Power up the AIO® Wall Mounted unit.
- b. Activate and deactivate the connected dry contact device to verify that the unit responds correctly: turning on and entering standby mode as expected.

- a. Reattach the black plastic electrical protective cover onto the unit using the two screws removed in Step 4a.
- b. Reattach the black plastic electrical protective cover to the white metal frame of the AIO® Wall Mounted unit using the two screws removed in Step 4b.

- a. Position the Front Cover Panel on the AIO® Wall Mounted unit.
- b. Carefully reconnect the wire harness connector for the Onboard Touch Controller to the unit before fully attaching the Front Cover Panel.
- c. Reattach the Front Cover Panel to the AIO® Wall Mounted unit using the two screws removed in Step 3.
- d. Reinsert the Air Filter into the AIO® Wall Mounted unit.
- e. Reinsert the grille above the filter.

The AIO® Wall Mounted Unit 230V with Electric Heat Strips features two 900W resistance heating strips which by default operate together (1800W), or individually (900W). If there is a requirement to operate the unit with reduced electric heat capacity (900W) or with electric heat disabled, this setup must be configured during installation or at initial startup.

 For models with auxiliary electric heat, do not abruptly cut power to the unit, as this may cause internal overheating. Instead, use the CP contact to place the unit in standby mode, allowing it to run its cool-down ventilation cycle before shutting down completely.

- Turn off all electrical power before making any connections.
- All electrical connections and wiring **MUST** be installed by a qualified electrician and conform to the National Electrical Code and all applicable state and local codes.

1. Change the h
2. Configure the
3. Label the con

1. Turn off the power. De-energize the system. Always switch off the power completely. Disconnect the power cord at least five minutes before all capacitors are fully discharged.

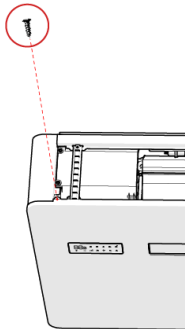
- Lift the ground
- Gently pull



Note: To
or tear

a. Remove the unit ()

Figure 14. Front screws



b. Gently pull the paper away from the side.



- The Onboard the back of harness connector back of the
- Do not pull the can tear the Touch Control
- Carefully disconnect connector back Cover Panel connector and

21

- a. Remove the two lower screws that secure the black plastic electrical protective cover to the plastic Onboard Touch Controller's cover and set them aside.



Keep the screws separate from the screws removed in the previous step.

- b. Remove the two screws that secure the black plastic electrical protective cover to the white metal frame of the AIO® Wall Mounted unit and set them aside.

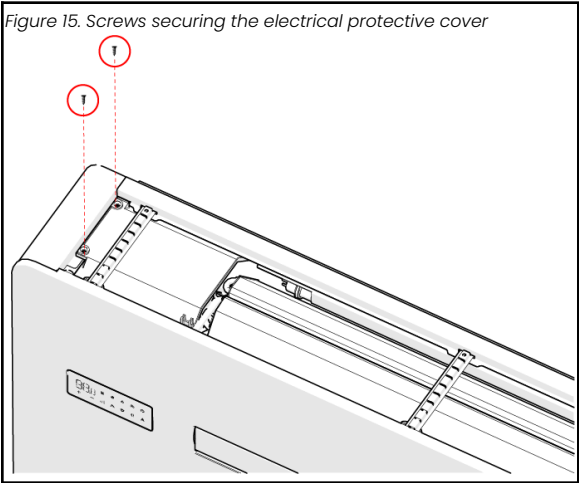


Figure 15. Screws securing the electrical protective cover

- c. Remove the black plastic electrical protective cover and set it aside. The unit's internal components are now visible.

5. For 900 W Operation only:

- a. Disconnect the Heater 2 connector for one heating strip from the PCB.

