AIO® Wall Mounted Pro (Gen 3)

Installation Guide



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Unitary Small HP
AHRI Standard 210/240

Intertek

ENERGY STAR

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DISCLAIMER

IMPORTANT - TRAINING IS REQUIRED PRIOR TO PERFORMING INSTALLATION.

While this guide outlines the general installation requirements for the unit, it does not replace required installer training. Before commencing installation, the project manager must contact the INNOVA VIP Department at (212) 204-2700 to coordinate training for the installer.

Failure to ensure that installation is performed by INNOVA-trained personnel may result in improper operation or equipment damage, and may void the warranty.

Training may be conducted in person or remotely (online).

This overview serves as the official installation training and may include overview videos, best practices, and system requirements

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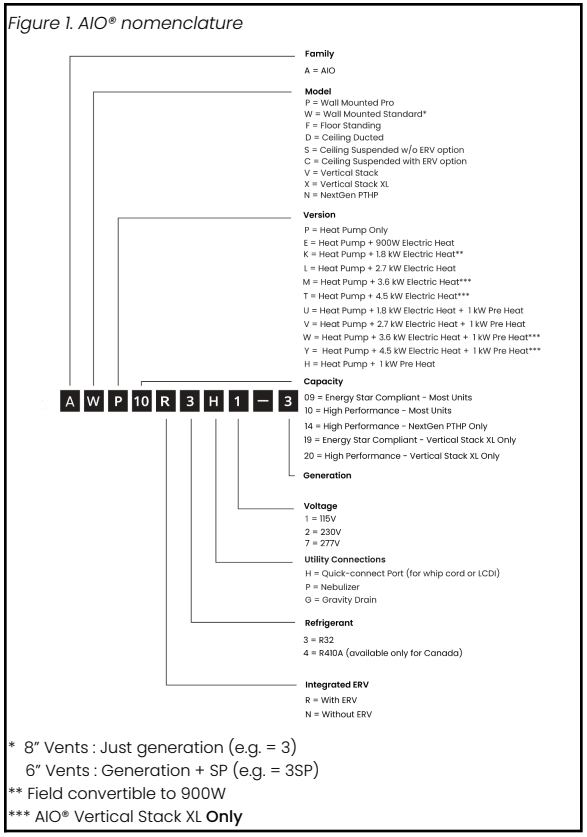
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MODEL NUMBER NOMENCLATURE

The code identifies the family, model, version, size, voltage, accessories, refrigerant type, and ERV option. See the diagram below for details.

Figure 1. AIO® nomenclature



* 8” Vents : Just generation (e.g. = 3)
6” Vents : Generation + SP (e.g. = 3SP)
** Field convertible to 900W
*** AIO® Vertical Stack XL **Only**

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1. ABOUT THIS GUIDE

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 Documentation-specific language

Some language and symbols in this guide have specific meanings.

1.1.1 Reference to the product

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

1.1.2 Unit orientation

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

1.1.3 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.

1.1.4 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.

1.2.1 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 an icon 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.

1.2.2 Hazard icons

The hazard icons represent the type of risk and are used in conjunction with any of the warning panels.

	The flame icon indicates information related to a fire or explosion hazard.
	The lightning-bolt icon indicates a warning related to electrical hazards.
	The three vertical, S-shaped, parallel lines icon indicates information related to a hot surface hazard.
	The hand icon indicates information about a moving part hazard and a sharp-surface hazard.
	The slippery surface icon indicates information related to a slipping hazard.
	The exclamation-mark icon indicates general hazards (environmental hazards, moving parts hazards, lifting hazards, and other categories).

1.2.3 Annotation icons

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



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 necessary to safely and securely install the AIO® Wall Mounted Pro (Gen 3) 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 local and national codes.

The precautions in this guide supplement, rather than replace, established safety practices. In case of conflict, always follow the more stringent requirement.

Only a trained 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, halogen lamps); fire or explosion can result. Only use approved electronic detectors when checking for refrigerant leaks.
- Refrigerant under pressure: Use appropriate personal protective equipment (PPE) and follow all applicable OSHA safety requirements when servicing or handling the unit.

⚠WARNING

- Do not leave refrigerant cylinders in confined spaces; always store and use them in well-ventilated areas. Keep ventilation openings clear of obstruction.
- Do not charge, replace, or mix the R32 refrigerant with any other refrigerant type. Using other refrigerant types may damage equipment and pose safety risks.
- Do not install units utilizing flammable refrigerants in unventilated spaces unless the space is designed to prevent refrigerant concentrations from accumulating to levels that could create a fire or explosion in the event of a leak. Note that refrigerant leaks may be odorless and difficult to detect.
- Never store or transport refrigerant cylinders in temperatures above 122 °F (50 °C).

⚠WARNING

- During storage, protect cylinders and the unit from mechanical damage, tipping, or corrosion.

⚠CAUTION

- Leak testing must be performed after installation is complete.
- This unit comes precharged with flammable refrigerant (R32). If the unit does not cool or heat, it may indicate a refrigerant leak. If a leak is detected, do not touch the unit. Ventilate the area, then immediately consult the building manager or the unit manufacturer. Refrigerants may cause cold burns.
- When handling the unit, verify that no other substance (including air) enters the refrigerant circuit other than the contained R32 refrigerant.
- Do not release refrigerant into the atmosphere; follow environmental regulations. In the US, refrigerant handling must comply with the EPA Clean Air Act Section 608 (certified personnel, recovery, reclaim, and recycling).
- Follow all local environmental regulations for refrigerant handling and disposal.

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.
- Do not use an extension cord or adapter plug, or connect multiple devices to a single outlet, as this may cause a fire or electric shock.
- Do not modify plugs or remove the grounding pin; always connect to a grounded 3-prong power supply.
- Do not bundle, pull, damage, or modify the power cord. Do not place heavy objects on it or heat sources on or near it, as this may cause a fire or electric shock.
- Do not operate the unit with damaged electrical cords or plugs. If the power cord is damaged, it must be replaced by the manufacturer or by a qualified electrician.
- Do not connect the ground wire to gas pipes, lightning rods, or telephone ground.
- Ensure electrical panels are closed and secured before energizing equipment.
- In the event of a blackout or thunderstorm, turn the unit off and disconnect it from the power source immediately.

2.5 Moving parts hazards

⚠ DANGER

- Moving parts: do not operate the equipment with panels, guards, or covers removed.
- Ensure power is disconnected and components have come to a complete stop before accessing the interior. Internal fans, motors, and other moving components may start automatically when power is supplied.

⚠ WARNING

- Keep hands, hair, tools, and loose clothing away from fans and moving components. Contact with moving parts can cause serious injury.
- Do not remove, bypass, or disable protective covers, guards, or safety interlocks.

⚠ CAUTION

- Only trained HVAC technicians are authorized to service the unit with the panels removed.
- Reinstall all panels before operation and keep your hands away from the fan area to prevent 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.

⚠ CAUTION

- 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 either INNOVA-approved or comply with the specifications for required pressure drop and free area. Installation of louvers or grilles that do not meet these specifications may cause:

- Overheating of the unit.
- Water damage.
- Reduced performance.
- Voiding of the product warranty.

⚠CAUTION

Install the unit in a location protected from impacts that could cause mechanical damage.

⚠WARNING

This unit contains R-32 refrigerant, which is classified as A2L—low toxicity and mildly flammable. The following precautions must be followed:

- Do not release R-32 into the atmosphere. It has a Global Warming Potential (GWP) of 675.
- Install the unit in a well-ventilated area to prevent refrigerant buildup.
- Take reasonable precautions to ensure the unit is not exposed to excessive heat.
- The use of leak detectors with halogen lamps is not allowed near R-32 systems.
- Make sure the room size matches the refrigerant charge. The refrigerant concentration must remain below the Refrigerant Concentration Limit (RCL) in case of a leak. For more information, refer to ASHRAE 15, ASHRAE 34, UL 60335-2-40, and applicable state and local codes.
- Use only mechanical connectors that comply with ASHRAE 15 (Safety Standard for Refrigeration Systems). Replace sealing components and, if connectors are reused, re-fabricate flared joints.
- If required, install a leak-detection system that detects refrigerant leaks and triggers ventilation or other safety responses.
- To prevent frostbite or other injuries, wear gloves and safety goggles when handling R-32.
- Store R-32 cylinders in a cool, ventilated space, away from heat sources, direct sunlight, or anything that could cause ignition.
- Attach R-32 cylinders securely to prevent them from shifting or being damaged.

The unit is designed for indoor installation only. Only the exterior intake and exhaust grilles are rated for outdoor exposure.

- 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.

⚠CAUTION

- 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.

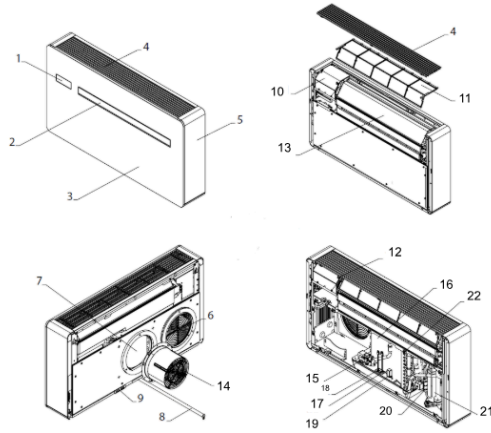
⚠CAUTION

- 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.