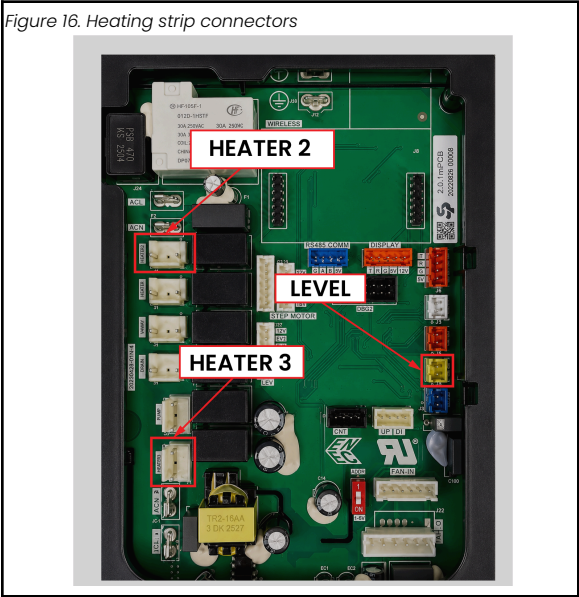


Figure 16. Heating strip connectors

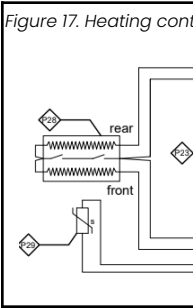


Figure 17. Heating control wiring

- b. Cut off the wire to prevent shorting.
- c. Wrap wire with electrical tape and secure with wire nut to the back of the unit.
- d. Reattach the black plastic electrical protective cover and secure with screws removed in step 5a.
- e. Reattach the black plastic electrical protective cover to the white metal frame of the AIO® Wall Mounted unit and secure with screws removed in step 5b.

6. Finish closing the unit:

- a. Position the unit on the wall and secure with the Wall Mounting screws.
- b. Carefully disconnect the heating strip connectors from the unit and secure the unit with the Cover Plate.
- c. Reattach the black plastic electrical protective cover to the white metal frame of the AIO® Wall Mounted unit and secure with screws removed in step 5b.
- d. Reinsert the heating strip connectors into the unit.
- e. Reinsert the heating strip connectors into the unit.

To configure the heater:

1. Hold down the **HEAT** button for 5 seconds. The **HEAT** button will flash.
2. Press and hold the **HEAT** button for 10 seconds. The **ADVANCED SETPOINT** screen will appear. The screen will show **HC**.
3. Press the **+** or **-** button to select the wattage by pressing the **HEAT** button. The screen will show the wattage as follows:
 - NO** – Electric resistance heater
 - r1** – 900W of electric resistance heater
 - r2** – 1800W of electric resistance heater

temperature is still 5.4°F (3°C) below the setpoint, Heater 3 is activated.

4. To confirm and save the settings, press **Power**  again (the save icon appears).

5. Press the **A** button 3 times to exit the Setup Menu.

To label the configuration:

Mark **900W** or **1800W** on the unit's label for future reference.

Figure 18. Marking label for resistance heating configuration

Installer Responsibility	900W	1800W
Power supply (V/Ph/Hz)	230/1/60	230/1/60
Voltage range	180-253	180-253
Running Amps Cooling	3.4	3.4
Max Amps Cooling	7.8	7.8
Running Amps Heating	6.8	10.7

9. STARTUP AND CONFIGURATION

WARNING

- When the AIO® Wall Mounted unit is in the OFF state, voltage may still be present at the electrical controls. To avoid electric shock or damage to the unit, disconnect the power supply before opening or servicing the unit. Unplug the power supply cord from the outlet or turn off the circuit breaker and/or remove the fuse.

After the unit has been physically installed, electrically connected, and the installation checklist and self-certification procedures have been completed, the unit must be started up and commissioned before it is ready for use. This chapter covers the initial power-on procedure, system verification, menu configuration, and Wi-Fi setup.

9.1 Onboard Touch Controller Overview

The Onboard Touch Controller is located on the front panel of the unit. It consists of a segmented numeric display and a row of capacitive touch buttons. All startup, commissioning, and configuration operations are performed through this controller.

The controller has the following touch buttons:

Table 3. Onboard Touch Controller buttons

Button	Description
+ (Plus)	Increases setpoint temperature; scrolls upward through menu items
- (Minus)	Decreases setpoint temperature; scrolls down through menu items
Fan speed 	Cycles through fan speed levels (for example: Low, Medium, High, Boost, and Auto)
Mode	Cycles through operating modes (Heating, Cooling, Dehumidification, Fan Only, and Auto)
Swing 	Activates or deactivates the motorized air direction louver
Timer	Sets the auto-off timer
Night 	Activates or deactivates Night mode
A (Auto / Alert)	Used for Auto temperature changeover, menu access, and displaying active alerts
Power 	Turns the unit on or off; used for menu access and confirmation



The order and content of menu items may vary depending on the installed firmware (FW) version. Always verify the firmware version before making configuration changes.

9.2 Powering time

Before powering o

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- ☐ The installa
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- ☐ The unit h
- ☐ The cond
- ☐ been [inst](#)
- ☐ Confirm t
- ☐ permane
- ☐ properly
- ☐ specified

To power on the u

1. Turn on the ci
- power supply
2. Verify that the
- acceptable o
- data label.
3. Press the **Power**
- Controller. The
- will enter stan
4. Verify that no
- an error code
- Troubleshooti
- before proceed



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[9.6](#) for V

9.3 Verifying (Diagnostic r

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Accessing the Dia

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- buttons simul

- The display shows "VE" (firmware version), confirming that the Info & Commissioning menu is active.
- Use the **+** and **-** buttons to scroll through the available parameters.
- To exit the menu, press and hold the **Power button**  for 10 seconds, or wait 30 seconds for automatic timeout.

Diagnostic menu parameters

Table 4. Diagnostic menu parameters

Parameter	Description	Options/Range
VE	Main firmware version	Read-only
Fi	Indoor fan speed (rpm = displayed value × 100)	Read-only
Fo	Outdoor fan speed (rpm = displayed value × 100)	Read-only
CO	Compressor operating frequency (Hz)	Read-only
ro	Room temperature (°C) (FW 1.15.1+)	Read-only
ou	Outdoor temperature (°C) (FW 1.15.1+)	Read-only
ic	Incoil (evaporator) temperature (°C) (FW 1.15.1+)	Read-only
oc	Outcoil (condenser) temperature (°C) (FW 1.15.1+)	Read-only
dc	Compressor discharge temperature (°C) (FW 1.15.1+)	Read-only
tU	Total unit running time – General (Days: Hours) (FW 1.15.1+)	Read-only
tH	Total unit running time – Heating (Days: Hours) (FW 1.15.1+)	Read-only
tC	Total unit running time – Cooling (Days: Hours) (FW 1.15.1+)	Read-only
tA	Total auxiliary heater running time (Days: Hours) (FW 1.15.1+)	Read-only



After installation, please verify the firmware version (VE), confirm that both fan speeds (Fi and Fo) report non-zero values while the unit is operating, and check that temperature readings (ro, ou) are reasonable for the current conditions.

9.4 Configuring the unit (User menu)

The User menu provides access to basic configuration parameters that may need to be adjusted during commissioning. These settings can also be changed by the end user after installation.

Accessing the User menu

- With the display off, press and hold the **Power button**  for 10 seconds.
- The unit turns on, and the display shows a flashing indicator.
- Continue holding the **Power button**  until a menu code appears (e.g., CF or Ub), then release.
- Use the **+** and **-** buttons to scroll through menu items.

- Press the **Power button** to select the parameter and enter edit mode.
- Use the **+** and **-** buttons to change the value.
- Press the **Power button**  again to confirm the change. The display briefly shows a confirmation indicator  and then advances to the next menu item.
- To exit the User menu, press the **A button** twice quickly, or wait 30 seconds for automatic timeout.

User menu parameters

Table 5. User menu parameters

Parameter	Description	Options/Range
CF	Temperature scale selection	°C (default) or °F
Ub	Buzzer volume	0 (off), 1 (low), 2 (medium), 3 (high, default)
oH	Room temperature offset – Heating	16 to 48°F -9° to +9° (C)
oC	Room temperature offset – Cooling	16 to 48°F -9° to +9° (C)
ur	Wi-Fi module reset	no (default), cr (clear credentials), SF (soft reset)
uP	Wi-Fi / Bluetooth provisioning mode	no (default), St (activate provisioning)



If the unit is configured for high wall installation (in = UP), the heating temperature offset (oH) is automatically set to -4°C (-7°F) to compensate for temperature stratification effects.

CAUTION

- If the unit has been powered on for more than 15 minutes, the Wi-Fi provisioning window will have closed. To reactivate provisioning mode, navigate to the "uP" parameter in the User menu and set it to "St" before attempting Wi-Fi configuration.

9.5 Installer settings (Installer menu)

The Setup menu contains advanced configuration parameters intended for use by the installer during commissioning. These settings control the unit's operating mode, installation orientation, connectivity options, and accessory integration options.

Accessing the Installer menu

- First, access the User menu (see [Section 9.4](#)).
- From the User menu, press and hold the **+** and **-** buttons simultaneously for 10 seconds.
- The display will show a Setup menu parameter code (e.g., HC).
- Use the **+** and **-** buttons to scroll through menu items.
- Press and hold the **Power button**  for 2 seconds to select an item and enter edit mode.

- Use the **+** and **-** buttons to scroll through menu items.
- Press and hold the **Power button**  to confirm the change.
- To exit the Setup menu, press the **A button** twice quickly, or wait 30 seconds for automatic timeout.