3. AIO® WALL MOUNTED PRO (GEN 3) OVERVIEW

3.1 Components and structure

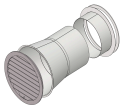
Figure 2. AIO® Wall Mounted Pro (Gen 3) Components



1	Onboard Touch Controller	**12**	Room Air Sensor
2	Air Outlet Deflector	**13**	Indoor Coil
3	Front Cover Panel	**14**	ECM Axial Condenser/Outdoor Fan
4	Inlet Grille	**15**	Disbursement Pump
5	Decorative Side Panel	**16**	Outdoor Coil
6	Outdoor Air Intake	**17**	Maximum Level Float
7	Outdoor Air Outlet	**18**	Level Float
8	Rubber Drain Hose	**19**	Condensation Drain Valve
9	Anti-Lift Bracket	**20**	Four-Way Valve
10	Terminal Block	**21**	Compressor
11	Air Filter	**22**	Outdoor Air Sensor

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)	L129A L221A L229A L259A		✓
	Sunvent Louvers	LLA9		✓
	Thermaduct RLA8	RLA9		✓
	Plenum boxes	Dependent on Configuration		✓
	GWN Gateway - for LTCH20, TFTH20, and Modbus	GWN		✓
	GWX Gateway - LTCH20, TFTH20, MODBUS, BACnet, and third-party thermostats	GWX		✓

Picture	Part	SKU	Factory Installed	Field Installed
	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		✓

INNOVA 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 plate

The unit's rating plate provides essential product information, including the model number, serial number, electrical specifications, and compliance markings. Refer to the rating plate when installing the unit, registering it, or contacting technical support. The rating plate is located on the black electrical cover and on the upper right side of the unit.

Do not remove or tamper with the rating plate. Doing so will void the product warranty.

4. RECEIVING AND HANDLING THE UNIT

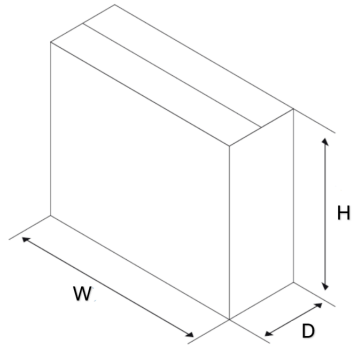
The following section contains information about preparing for the unit installation.

4.1 Shipping configuration

- The unit and mounting bracket are shipped in a single carton. Other accessories are shipped separately.
- The unit is shipped configured for a low-wall installation. If the unit will be installed as a high wall installation, refer to Configuring the Unit for a High Wall Application.

4.2 Packaging dimensions and weight

Figure 3.



Width (W)	43.30 in (1099.8 mm)
Height (H)	26.38 in (670 mm)
Depth (D)	10.04 in (255 mm)
Weight	105 lbs (47.6 kg) (106 lbs [48.1 kg] if the 1800W heat strip is included)

4.3 Handling the unit

Safety precautions

⚠WARNING

- This unit is heavy and unbalanced. Improper handling may result in serious personal injury and/or damage to equipment.
- Only trained and qualified personnel should handle or move the unit.
- Use lifting equipment rated for the unit's weight and dimensions.
- Always lift from designated lifting points or packaging handles.
- Keep the area beneath and around the load clear at all times during lifting or hoisting.
- Maintain complete control of the unit and keep it upright at all times during handling procedures.
- **Improper handling of the shipping carton may result in serious personal injury or damage to equipment.**

⚠CAUTION

- The unit must remain upright at all times during transport, handling, and storage. Tipping the unit may damage compressor welds and cause refrigerant leaks.
- Never tilt, lay on its side, or invert the shipping carton.
- If the unit was not transported upright, do not install it. Contact your INNOVA representative or contractor immediately.
- Do not place the unit in any position other than upright under any circumstances.

The unit is packaged in a shipping carton with integrated lifting handles. Follow these guidelines for safe handling:

- The carton may be moved in one of the following ways:
  - Manual handling: By two trained personnel using the built-in handles.
  - Mechanical handling: Using a forklift for heavier units
- Always use the designated lifting handles provided on the packaging to avoid damaging the carton or the unit inside.
- Refer to the labeling on the shipping carton for stacking limitations and handling instructions.
- Do not exceed maximum manual lifting weights as defined by OSHA and applicable local regulations.

4.4 Receiving the unit

⚠DANGER

- When removing the unit from the carton, always 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.

⚠WARNING

- Always use two people to lift and install the unit.
- The unit is heavier on the right side (compressor side) and may be unbalanced when lifted.
- **Failure to use proper lifting techniques can result in back injury or other physical harm.**

⚠CAUTION

- The unit must remain upright at all times. Do not place the unit in any position other than upright under any circumstances.
- Tipping the unit — whether on its side, back, or at an angle — can damage the compressor welds and cause refrigerant leaks.

Follow this procedure when receiving the shipment:

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.
   - Document the damage on the freight bill.
   - If the unit was delivered on its side, note this on the delivery receipt and notify your INNOVA representative or contractor, and wait at least 72 hours before operating the unit.
2. **Remove the unit from the carton.**
   - Carefully remove the unit from the carton while keeping it upright.
   - Check the interior of the carton for signs of refrigerant leakage using an electronic leak detector compatible with R-32.
   - In case of a refrigerant leak inside the carton:
     - Do **not** install the unit.
     - Report the issue immediately to your INNOVA representative or distributor.
3. **Inspect the unit and all accessories for any damage that may have occurred during shipping.**
   - Remove the outer covers to inspect for underlying damage.
   - Photograph all damage and all sides of the unit to support a damage claim.
   - Document the damage on the freight bill.
   - Notify your INNOVA representative or distributor.
4. **Record the unit nameplate and serial number.**
   The nameplate is provided as a separate adhesive sticker that must be attached to the top-left corner of the unit. It lists key information, including the model number, serial number, electrical specifications, and compliance markings. Attach the sticker securely and refer to it during installation, registration, or service of the unit.
5. **Perform basic functional testing (if the carton appears damaged).**
   If the unit appears damaged, unpack and test both the heating and cooling modes. Immediately report any irregularities or operational issues to your INNOVA representative or distributor.
6. **Verify package contents.**
   Verify the contents of the carton against the components list to ensure all components are present. If any items are missing, contact your INNOVA representative or distributor immediately.
   a. Photograph all damage and all sides of the unit to support a damage claim.
   b. Clearly document the damage on the freight bill.
   c. Notify your INNOVA representative or distributor.



To remain eligible for a claim, all damage must be reported within two weeks of delivery.

4.5 Inspecting drain tube clearance

Before installing the unit, follow these steps to inspect the drain tubes and ensure proper drainage:

1. Open the front cover panel of the air conditioner to access the internal components.
2. Locate the two drain tubes connected to the drain pan. These are positioned on the right side of the unit, directly below the high-efficiency indoor heat exchanger (see Component Layout (Exploded View)). There is one drain tube in the front and one in the back.
3. Check if either drain tube is pressing against the internal metal divider that separates the upper (inlet) and lower (outlet) sections of the unit.
   If a tube is pressing upward against the metal plate, it may push up the drain pan, preventing proper drainage.
4. If necessary, trim the bottom of the affected tube to relieve the pressure on the drain pan. Ensure that the tube still maintains a secure connection to the drain pan after trimming.

4.5 Storing the unit

Storage guidelines

⚠CAUTION

- Improper storage may damage the unit.
- Store the unit according to the guidelines below. Failure to do so may result in equipment damage and will void the warranty.
  - Store the unit indoors in a clean, dry, and well-ventilated location.
  - Keep the boxed unit off the ground using pallets or planks to prevent moisture exposure.
  - Ensure the unit remains upright at all times during storage.
  - Follow all applicable state and local regulations for HVAC equipment storage.

5. SITE PREPARATION

5.1 Pre-Installation checklist

Before installing an AIO® unit, review the following checklist and confirm that all items are true.

- ☐ Make sure you have approved louvers for external venting. Use of any grille or louver assembly other than those approved may cause the unit to overheat and result in a fire. It can also lead to water damage and/or performance issues and will void the warranty. See Approved Louvers for louver specifications.
- ☐ Make sure you have downloaded and printed the correct template for the louver you are using. Some louver assemblies require holes drilled in slightly different places to accommodate the design. You can access templates by visiting innova.co/templates. If you are not 100% sure that you have the correct template, discuss it with your distributor or INNOVA.
- ☐ Ensure that the installation location provides sufficient clearance around the unit. For specific clearance requirements, see Clearances.
- ☐ Ensure that the installation location is at least 41" (1041.4 mm) away from devices that receive or transmit electromagnetic radiation.
- ☐ Ensure the wall at the installation location can support the AIO® Wall Mounted Pro unit's weight. The wall must meet one of the following conditions:
  - Contain internal studs, allowing at least two of the bracket screws to be anchored into studs.
  - Be constructed of a solid load-bearing material (such as concrete or masonry) capable of supporting the full weight of the unit with appropriate anchors.

To check for stud locations:
Position the mounting template on the wall and check whether studs are located behind the holes, where the bracket will be attached.

- ☐ Ensure that a suitable drainage method is available for the unit's condensate. This may be either:
  - **In-the-wall drain (recommended):** Confirm that it is safe and feasible to connect the unit's rubber drain hose to a concealed drainpipe within the wall that leads to the building's wastewater system; or
  - **Direct exterior drain (warm climates only - above freezing point):** If no suitable in-wall option exists, route the drain hose to discharge outside: onto the ground or through an exterior drainpipe. Take care to prevent water damage and ensure compliance with local regulations.
- ☐ Ensure that one of the following electrical setups is in place at the installation location:
  - **Grounded electrical outlet:** A properly rated, grounded power outlet is required. The outlet must be within reach of the unit's power cord and positioned to avoid any tension on the cord.
  - **Hardwired connection:** The wall is prepared for in-wall hardwiring, with access aligned to the electrical connection area indicated on the installation template.
- ☐ Ensure there are no obstructions on the building exterior that could block airflow through the louvers. We require maintaining at least 48" (1219.2 mm) of unobstructed clearance in front of the louvers for proper airflow.
- ☐ Ensure that no curtains or furniture will block the return or supply air grilles on the AIO® Wall Mounted Pro unit.