Installer menu parameters

Table 6. Installer menu parameters

Parameter	Description
HC	Heating / selection
ho	Hotel mode
in	Installation mounting
co	Wi-Fi exposure
Ad	Modbus address
rF	Remote fan wall control
HL	Hotel mode minimum (1.3.0+)
Hh	Hotel mode maximum (1.3.0+)
CL	Hotel mode minimum (1.3.0+)
Ch	Hotel mode maximum (1.3.0+)
Ht	Auxiliary heater (ELEC mode)
HE	Auxiliary heater operating models on
Uu	UV-C lamp
Hr	ERV module
Hn	ERV control (1.15.1+)
Sn	SNS system (nebulizer)
At	Drain open in cooling (1.15.1+)



Dependent configuration parameters non-dependent on current

! NOTICE

- **Hotel Mode: ho must be set to ys (enabled) for HL, Hh, CL, and Ch Parameters to be usable**
- If Heating Only (ho) or Cooling Only (co) mode is enabled in the HC parameter, the disabled mode will not be available from the display or remote control. The Auto operating mode will also exclude the disabled mode.

Key installer configurations

High wall / Low wall installation (in): If the unit is mounted in a high wall position, set this parameter to uP. This automatically reverses the air deflector's operating direction and adjusts the heating temperature offset. See [Section 8.1](#) for the full high wall configuration procedure.

Hotel mode (ho): When enabled, the operating modes available to the end user are limited to Heating and Cooling. Fan speed adjustment is permitted, but the setpoint range is restricted. Heating setpoint is limited to 22°C to 28°C (72°F to 82°F), and Cooling setpoint is limited to 16°C to 24°C (61°F to 75°F) by default. These ranges can be adjusted using the HL, Hh, CL, and Ch parameters.

Wi-Fi expansion module (co): The Wi-Fi module should only be turned off if an external Modbus supervisor is connected and Wi-Fi communication is not used, or if an M7 series wall controller is installed.

Remote function (rf): Set to ys when an M7 series wall control is connected. When enabled, Fan Only and Dehumidification modes are disabled on the onboard controller, and room temperature sensing is transferred to the M7 wall controller probe.

9.6 Connecting the unit to Wi-Fi

The AIO® Wall Mounted unit supports Wi-Fi and Bluetooth connectivity through a dedicated mobile app. Wi-Fi configuration allows the end user to monitor and control the unit remotely from a smartphone.

Required app

Download the INNOVA Butler app (developed by Solution Tech Srl) on the end user's mobile device:

- **Apple iOS:** Search for "INNOVA Butler" in the App Store
- **Android:** Search for "INNOVA" in the Google Play Store (developer: Solution Tech Srl)



The app pairs the device via Wi-Fi and Bluetooth. The pairing procedure is guided through the app itself. The unit's Wi-Fi network will not appear in the smartphone's Wi-Fi settings; connection is managed entirely through the app.

Wi-Fi configuration procedure

1. Ensure the unit is powered on.
2. If the unit has been powered for more than 15 minutes, re-enable provisioning mode: access the User menu ([Section 9.4](#)), navigate to the uP parameter, and set the value to St.
3. Open the INNOVA Butler app on the mobile device.
4. On the first launch, grant the required permissions when prompted: location access (Approximate or While Using the App) and access to nearby devices (Allow).
5. The app will search for available devices. Ensure the unit is turned on and in provisioning mode.
6. When the device appears in the app's device list (e.g., IN3113933 – 2.0 NG), select it.
7. Assign a name to the device and create or select a room.
8. If prompted, open the mobile device's Wi-Fi settings and connect to the unit's temporary network (e.g., TP-Link_386A).
9. Wait for the app to confirm "Device added successfully".



For issues related to the mobile app, contact the app developer (Solution Tech Srl) through the app support function rather than the unit manufacturer's service department.

Resetting Wi-Fi credentials

If the unit needs to be paired again with a different mobile device or Wi-Fi network, the existing credentials must be cleared first:

1. Access the User menu ([Section 9.4](#)).
2. Navigate to the ur parameter.
3. Set the value to cr (clear credentials) or SF (soft reset, which also clears the stored calendar settings).
4. Confirm the change. The unit will re-enter provisioning mode and is ready for a new pairing.

9.7 Locking and unlocking the keypad

The Onboard Touch Controller can be locked to prevent unauthorized changes to settings. This is useful in hotel or commercial installations.

To lock or unlock the keypad:

- Press and hold the + and – buttons simultaneously for approximately 3 seconds.
- The display will briefly show a keypad lock/unlock confirmation.
- When the keypad is locked, pressing any button displays "bl" on the screen.