⚠CAUTION

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.

5.2 Installation clearances

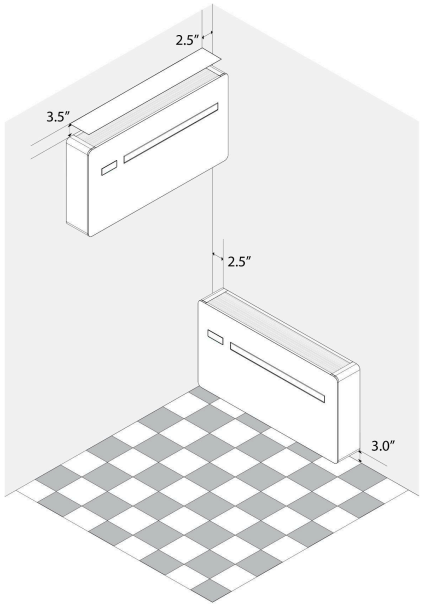
The AIO® Wall Mounted Pro unit's clearance requirements depend on how the unit is mounted. Carefully read the following criteria to determine the required clearances.

- **Top Clearance**
  There must be a minimum of 3½" (88.9 mm) clearance between the unit and any surface above, including the ceiling or a shelf, to ensure adequate return airflow. However, to ease cleaning the filter and servicing the unit, 8" (203.2 mm) of clearance is recommended.
- **Bottom Clearance**
  There must be a minimum of 3" (76.2 mm) clearance 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 Clearances**
  The AIO® Wall Mounted Pro unit must not come into contact with any surfaces on either side, as it produces slight vibrations during operation. To prevent vibration-related noise, a minimum clearance of 1" (25.4 mm) is required on each side. However, for ease of installation and removal, a clearance of 2½" (63.5 mm) on either side is recommended.

- **Front Clearance**
  A minimum of 30" (762 mm) of unobstructed space is required in front of the AIO® unit to ensure proper airflow. Because the supply air vent is located on the front panel, any obstruction can inhibit performance and reduce efficiency. Be sure to keep the area clear of curtains, furniture, plants, or any other objects that could block the airflow.
- **Rear Clearance**
  The rear of the unit must be installed flush against the wall, with no gaps between the unit and the wall surface. Any gap can allow unconditioned air to enter the unit, potentially causing short cycling, reduced efficiency, and improper humidity control. Any plenums, adapters, or similar transition components must be sized to maintain the required airflow.

  The rear of the fan must be no less than 2" (50.8 mm) away from the edge of an external louver.
- **Exterior Clearance**
  There must be a minimum of 36" (914.4 mm) clearance in front of the exterior louvers to ensure proper airflow from the louvers.

Figure 4.



5.3 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.
- Impact driver with assorted driver bits.
- At least four 1/4" (6.35 mm) load-bearing wall anchors, each capable of supporting at least 50 lbs (22.7 kg), and which can be easily removed 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 Pro 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).

6. INSTALLING THE UNIT

To install the AIO® Wall Mounted Pro unit:

1. Affix the template to the wall.
2. Prepare the vents.
3. Affix the wall bracket to the wall.
4. Install the fan.
5. Attach the exterior louvers.
6. Prepare a condensate drain.
7. Prepare the electrical connection.
8. Mount the AIO® unit on the wall bracket.
9. Fasten the Anti-Lift Bracket.
10. Check for air leaks.
11. Connect the unit to the condensate drain.
12. Connect the unit to the power source.
13. Connect the fan.
14. Configure the AIO® Wall Mounted Pro Unit.
15. Test the unit.
16. Certify the installation.

6.1 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.

To affix the template:

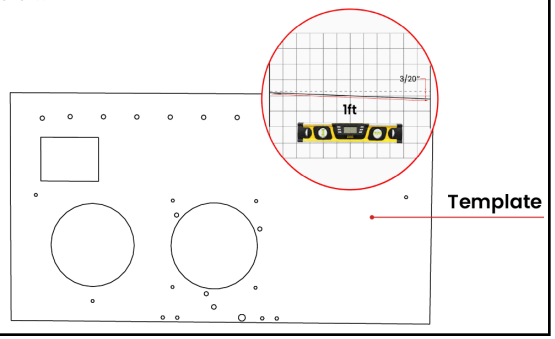
1. **Ensure that you have downloaded and printed the correct template.**
   a. The template is available at: AIO® WM Pro Installation Template.
   b. Some louver assemblies require holes to be drilled in different locations.
   c. If you are unsure whether you have the correct template, contact your distributor or INNOVA.
2. **Tape the template to the wall.**
   a. Position the template in the exact location you want to install the unit.
   b. Use a level to ensure the template has at least a 1/4" per foot (20.8 mm/m) slope down 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 1/4" per foot (20 mm/m).

c. Use painter's tape to affix the template to the wall.

The unit must lean slightly to the right to ensure proper drainage from the drain pan. Do not exceed a slope of 2% (or a total of ⅝" [20.3 mm] for the Wall Mounted Pro unit) to avoid the unit appearing misaligned.

Figure 5.



6.2 Preparing the vents

To prepare the vents:

1. Make vent holes.
2. Install vent sleeves.

6.2.1 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. **The required borehole diameter is slightly greater than 8" (203.2 mm), with a minimum depth of 6" (152.4 mm) to accommodate the fan protrusion beyond the rear of the unit.**
   Additional clearance around the fan frame is necessary to reduce vibration transmission. Depending on the type of vent assembly type and airflow requirements, a larger opening may be necessary.
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 (3.5%-7%) toward the exterior.**
   This helps prevent water from entering the unit through the vent openings.

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

6.2.2 Installing the vent sleeves

To install the vent sleeves:

1. **Insert the vent sleeves into the boreholes.**
   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.**
   Apply a continuous bead of silicone around the entire perimeter—both inside and outside—to ensure a completely airtight seal.

⚠CAUTION

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

6.3 Affixing the wall bracket to the wall

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

⚠WARNING

- The AIO® Wall Mounted Pro Unit must be securely mounted according to the instructions below.
- Failure to do so may result in death, serious injury, or property damage.

To install the wall bracket:

1. **Position the bracket:**
   a. Align the wall bracket with the mounting template. When the unit is installed, it should completely cover the bracket.
   b. Use the markings at the top right of the template to position the bracket correctly.
   c. Ensure 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.
- Use a level to verify that the bracket is aligned with the slope of the template before continuing.

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 6 screws to secure the wall bracket to the wall:

- Two of the screws must go into the wall studs. These provide the primary structural support.
- The two outermost holes on the wall bracket must be used. Screwing these down prevents the bracket from shifting.
- The remaining four holes may be fastened to drywall using four ¼" (6.4 mm) load-bearing wall anchors that support at least 50 lbs (22.7 kg) and can be removed cleanly from the wall.

d. Make sure the bracket is pulled tight against the wall with no visible gaps.

To secure the bracket using the Full Anchor Method:

a. Secure all six holes with load-bearing anchors.
Use ¼" (6.4 mm) load-bearing wall anchors, rated for at least 50 lbs (22.7 kg), and which can be removed cleanly from the wall.

b. Make sure the bracket is pulled tight against the wall with no visible gaps.

⚠CAUTION

Do not use butterfly anchors, as they cannot be removed cleanly and may damage the wall surface.

The two outermost holes on the wall bracket must always be used to prevent lateral shifting of the bracket.

3. Verify level and tightness.

The wall surface must be flat and level to ensure the unit is flush with the wall. If the wall is uneven, the unit cannot be properly installed.

a. Ensure the bracket is flush with the wall and does not flex or shift.
b. Double-check that the bracket is aligned with the template.

4. Seal the bracket.

a. Apply a continuous bead of silicone sealant around the outer edge of the bracket where it meets the wall.
b. Apply an additional bead of silicone along the inner edge where the bracket meets the wall.
c. At the bottom of the bracket, where it meets the wall, apply sealant to form a small lip that acts as a dam. This will prevent water from accumulating in the wall cavity or the vent sleeve.

⚠WARNING

The AIO® Wall Mounted Pro Unit must be installed level on the vertical axis and with a slight slope toward the right side (approximately ⅛" [3.2 mm]). Improper installation may result in leaks during operation. INNOVA will not certify installations that deviate from this requirement. Non-certified installations will void the 10-year warranty.

Figure 6.

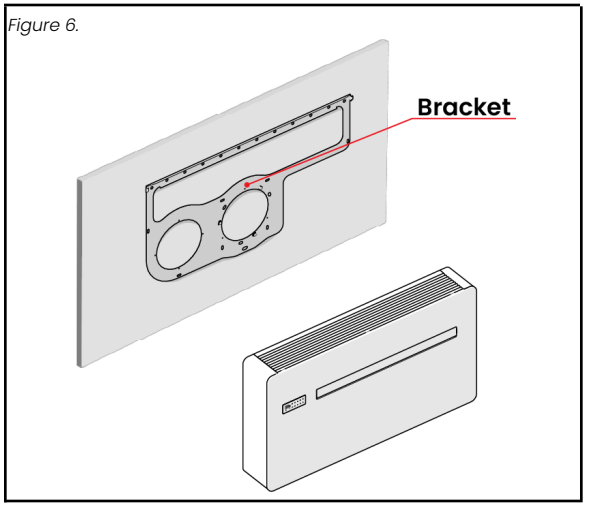
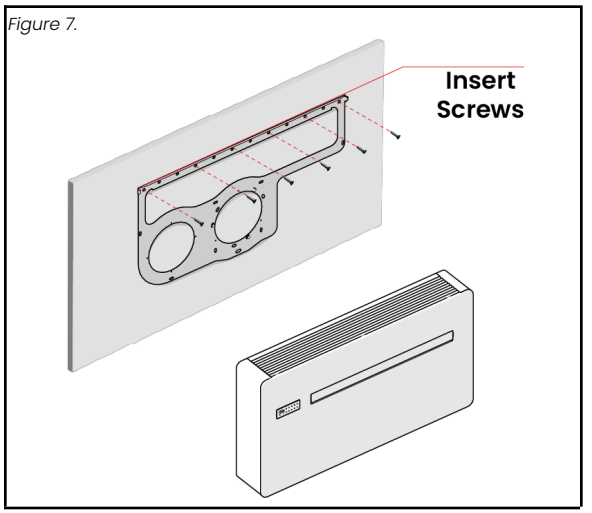


Figure 7.

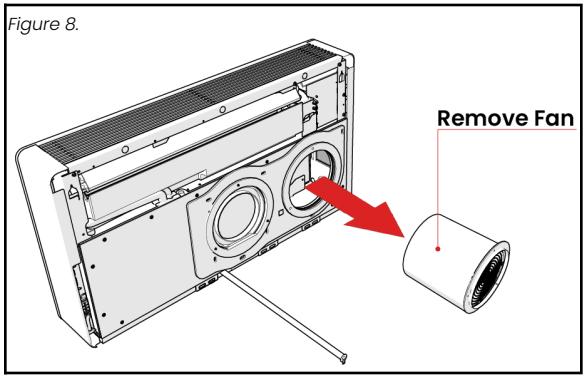


6.4 Installing the fan

To install the fan in the wall bracket.

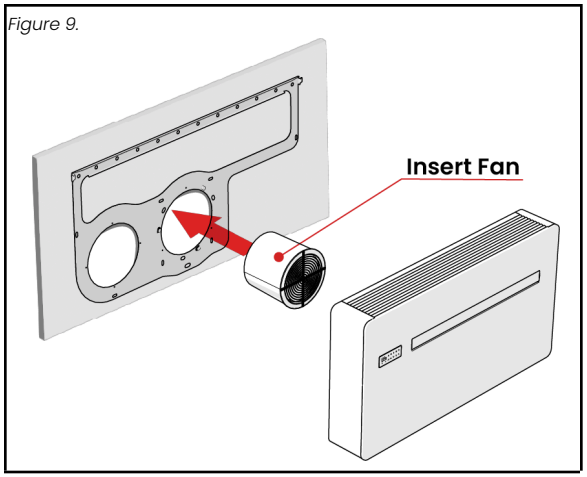
1. **Pull the fan out from the back of the unit.**

Figure 8.



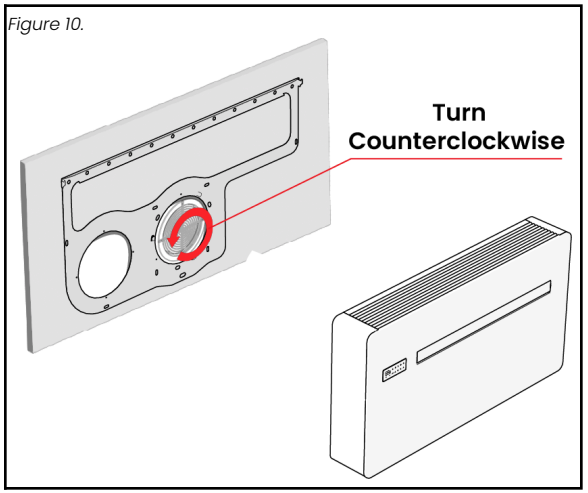
2. **Insert it into the right-hand hole on the wall bracket.**

Figure 9.



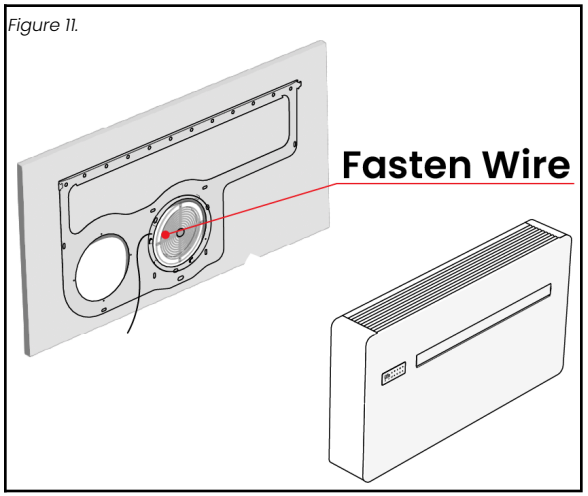
3. **Turn the fan counterclockwise to lock it in place.**

Figure 10.



4. **Secure the wire in the groove on the bracket.**

Figure 11.



6.5 Attaching exterior louvers

This section defines the exterior louvers approved for use with the AIO® Wall Mounted Pro unit, outlines the performance and application criteria for louver selection, and provides installation requirements to ensure proper airflow, weather protection, and code compliance.

⚠ WARNING

Using any louver that does not follow the requirements in this section may cause fire, leaks, or unit failure, and will void the warranty.

While many venting systems, including those using louvers or grilles, can be designed to work with the AIO® Wall Mounted Pro Unit, only certain models have been tested and approved to ensure compatibility and performance.

6.5.1 Approved louvers

The following louvers are approved for use with the AIO® Wall Mounted Pro Unit:

- Sunvent
  - LLA/F 9W
  - LLA/C 9W
- Thermaduct
  - RLA9

If not using one of the INNOVA-approved louver solutions, contact INNOVA to ensure that the louver solution being used matches the requirements of the AIO® Wall Mounted Pro Unit.

6.5.2 Installing the exterior louvers

To install the exterior louvers:

1. **Ensure there are no obstacles in front of the louver location.**
   - Maintain a minimum of 36" (914.4 mm) of free space in front of the louvers.
   - Ensure that there is a minimum of 84" (2133.6 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" (2133.6 mm), the stricter standard should be followed.
   - Ensure a minimum of 2" (50.8 mm) of clearance between the inner edge of the exterior louver and the exterior-facing end of the unit's fan. Additionally, make sure to account for any other installation components (such as a plenum box for a windowsill adapter, or similar transition elements) to ensure proper connection and avoid restricting airflow.
2. **Install the louvers.**
   Follow the louver manufacturer's installation instructions.
3. **Seal the louver installation.**
   - Flash and seal around the exterior components to prevent water penetration and damage.
   - Seal the louver sleeve tightly to the wallboard inside the room. Failure to adequately seal around the louver sleeves may cause the unit's fan to pull insulation into the unit, damaging it.

⚠CAUTION

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

6.6 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 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 Pro Unit.

6.6.1 Condensate drain options

The AIO® Wall Mounted Pro 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 [18.1°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 the building's wastewater system (sewer).

  Note: This is the preferred drain option. Use an internal wall drain whenever possible.
- **Direct exterior drain**
  In this setup, the condensate hose discharges directly outside, either onto the ground or via an extended drainpipe or hose.
  - Installation Requirements:
    - Drainage is accomplished by gravity only. For this reason, the unit-supplied rubber drain hose must slope downward at least 3.6" (91.4 mm) per foot along its entire length. If connecting a drainpipe to the rubber hose, use a PVC pipe with a minimum inside diameter of ¾" (19.1 mm) and a downward slope of at least ¼" (6.4 mm) per foot.
    - Pipes running in or along exterior walls must be wrapped with self-regulating heat tape and insulated to prevent freezing.

⚠WARNING

When preparing a direct exterior drain, ensure it does not discharge water onto walkways or work areas, where it could create slip hazards.

- In winter, discharged water may freeze, causing ice buildup.
- In summer, standing water may promote algae growth, resulting in slippery surfaces.

⚠CAUTION

The section of the rubber condensate hose that is exposed inside the room must be wrapped in anti-condensation insulation. Without proper insulation, condensation can form on the outside of the hose due to the temperature difference between the cold condensate and the warmer room air. This can cause water to drip onto the floor, potentially damaging flooring materials.



Do not connect the main drain hose to a barbed fitting. Instead, for optimal performance and to minimize the risk of leaks or disconnections, insert the hose directly into a ¾" (19.1 mm) PVC pipe.

6.6.2 Preparing an in-the-wall drain
To prepare an in-the-wall drain:

1. **Install a drainpipe in the wall.**
   - A licensed plumber must perform this.
   - The drainpipe must have a minimum interior diameter of ¾" (19.1 mm).
   - The drainpipe must terminate in a 45° fitting.
   - The opening of the 45° fitting must line up with the rubber drain pipe.
   - If the drainpipe is in an exterior wall, wrap it with insulation and install heat tape.

⚠WARNING

Only use self-regulating heat tape or heat tape designed for use under insulation. Use of any other type of heat tape may result in a fire and void your warranty.

2. **Test the drain.**
   - Pour water into the drainpipe.
   - Check for leaks.

6.6.3 Preparing an external drain
To prepare an external drain:

1. **Drill a drain hole.**
   - Bore a drain hole through the exterior wall. The drain hole must have an outward slope of at least 2%.
   - Ensure that the drain hole and assembly allow for a downward slope of at least 2% from the condensate drain under the AIO® Wall Mounted Pro Unit.
2. **Insert the rubber drain hose through the drain hole.**
3. **Test the drain.**
   - Pour water into the drainpipe.
   - Check all connections for leaks.
4. **Seal the hole.**
   Once the drainpipe is confirmed to be leak-free, apply silicone sealant around the pipe penetration using the applicator.

6.7 Preparing the electrical connection

The AIO® Wall Mounted Pro Unit can be connected to the mains power supply in one of two ways:

- Using the Leakage Current Detection Interrupter (LCDI) power cord.
- Hardwiring the unit directly to the building's electrical system.