9.8 Configur

Before proceeding (10), confirm that the following steps have been completed:

- ☐ Unit powers on
- ☐ Firmware version is correct
- ☐ The temperature sensor is calibrated according to the parameter.
- ☐ The installation has been configured
- ☐ Heating/Cooling mode is set (HC parameter)
- ☐ If applicable: room temperature sensor (ho, HL, Hh, CL, Ch)
- ☐ If applicable, the unit is in the correct operating mode (parameters).
- ☐ If applicable, the unit is connected to the correct network (parameter).
- ☐ If applicable: the unit is in the correct control logic (parameter).
- ☐ Wi-Fi has been configured in the Butler app, or the unit is in the correct mode (how to do so).
- ☐ Buzzer volume is set to the correct preference (U)

Once all commissioning steps are complete, proceed to [Chapter 10](#).

10. RECORDING STARTUP DATA AND TESTING THE UNIT

After installing and configuring the unit, record the required startup data and test the unit to verify proper operation.

10.1 Recording startup data

Record the following information:

- ☐ Startup date and time
- ☐ Nameplate voltage
- ☐ Incoming voltage:
 - ☐ L1–N for 115 V units or L1–L2 for 230 V units
 - ☐ L1–ground
 - ☐ N–ground for 115 V units or L2–ground for 230 V units
- ☐ Running amperage
- ☐ Return-air temperature
- ☐ Supply-air temperature
- ☐ Outdoor-air temperature

10.2 Testing unit operation

To test the unit:

1. Confirm that the required indoor and exterior clearances are unobstructed.
2. Turn on the unit and verify that no error codes appear.
3. Set the unit to Cooling mode and select the lowest available temperature setpoint. Verify that the unit supplies cool air.
4. Allow the unit to operate in Cooling mode for approximately 20 minutes.
 - Verify that the condensate drainage system operates properly.
 - Record the running amperage, return-air temperature, supply-air temperature, and outdoor-air temperature.
 - Check for abnormal noise or vibration.
5. Turn off the unit and wait 10 minutes.
6. Set the unit to Heating mode and select the highest available temperature setpoint. Verify that the unit supplies warm air.
7. Test each available fan speed and verify that the fan responds correctly.
8. If a wall-mounted or remote controller is installed, use the controller to verify Cooling mode, Heating mode, and fan-speed operation.
9. Verify that no error codes appear after testing is complete.

11. POST-INSTALLATION TASKS

Before leaving the installation site, ensure that the following tasks are completed:

- **Clean-Up**
 - Remove all packaging materials.
 - Wipe off any dust or debris from the unit using a damp cloth.
- **User Handoff**

Review the following with the user:

 - Key features and unit specifications
 - Basic operating instructions
 - Routine maintenance requirements
- If the unit is installed in a salty, chemical, or acidic environment, apply a protective coil coating, such as DiversiTech Coil Guard, to protect the coil surfaces from corrosion and ensure long-term performance.
- If the unit is installed on a construction site, protect it with tight plastic wrap and do not operate it until all dust and debris in the air have been removed.

12. SELF-CERTIFICATION AND INSTALLATION

After completing the operational testing, self-certify the installation by completing the [Self-Certification](#) form.

The Self-Certification form is a required document in the installation procedure, and a part of the project manual.

For information about self-certifying the installation, see the project manual.

12.1 Commissioning

Record the following information. Provide this information with the completed pre-startup checklist and operational test results to the project manager.

Item	Information
Project/site	
Address	
Unit model	
Serial number	
Voltage rating	
Technician name	
Company	
Certification date and time	

13. WARRANTY

13.1 Basic Coverage

- **Parts:** 5 years from delivery.
- **Compressor:** 10 years from delivery.
- **Labor:** 2 years from certification (only if at least 10 units are installed, the site is certified by INNOVA or self-certified, and spare stock equal to 3% of total units is maintained)
- **Controllers:** Covered under a 2-year warranty.

13.2 Optional Extended Coverage

- **Additional 2-Year Parts & Labor Warranty:**
Extends the basic coverage to 4 years of labor and 7 years of parts.
- **Extended 10-Year Parts Warranty:** Extends parts coverage to 10 years total.
- **Extended 5-Year Full Warranty:** Extends full parts and labor coverage to 5 years total.
- **Extended 10-Year Full Warranty:** Provides a 10-year full warranty on parts, labor, and the compressor.
- **Extended 15-Year Full Warranty:** Provides a 15-year full warranty on parts, labor, and the compressor.

13.3 Validation Requirements

- Installation must be certified by an INNOVA technician or self-certified within 30 days.
- Installers must complete INNOVA training.
- The system must comply with applicable codes, use approved louvers, and be properly maintained (e.g., clean filters monthly, coils every 18 months).

For warranty service or claims, contact INNOVA Support at vip@innova.co or [\(212\) 204-2700](tel:2122042700).