⚠WARNING

- Only a licensed electrician may prepare the electrical connection.
- Ensure that electrical power is disconnected at the main fuse or breaker panel before starting any electrical work.
- Failure to follow these requirements may result in serious injury or death.

⚠WARNING

To prevent electrical shock, fire, or serious injury:

- A dedicated circuit breaker must be installed 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.

Failure to follow these requirements may result in serious injury or death.

⚠WARNING

- To avoid damage from voltage spikes or power surges, the unit must be connected to a dedicated surge protector or a building-wide surge protection system. Failure to use surge protection can result in equipment failure and may void the warranty.
- Do not connect the unit to a Ground-Fault Circuit Interrupter (GFCI), as normal unit operation may cause it to trip unnecessarily.

6.7.1 LCDI Power cord connection
An optional LCDI power cord is offered to be used with the AIO® Wall Mounted Pro Unit. If the LCDI cord was purchased, the AIO® Wall Mounted Pro Unit can be connected to the power supply by plugging the cord into an appropriately sized, grounded electrical outlet.

The outlet must match the LCDI power plug on the cord and be within reach of the power cord.

⚠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.

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 Pro Unit.
- ☐ The power outlet is a grounded connection and is rated for the maximum wattage indicated on the AIO® Wall Mounted Pro Unit data plate.
- ☐ Power is supplied only via a power outlet suitable for the provided plug on the LCDI cord.
- ☐ The power supply has suitable protection against overloads and/or short circuits. It is recommended that you use a correctly sized time-delay fuse or an equivalent device.

⚠ WARNING

- The power supply cable (LCDI cord) may only be replaced by a licensed HVAC contractor, in compliance with current national and local regulations.
- Improper wiring may result in death, serious injury, and/or property damage.

6.7.2 Hardwired connection

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

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

To prepare for a hardwired connection:

1. **Mount a junction box behind the terminal block on the lower-right side 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.**
   - Ensure the breaker is de-energized.
   - Route the electrical wire from the breaker box to the junction box. Ensure the wire is rated for the load.
   - Secure the wire in the junction box using an appropriate strain relief or connector, depending on the cable type. Leave enough wire extending from the junction box to reach the unit's connection point.

6.8 Mounting the unit on the wall bracket

After verifying that the bracket is securely anchored to the wall, level on the vertical axis, and that all necessary electrical connections and condensate drain preparations are complete, you can mount the unit on the bracket.

To mount the AIO® Wall Mounted Pro unit onto the wall bracket:

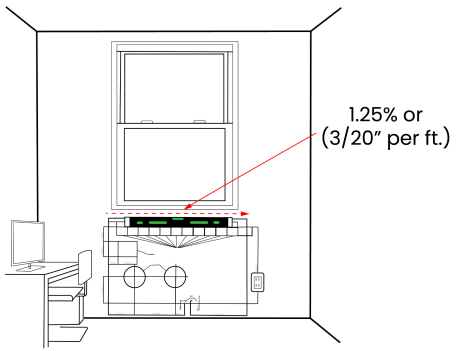
1. **Lift the AIO® Wall Mounted Pro unit and clip it to the prongs on the wall bracket.**

To ease placement, tilt the bottom of the unit slightly away from the wall.

Two people must lift the unit.

2. **Check that the unit has the correct slope**
   - A digital level is recommended for greater accuracy.
   - The unit should have a slight downward slope towards the right of approximately 1/4" per foot (20.8 mm/m) to ensure proper drainage.

Figure 12.



6.9 Fastening the Anti-Lift Brackets

Two Anti-Lift Brackets are provided to secure the AIO® Wall Mounted Pro Unit in place during installation and operation. These brackets must be installed on either side of the rubber drain hose to maintain the correct slope of the unit, ensuring reliable long-term performance.

To fasten the Anti-Lift Brackets to the wall:

1. **Position the Anti-Lift Brackets over the template.**
   - Ensure the screw holes on the template are positioned over wall studs if required (see Affixing the Wall Bracket to the Wall).
2. **Secure the Anti-Lift Brackets to the wall.**
   - Use two screws to attach the Anti-Lift Brackets to the wall.
   - If the wall is hollow, use two ¼" (6.4 mm) load-bearing wall anchors that support at least 50 lbs (22.7 kg) and can be removed cleanly from the wall.

6.10 Checking for air leaks

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

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

To check for air leakage:

1. Temporarily mount the AIO® Wall Mounted Pro Unit on the bracket.
2. **Darken the room.**
    a. Close the curtains in the room.
    b. If there are no curtains, use opaque material to cover the windows.
    c. Turn off the lights in the room.
3. **Check the wall for air gaps.**
    a. Inspect the area where the AIO® Wall Mounted Pro Unit meets the wall.
    b. Check all sides for light infiltration. A mirror can be helpful for viewing areas behind the unit.
    c. If the sleeves are secure against the back of the unit, there should be no light infiltration.

Figure 13.

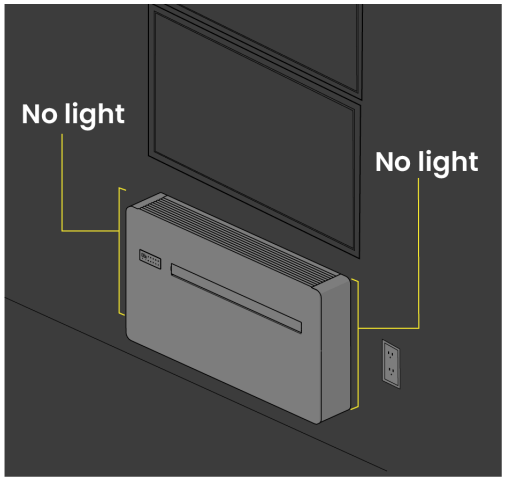
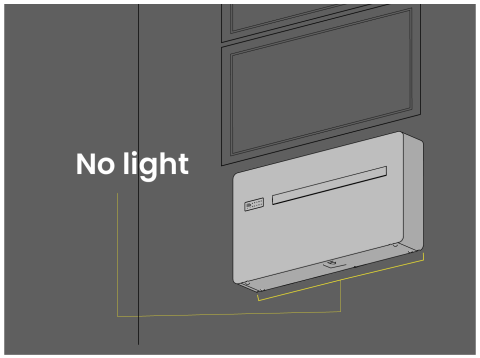


Figure 14.



4. **If there are air gaps:**
    a. Lift the unit off the wall bracket. Set it aside.

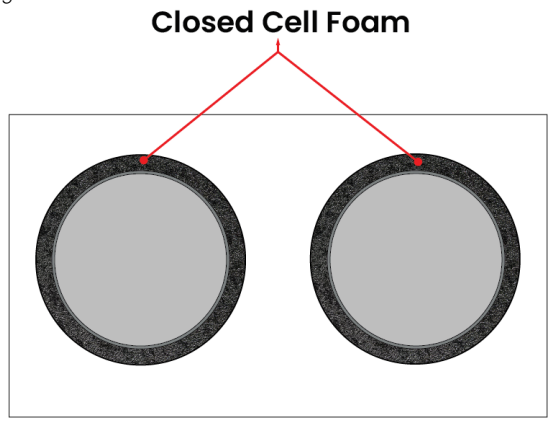
⚠WARNING

- Two people must lift the unit.
- Lift the unit from the sides of the bottom base.
- Be aware that the unit is unbalanced on the right (compressor) side. Support this side securely during lifting.
- Lift with your legs, not your back.
- Failure to follow these instructions can result in back or other injury.

    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.
    d. After remounting the unit, check that it is vertically aligned from top to bottom.

If it tilts forward, shim the wall bracket to correct the alignment.

Figure 15.



6.11 Connecting the 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 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.

⚠CAUTION

- 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 connecting the AIO® Wall Mounted Pro Unit to the prepared condensate drain.

Connecting an In-the-wall drain
To connect the rubber hose to an in-the-wall drain:

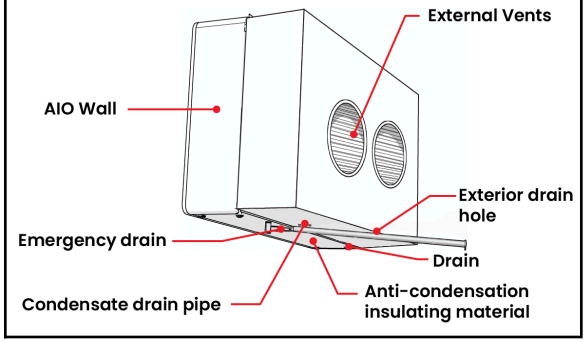
1. **Prepare the rubber hose.**
   Cut the end of the rubber hose as needed, but make sure there is enough left that at least 4" (101.6 mm) of the hose can be inserted into the pipe.

   Note: The remaining steps in this procedure can only be performed after the unit is mounted on the wall bracket.
2. **Connect the rubber hose to the drainpipe.**
   - Gently push at least 4" (101.6 mm) of the rubber hose into the drainpipe.
   - Be careful not to squeeze or crimp the rubber hose.
   - Ensure the rubber hose fits snugly in the drainpipe and does not pop out or detach.
3. **Insulate the rubber hose.**
   - Wrap the part of the rubber hose that is in the room with anti-condensation, insulating material.

Connecting an external drain
To connect the rubber hose to an external drain:

1. **Insert the rubber hose into the drain pipe.**
   - Gently push at least 4" (101.6 mm) of the rubber hose into the external drain pipe.
   - Be careful not to squeeze or crimp the rubber hose.
   - Ensure the rubber hose fits snugly in the pipe and does not pop out.
2. **Seal the connection.**
   - Properly seal the area around the drain pipe and wall penetration to prevent water and air from entering the room.
   - Use best practices, based on the application and materials used.
3. **Insulate the rubber hose.**
   - Wrap the part of the rubber hose that is in the room with anti-condensation, insulating material.
4. **Insulate any external piping.**
   - Wrap all external piping with heat tape and insulation.

Figure 16.



6.12 Condensate drain 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 six 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.

6.13 Connecting the unit to the power supply

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

Connecting the unit with an LCDI power cord
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 other end of the LCDI power cord into the power outlet prepared for the unit.**
3. **Secure all wiring.**

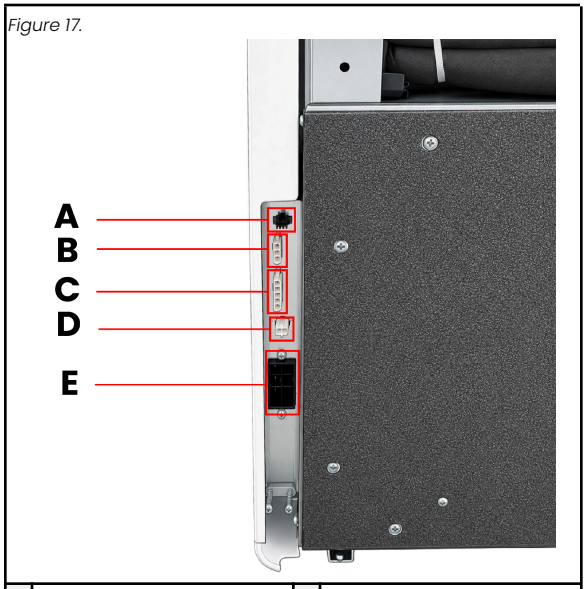
Connecting the unit with a hardwire
You can purchase a whip cord to connect the unit to the power supply or create your own power cable.

Note: If you plan to use your own wiring to connect the AIO® Wall Mounted Pro Unit to the junction box, ensure the wire gauge is appropriate for the voltage, amperage, and cable length.

To connect the unit using a whip cord:

1. **Unscrew the Decorative Side Panel on the right side of the unit and set it aside.**
2. **Insert the male connector on the whip cord into the female connector on the unit's power terminal.**
3. **Reattach the decorative panel on the right side of the unit.**
4. **Connect the wires on the other end of the cable to the junction box.**
   - For 115V units:
     - Connect the brown wire to the live.
     - Connect the blue wire to neutral.
     - Connect the yellow wire to ground.
   - For 230V units:
     - Connect the brown and blue wires to the live phases.
     - Connect the yellow wire to ground.

Figure 17.



A	ERV communication	D	Power for heat trace on condensate line/Nebulizer
B	Power for ERV/Nebulizer	E	Quick-connect line power
C	ECM axial condenser fan power		

To hardwire the unit without using a whip cord:

Watch the following video:

AIO Wall Mounted (Gen 2+) Hardwire Instructio...

6.14 Connecting the ECM axial condenser/outdoor fan

1. Unscrew the Decorative Side Panel on the right side of the unit and set it aside.
2. Connect the ECM axial condenser/outdoor fan wire to port marked C in Figure 17.
3. Once the fan wire is properly connected, reattach the decorative panel on the right side of the unit.

7. ADVANCED FEATURES

The Wall Mounted Pro system offers advanced programmable features, allowing the hardware to be tailored for specialized environments such as hotels or high-traffic commercial spaces.

For details on basic programmable features, refer to

AIO Wall Mounted and Wall Mounted Pro (Gen 2/...

7.1 Accessing the advanced menu

Press and hold ⏻ for 10 seconds. CF appears. You have accessed the advanced menu.

7.2 Switching between Celsius and Fahrenheit

By default, the system displays temperatures in Fahrenheit. To specify the units in which to display temperatures:

1. In the advanced menu (CF is displayed), tap either of the **+** or **–** keys to toggle between Fahrenheit and Celsius.
2. Tap the **Power key** (⏻) to confirm the setting. [ ] appears to confirm the new setting has been recoded.
3. Tap the **Auto mode key** (A) twice to exit the menu.

7.3 Selecting Hotel mode

In Hotel mode:

- Only the Heating, Cooling, and Fan-only modes are enabled. The Dehumidification and Automatic modes are deactivated.
- The temperature setting range is limited to 72°F to 82°F (22.2°C to 27.8°C) in Cooling mode and to 61°F to 75°F (16.1°C to 23.9°C) in Heating mode.
    1. In the advanced menu (CF is displayed), press and hold the **+** or **–** keys together for five seconds until HC appears.
    2. Tap either of the **+** or **–** keys to scroll to ho.
    3. Tap ⏻ to confirm the selection.
    4. Select YS to turn on Hotel mode or NO (the default setting) to exit Hotel mode. [ ] appears to confirm the new setting has been recoded.
    5. Tap the **Auto mode key** (A) twice to exit the menu.

7.4 Setting a temperature offset in Heating mode

Use this parameter to calibrate the thermostat by applying a temperature offset. This corrects reading errors caused by poor placement (such as mounting the thermostat in a draft or near a heat source), ensuring the displayed temperature reflects the actual room conditions.

1. In the advanced menu (CF is displayed), press and hold the **+** or **–** keys together for five seconds until HC appears.
2. Tap either of the **+** or **–** keys to scroll to oF.
3. Tap ⏻ to confirm the selection.
4. Tap either of the **+** or **–** keys to set the desired temperature offset.
5. Tap ⏻ again to confirm the setting. [ ] appears to confirm the new setting has been recorded.
6. Tap the **Auto mode key** (A) twice to exit the menu.

7.5 Setting a temperature offset in Cooling mode

Use this parameter to calibrate the thermostat by applying a temperature offset. This corrects reading errors caused by poor placement (such as mounting the thermostat in a draft or near a heat source), ensuring the displayed temperature reflects the actual room conditions.

1. In the advanced menu (CF is displayed), press and hold the **+** or **–** keys together for five seconds until HC appears.
2. Tap either of the **+** or **–** keys to scroll to oC.

3. Tap ⏻ to confirm the selection.
4. Tap either of the **+** or **–** keys set the desired temperature offset.
5. Tap ⏻ again to confirm the setting. [ ] appears to confirm the new setting has been recorded.
6. Tap the **Auto mode key** (A) twice to exit the menu.

7.6 Activating or deactivating the ERV Module (for Gen 3 units only)

1. In the advanced menu (CF is displayed), press and hold the **+** or **–** keys together for five seconds until HC appears.
2. Tap either of the **+** or **–** keys to scroll to Hr.
3. Tap ⏻ to confirm the selection.
4. Select YS (the default setting) to activate the ERV or NO to deactivate it.
5. Tap ⏻ again to confirm the setting. [ ] appears to confirm the new setting has been recorded.
6. Tap the **Auto mode key** (A) twice to exit the menu.

7.7 Adjusting the beep sound volume

The unit sounds a beep when any action is performed to confirm its success. You can adjust the sound volume as desired.

1. In the advanced menu (CF is displayed), press and hold the **+** or **–** keys together for five seconds until HC appears.
2. Tap either of the **+** or **–** keys to scroll to ub.
3. Tap ⏻ to confirm the selection.
4. Tap either of the **+** or **–** keys adjust the sound level. The volume range is from 00 (minimum) to 03 (maximum).
5. Tap ⏻ again to confirm the setting. [ ] appears to confirm the new setting has been recorded.
6. Tap the **Auto mode key** (A) twice to exit the menu.

8. SPECIALIZED CONFIGURATIONS

The AIO® Wall Mounted Pro Unit can be configured for the following situations:

- When the unit is mounted high on a wall.
- When the unit is used with an occupancy sensor.

8.1 Configuring the unit for a high wall application

The AIO® Wall Mounted Pro Unit can be installed in high-wall applications. By default, the unit is factory-configured for low-wall installation, with airflow directed upward. This works well for heating and cooling when the unit is installed near the floor.

For high-wall applications, the airflow direction must be modified by adjusting the supply air louver position to blow downward instead of upward. This is achieved by modifying the bracket on the unit and changing the program code.

Additionally, a lower cover panel (Part GB0737II) should be installed to cover the unfinished bottom of the AIO® Wall Mounted Pro Unit.

⚠ WARNING

When the AIO® Wall Mounted Pro Unit is in the OFF position, voltage is still being supplied to the electrical controls. To avoid electric shock or damage to the AIO® Wall Mounted Pro Unit, disconnect the power to the unit before opening it by doing one of the following:

- Unplug the power supply cord from the power outlet.
- Turn off the circuit breaker or remove the fuse.

Failure to follow this warning can result in death, serious injury, and/or property damage.

To configure the AIO® Wall Mounted Pro Unit for high wall installation:

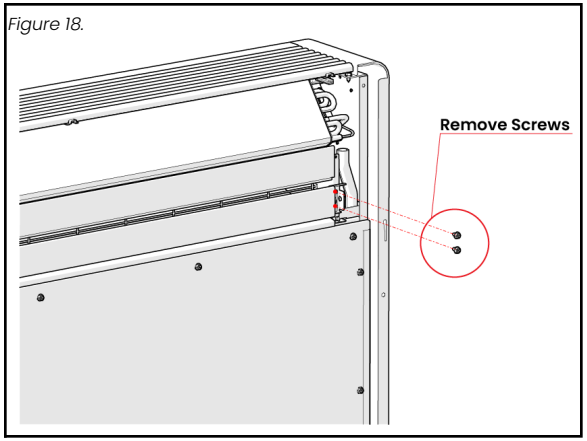
1. Adjust the louver bracket.
2. Program the louver direction.