For detailed terms and conditions, click the link below:

 [AIO Warranty Terms and Conditions - 2026 - INN...](#)

APPENDIX A – DIMENSIONS

To view the dimensions of the AIO® Wall Mounted unit as a high-resolution PDF, click the link below:

[AIO Wall Mounted Standard Gen 2 and 3 Dimensions](#)

Figure 19. Wall Mounted Standard Dimensions

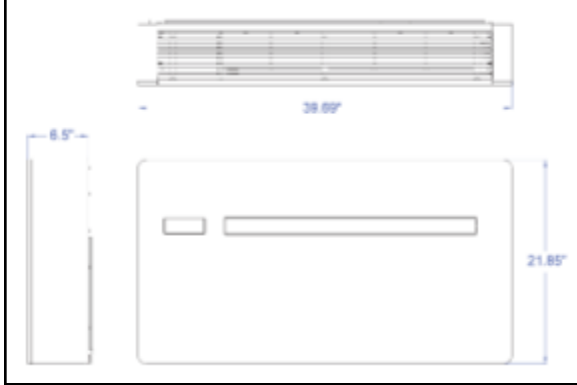


Figure 20. Wall Mounted Standard Dimensions

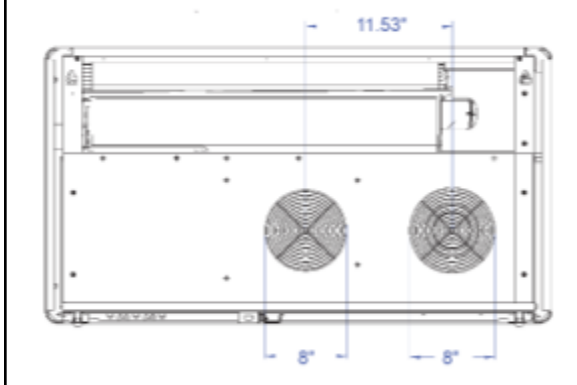


Figure 21. Dimensions (top view)

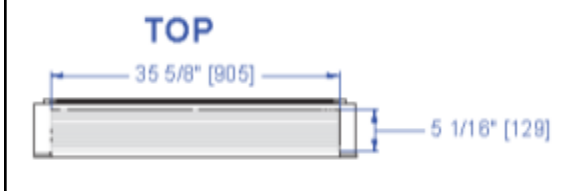


Figure 22. Dimensions (left view)

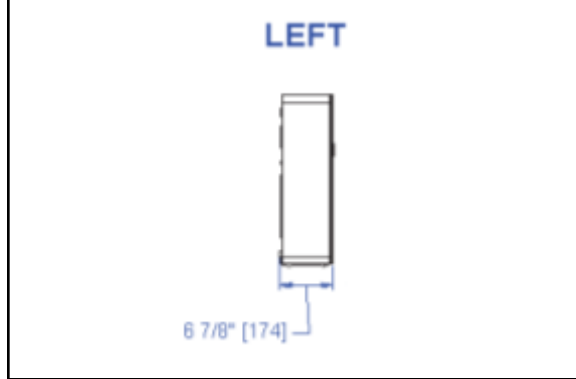


Figure 23. Dimensions (front view)

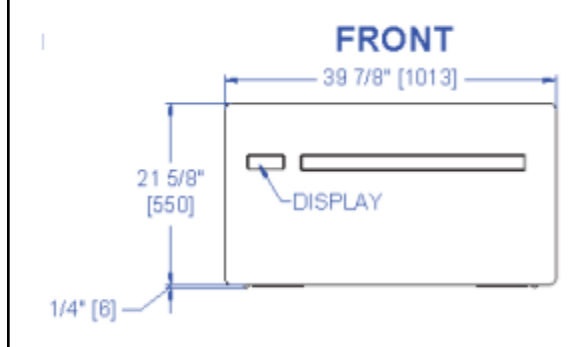


Figure 24. Dimensions (right view)

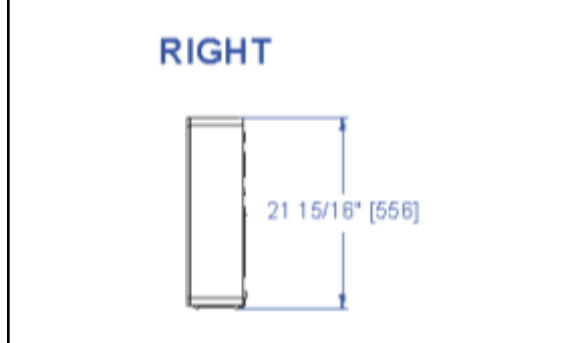


Figure 25. Dimensions

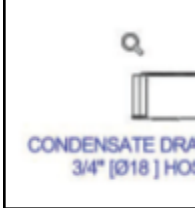


Figure 26. Dimensions

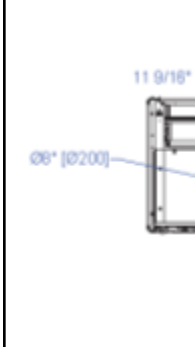
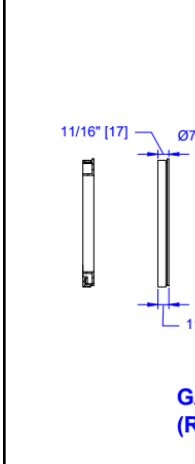