8.1.1 Adjusting the louver bracket

To adjust the louver bracket position:

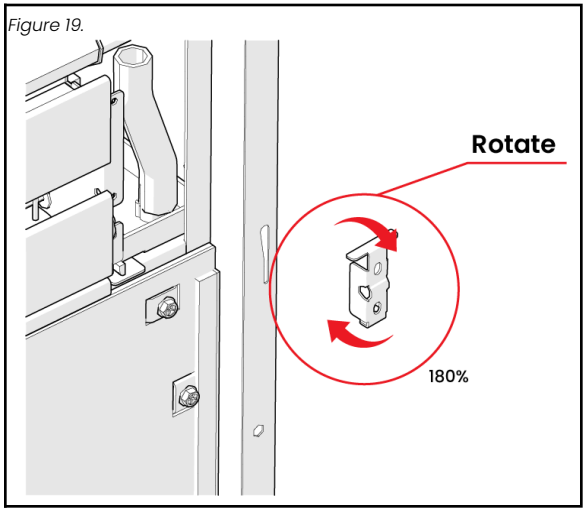
1. Ensure that the AIO® Wall Mounted Pro Unit is disconnected from the power supply.
2. If the unit's front cover is still attached, remove it.
3. Remove the screws from the right-side louver bracket.

Figure 18.



4. Flip the bracket over (180°) to reverse its orientation.

Figure 19.



5. Reinstall the right-side louver support bracket screws.
6. Reinstall the Front Cover Panel and grille.
7. Install the lower cover panel (Part GB0737II) on the bottom of the AIO® Wall Mounted Pro Unit.

For more information, see the documentation for the lower cover panel.

8.1.2 Programming the louver direction

Once the physical modifications have been made to the AIO® Wall Mounted Pro Unit, including installing the lower body cover and changing the direction of the louver bracket, the AIO® Wall Mounted Pro Unit must be programmed as well. The programming will be stored in the unit and will not be lost during a power outage or if the power cord is disconnected.

To program the louver direction:

1. **Reconnect the AIO® Wall Mounted Pro Unit to the power supply.**
2. **Press ⏻ 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. After a few seconds, the display returns to normal.
- The louver direction is now programmed for high wall installation.

8.2 Connecting a dry contact

⚠ DANGER

- Always turn off all electrical power before making electrical connections. All electrical connections and wiring MUST be installed by a qualified electrician and conform to the National Electrical Code and all applicable local codes.
- Improper wiring may result in death, serious injury, and/or property damage.

⚠ CAUTION

For models with auxiliary electric heat, do not wire up the dry contact directly to the unit, as abruptly shutting off power to the unit may cause internal overheating. Instead, the dry contact must be wired to an external control or switch that can safely place the unit in standby mode and enable a cool-down ventilation cycle before complete shutdown.

The AIO® Wall Mounted Pro 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.

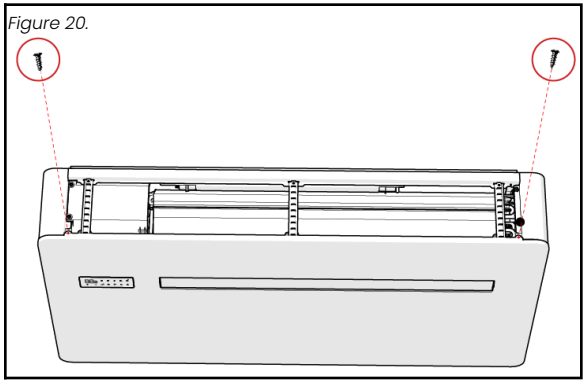
When the dry contact opens, the unit enters standby mode and displays CP (Contact Present) on the screen.

To minimize electrical interference, use only shielded cable when connecting a dry contact input (see installation instructions below).

To connect a dry contact:

1. **Turn off the power**
   De-energize the Unit: Before accessing the filters, always switch off the power to the unit to prevent accidental activation and ensure safety:
   a. Unplug the power cord or turn off the breaker.
   b. Wait at least five minutes before continuing.
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: Do not break the plastic or tear the filter.
3. **Remove the front cover panel.**
   a. Unscrew the two front screws on the top of the unit (labeled in the following figure).

Figure 20.



   b. Gently pull the top panel forward and set it aside.

⚠CAUTION

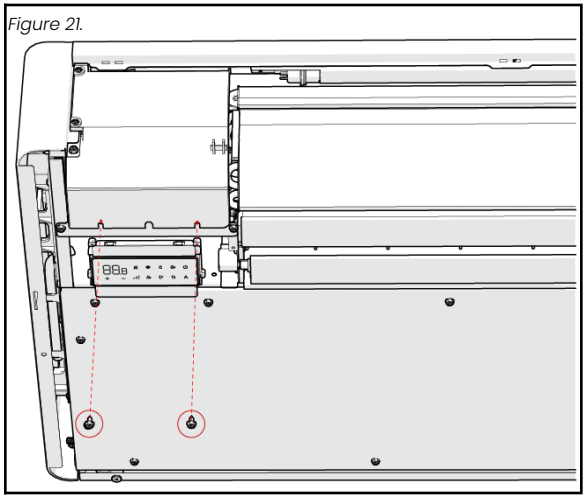
When removing the Front Cover Panel of the AIO® Wall Mounted (Gen 3) unit:

- The Onboard Touch Controller is clipped to the back of the Front Cover Panel, and a wire-harness connector is soldered directly to the controller.
- Do not pull the panel abruptly, because this can tear the connector from the Onboard Touch Controller, causing damage.
- Carefully disconnect the wire harness connector before fully removing the Front Cover Panel to avoid damaging the connector or the Onboard Touch Controller.

4. Remove the black plastic electrical protective cover.

a. Remove the two lower screws securing the black plastic electrical protective cover to the plastic Onboard Touch Controller cover, and set them aside.

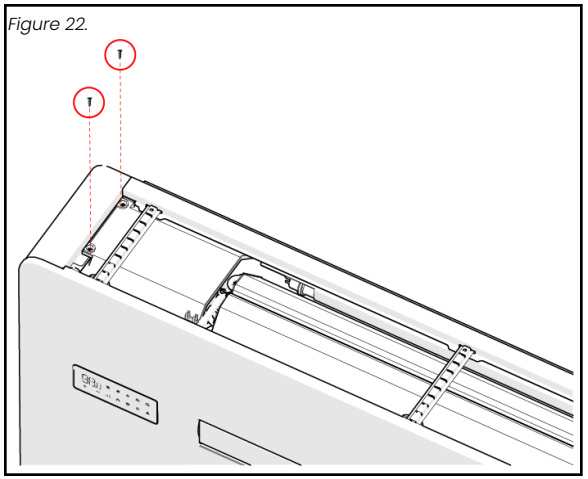
Figure 21.



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

b. Remove the two screws securing the black plastic electrical protective cover to the white metal frame of the AIO® Wall Mounted Pro Unit, then set them aside.

Figure 22.



Keep the screws separate from the screws removed previously.

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

5. Install the shielded cable (for CP input)

a. Prepare the shielded cable.

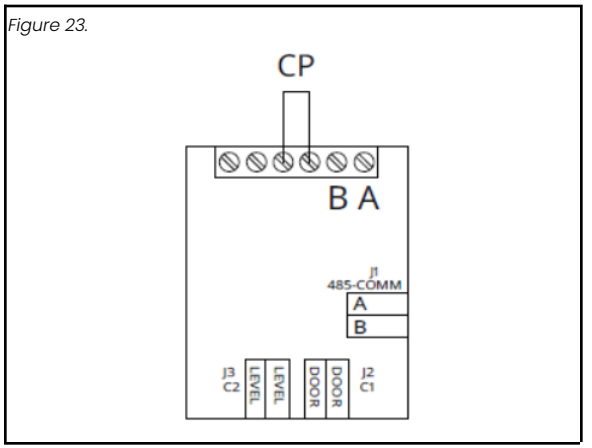
- Carefully strip the outer jacket to expose the internal wires and drain wire (shield conductor), ensuring no damage occurs to the inner conductors.

b. Connect the shielded cable to the CP terminals

- Loosen the screws on the CP terminals on the control board.
- Remove the factory-installed jumper connecting the CP terminals.
- Insert the wires from the dry contact device into the CP terminals.
- Tighten the screws securely.

See the following image for the proper connection points.

Figure 23.



c. Ground the shield (drain wire):

- Connect the cable's drain wire securely to the dedicated grounding terminal located at the top of the AIO® Wall Mounted Pro Unit's electrical compartment.
- Ensure the drain wire is grounded only at this end (unit side) to prevent interference or ground loops.

d. Insulate the shield:

- Insulate any exposed shield (foil, mesh, or drain wire) with insulating tape or heat-shrink tubing to prevent accidental contact with other conductors or grounding points.

6. Position the black plastic electrical protective cover in place.

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

7. Test that the dry contact works properly.

a. Power up the AIO® Wall Mounted Pro Unit.

b. Activate and deactivate the connected control device (e.g., an occupancy sensor) to verify that the unit responds correctly: it turns on and enters standby mode as expected.

8. **Secure the plastic cover.**
    a. Reconnect the Onboard Touch Controller wire harness connector.
    b. Reattach the black plastic electrical protective cover onto the plastic housing of the On-Board Touch Controller using the two screws removed in Step 4a.
    c. Reattach the black plastic electrical protective cover to the white metal frame of the AIO® Wall Mounted Pro Unit using the two screws removed in Step 4b.
9. **Finish closing the unit.**
    a. Position the Front Cover Panel on the AIO® Wall-Mounted Pro Unit.
    b. Reattach the Front Cover Panel to the AIO® Wall Mounted Pro Unit using the two screws removed in Step 3.
    c. Reinsert the Air Filter into the AIO® Wall Mounted Pro unit.
    d. Reinsert the grille above the filter.