Figure 27. Gasket Access



Special
Mounting

APPENDIX B – WIRING DIAGRAMS

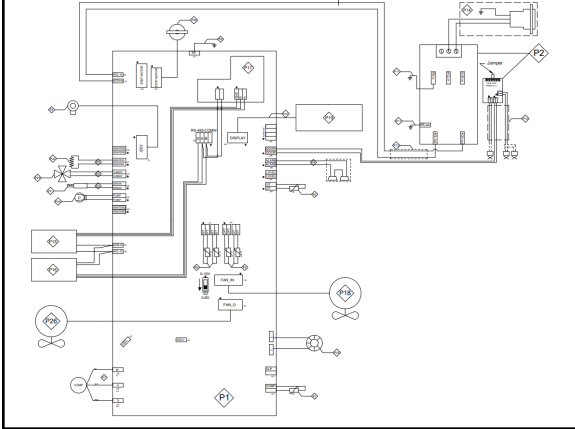
The following are the wiring diagrams for AIO® Wall Mounted units.

B.1 AIO® Wall Mounted 115V Wiring Diagram

To view the diagram as a high-resolution PDF, click the link below:

[PDF AIO Wall Mounted 115V Heat Pump only Wiring Dia...](#)

Figure 28. Wall Mounted 115V Wiring Diagram



Part	Description	INNOVA Code	Notes
P1	Integrated PCB	N540205A	Included in N576205A
P2	Filter 2.0 18A PCB	N560536A	Included in N576205A
P3	EEV Coil	N276928B	Included in N576205A
P4	Pan cables harness	N576205A_02	Included in N576205A
P5	4way valve cable + temperature sensor	N576205A_03	Included in N576205A
P6	Indoor and Incoil temperature sensors	N576205A_04	Included in N576205A
P7	Compressor cables + discharge temperature sensor	N576205A_05	Included in N576205A
P8	PE IntPCB	N576205A_06	Included in N576205A
P9	Kit wiring heating elements	N576205A_07	Included in N576205A
P10	Display cable	N576205A_08	Included in N576205A
P11	PE filter wiring diagram	N576205A_09	Included in N576205A
P12	Transfer cables wiring diagram	N576205A_10	Included in N576205A
P13	Power supply to IntPCB	N576205A_11	Included in N576205A
P14	Power cable with USA 2.0 NC connector	N500399A	
P15	Power + RS485 cable for ERV 2.0 NC	N500400A	
P16	2.0 NC Rolbit power + communication cable	N500403A	

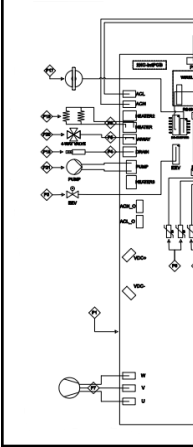
Part	Description	INNOVA Code	Notes
P17	WI-FI Expansion 2.0/WLH	N540217A	
P18	Internal Fan	N276300B	
P19	Display	N570177A	
P20	Flap motor	N276014A	
P21	Drain Thermoactuator	276417A	
P22	Heating Element Kit	N560052A	115 version
P23	4-way Valve	N276939A	115 version
P24	Drain Pump	N640020A	115 version
P25	PFC Reactor	N560538A	115 version
P26	External Fan	N520012B	

B.2 AIO® Wall Mounted 230V (with optional resistance heating strips) Wiring Diagram

To view the diagram as a high-resolution PDF, click the link below:

[PDF AIO Wall Mounted 230V with electric heat.pdf](#)

Figure 29. Wall Mounted

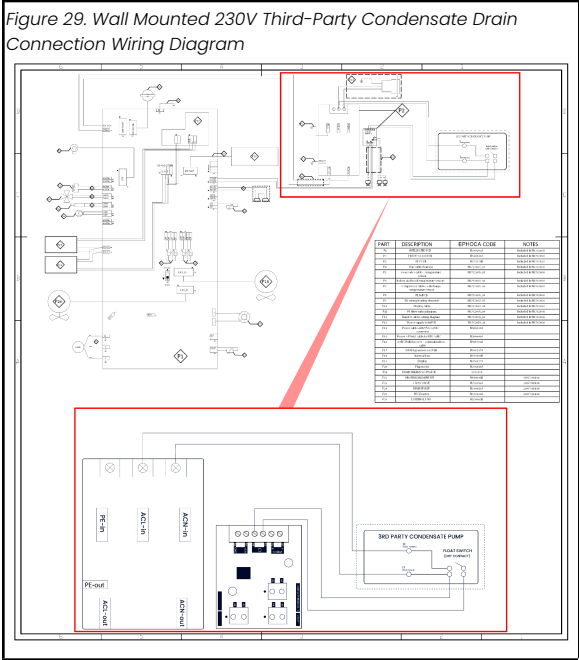


Part	
P1	
P2	
P3	
P4	
P5	4way
P6	Indo
P7	Compresso
P8	
P9	
P10	
P11	
P12	T
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	
P21	
P22	
P23	
P24	

B.3 AIO® Wall Mounted 230V diagram for attaching a third-party condensate pump

To attach a third-party condensate pump to the AIO Wall Mounted (230V) unit, see the diagram in the link attached below:

[PDF AIO Wall Mounted 230V Wiring Diagram for Conn...](#)



APPENDIX C – GLOSSARY

Term	Definition
A2L	ASHRAE/ANSI safety classification for refrigerants with low toxicity and mild flammability; applies to the R-32 refrigerant used in this unit.
AHRI	Air-Conditioning, Heating, and Refrigeration Institute; the unit's performance ratings are certified under the AHRI Unitary Small Heat Pump Equipment (USHP) program per ANSI/AHRI Standard 210/240.
Anti-Lift Bracket	A pair of factory-supplied brackets fastened to the wall to prevent the unit from lifting off the wall bracket during operation or servicing.
AWG	American Wire Gauge; conductor sizing standard (e.g., 18 AWG shielded four-conductor cable for dry-contact runs longer than 30 ft).
Contact Presence (CP)	Status displayed on the Onboard Touch Controller when an external dry-contact input places the unit in standby mode.
ERV	Energy Recovery Ventilator: an optional field-installed module that exchanges stale indoor air with fresh outdoor air while transferring heat and moisture between the two airstreams, improving indoor air quality and reducing energy consumption.
Exterior louver	An exterior vent assembly with slats that allows air to pass while resisting rain, debris, and pests. Performance is described by free area and pressure drop; only INNOVA-approved louvers may be used.
Hardwired	A direct electrical connection from the unit to a dedicated circuit breaker using a quick-connect whip cord or field-wired cable terminated in a junction box.
Heat strips	Optional 900 W electric resistance heating elements (two per unit on 230 V models) that provide supplemental heat when low ambient temperatures prevent the heat pump from operating effectively.
LCDI	Leakage Current Detection and Interruption: a power cord with built-in leakage-current protection used to connect the unit to a grounded power outlet.
LOTO	Lockout/Tagout; OSHA-compliant procedures requiring all power sources to be de-energized, locked, and tagged before installation or service work.
Nebulizer	An optional accessory that collects condensate, vaporizes it through a heated nozzle, and discharges it safely outdoors; used as an alternative to a gravity drain.
NEC	National Electrical Code: the U.S. standard governing electrical wiring and connections. All electrical work on this unit must comply with the NEC and applicable state and local codes.
Onboard Touch Controller	The built-in touch-sensitive display and control panel, clipped to the front cover panel. It is used to operate the unit and access setup menus.
OSHA	Occupational Safety and Health Administration; U.S. workplace safety standards referenced for safe installation, LOTO procedures, and PPE requirements.
PPE	Personal Protective Equipment: protective gear (e.g., gloves, safety goggles, protective clothing) required when handling refrigerant, hot components, or sheet-metal parts.

Term	
Quick-connect whip cord	An e conn othe box.
R-32	The refrig clas with hydra mod syste
Rating plate	The on th show elec mar
Vent Sleeve	A cy bore vent surfa leak
Surge protection	A de surge the u prot

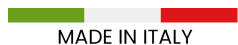
APPENDIX D – REVISION HISTORY

Rev	Date	Revised By	Changes
A	2026-04-27	Jason Rosenberg	Complete revision
B	2026-05-14	Jason Rosenberg	Startup and Configuration chapter added



With over 20 years of experience in the climate comfort sector, we have a clear goal: growth through innovation. Our team is laser-focused on the conception, development, and production of innovative heating, ventilation, and air conditioning solutions. This mission has developed through bringing together technical skills, creativity, technology, design, Italian passion, and a global vision to achieve the best energy efficiency and performance.

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AIO® Wall Mounted (Gen 3) **Installation Guide**