8.3 Configuring heating strip wattage

The AIO® Wall-Mounted Unit, 230V with Heat Strip, includes two 900 W heating strips that can operate together (1800 W) or individually (900 W). Use this procedure to configure the desired wattage during installation or at first startup.

1. **Turn off the power.**
    - Disconnect power to the unit to prevent accidental activation.
    - Unplug the unit or switch off the circuit breaker.
    - Wait at least 5 minutes and verify that all indicator lights are off before proceeding.
2. **Access the Heating settings.**
    - On the onboard touch controller, select `Ht`.
    - Select `N0` to turn off the heating strips.
3. **Set the Heating wattage.**
    - Select `r1` for 900 W operation.
    - Select `r2` for 1800 W operation.
4. **For 900 W Operation Only:**
    - Disconnect the connector for one heating strip on the PCB (see images below).

Figure 24.

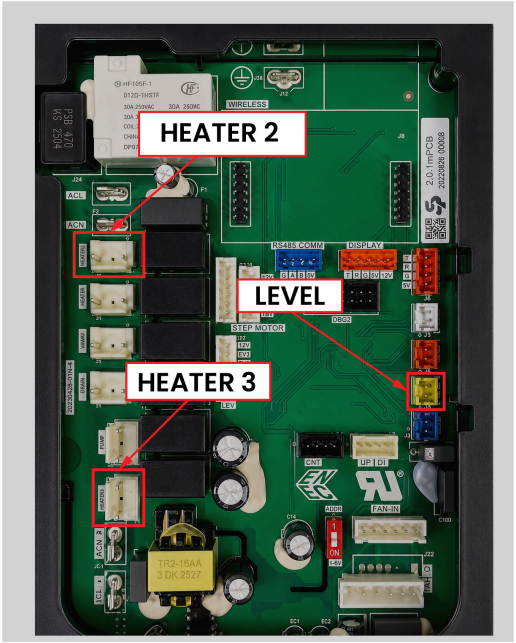
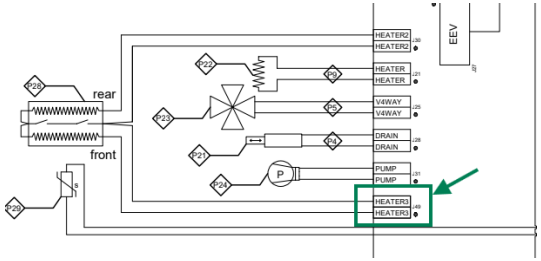


Figure 25.



- Cut off the plug from the disconnected wire to prevent reconnection.
- Wrap wire ends with electrical tape or use a wire nut to insulate them.

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

Figure 26.

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 UNIT 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 keys. All startup, commissioning, and configuration operations are performed through this controller.

The controller has the following touch keys:

Table 2. Onboard Touch Controller keys

Key	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 on the unit for the first time

Before powering on the unit, confirm that all physical installation steps are complete, including electrical connections, condensate drain and vent hole routing, and external louver installation.

To power on the unit for the first time:

1. Turn on the circuit breaker and/or connect the power supply cord.
2. Verify that the power supply voltage is within the acceptable operating range specified on the unit data label.
3. Press the **Power key** (⏻) on the Onboard Touch Controller. The display will illuminate, and the unit will enter standby mode.
4. Verify that no error codes appear on the display. If an error code is displayed, refer to the Troubleshooting section of the Service Manual before proceeding.

After the first power-on, the unit automatically enters a Wi-Fi provisioning window. If Wi-Fi is not configured within 15 minutes, provisioning mode automatically times out. Refer to Section 9.6 for Wi-Fi setup instructions.

9.3 Verifying system status (Info & Commissioning menu)

The Info & Commissioning menu allows the installer to verify the unit's firmware version and monitor real-time operating parameters. Use this menu to verify that all monitored components and operating parameters are functioning correctly after installation and startup.

9.3.1 Accessing the Info & Commissioning menu

1. With the display on, press and hold the + and A keys simultaneously for 10 seconds.
2. The display shows "VE" (firmware version), confirming that the Info & Commissioning menu is active.
3. Use the **+** and **–** keys to scroll through the available parameters.
4. To exit the menu, press and hold the **Power key** (⏻) for 10 seconds, or wait 30 seconds for automatic timeout.

9.3.2 Info & Commissioning menu parameters

Table 3. Info & Commissioning 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

Parameter	Description	Options/Range
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.

9.4.1 Accessing the User menu

1. With the display off, press and hold the **Power key** (⏻) for 10 seconds.
2. The unit turns on, and the display shows a flashing indicator.
3. Continue holding the **Power key** (⏻) until a menu code appears (e.g., CF or Ub), then release.
4. Use the **+** and **–** keys to scroll through menu items.
5. Press the Power key to select the parameter and enter edit mode.
6. Use the **+** and **–** keys to change the value.
7. Press the **Power key** (⏻) again to confirm the change. The display briefly shows a confirmation indicator [ ] and then advances to the next menu item.
8. To exit the User menu, press the **A key** twice quickly, or wait 30 seconds for automatic timeout.

User menu parameters

Table 4. User menu parameters

Parameter	Description	Options/Range
CF	Temperature scale selection	°C (default) or °F
Ub	Key tone 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 (Setup 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 Setup menu

1. First, access the User menu (see Section 9.4).
2. From the User menu, press and hold the **+** and **–** keys simultaneously for 10 seconds.
3. The display will show a Setup menu parameter code (e.g., HC).
4. Use the **+** and **–** keys to scroll through menu items.
5. Press and hold the **Power key** (⏻) for 2 seconds to select an item and enter edit mode.
6. Use the **+** and **–** keys to change the value.
7. Press and hold the **Power key** (⏻) for 2 seconds to confirm the change.
8. To exit the Setup menu, press the **Power key** (⏻) for approximately 10 seconds (the display will show a flashing indicator), then press the **Power key** (⏻) again for another 10 seconds to turn off the display. Alternatively, wait 30 seconds for automatic timeout.

Setup menu parameters

Table 5. Setup menu parameters

Parameter	Description	Options/Range
HC	Heating / Cooling mode selection	hc (both, default), ho (heating only), co (cooling only)
ho	Hotel mode	no (default), ys (enabled)
in	Installation position (wall mounting height)	dn (low wall, default), uP (high wall)
co	Wi-Fi expansion module	ys (WIFI + RS485 ON), no (WIFI + RS485 OFF), nr (WIFI OFF / RS485 ON)
Ad	Modbus address	1.....99 (default: 1)
rF	Remote function (M7 wall control)	no (default), ys (enabled)
HL	Hotel mode – Heating minimum setpoint (FW 1.3.0+)	18°C–24°C (64°F–75°F)
Hh	Hotel mode – Heating maximum setpoint (FW 1.3.0+)	18°C–24°C (64°F–75°F)
CL	Hotel mode – Cooling minimum setpoint (FW 1.3.0+)	21°C–25.5°C (70°F–78°F)
Ch	Hotel mode – Cooling maximum setpoint (FW 1.3.0+)	21°C–25.5°C (70°F–78°F)
Ht	Auxiliary heater type (ELEC models only)	no (default), r1 (1 kW), r2 (2 kW)
HE	Auxiliary heater operating mode (ELEC models only)	rE (standard, default), rH (resistance-only heating), rT (resistance-only heating when outdoor temp is low)
Uu	UV-C lamp kit	no (default), ys (enabled, UV-C models only)
Hr	ERV module (FW 1.15.1+)	no (default), ys (enabled, ERV models only)
Hn	ERV control logic (FW 1.15.1+)	no (2.0 mode, default), ys (PTAC mode)

Parameter	Description	Options/Range
Sn	SNS system activation (nebulizer) (FW 1.15.1+)	no (default), ys (enabled)
At	Drain opening function in cooling mode (FW 1.15.1+)	no (default), ys (drain open, pump off)

- Depending on the unit's factory configuration, some Setup Menu parameters may already be set to non-default values. Always verify the current settings before making changes.
- **For 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 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 to the INNOVA Wi-Fi app

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.

To use the Wi-Fi capability:

1. **Download the app.**
   To download the INNOVA app, scan the applicable QR code or click the applicable link below.

Android	iOS
Or click the link:	Or click the link:
Download the app from Google Play	Download the app from the Apple App Store

On these websites, the app is sometimes called **INNOVA Butler** instead of **INNOVA.**

2. **Install the app and create an account.**
   a. Follow the on-screen instructions to install the INNOVA app on your phone.
   b. When the installation is complete, click **Open**.
   c. Click **Register** and, when prompted, follow the on-screen instructions to register your account.
   d. Keep the app open, but do not begin the pairing process yet.
3. **Ensure the unit can be discovered by the app.**
   a. If the unit is not turned on, turn it on. The unit is now visible to the app for 15 minutes.
   b. If the unit is controlled by the onboard controller (no M7 wall controller is connected), verify that the Wi-Fi capability on the unit is enabled by entering the Installer menu on the unit and ensuring that **co** ("Connectivity Expansion") is set to **YS** (enabled, as described in Section 9.5).

If the unit is connected to an M7 wall controller, Wi-Fi function is controlled by the wall controller. In this case, connectivity expansion on the unit must be disabled, and pairing must be enabled (if needed) in the M7 wall controller menu.

   c. If the unit has been turned on for more than 15 minutes, enter the User menu on the onboard touch controller and activate the Wi-Fi pairing.
      - If the unit is controlled by the onboard touch controller, refer to Section 9.4.
      - If an M7 wall controller is connected, refer to the "User menu" section in the M7 Wall Controller (EEB749 and EFB749) Installation and User Guide.

4. **Pair the controller in the app.**
    a. Immediately, in the INNOVA app, click **Allow** to grant the app permission to access Wi-Fi.
    b. Follow the on-screen instructions to pair the app with the controller.

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 **–** keys simultaneously for approximately 3 seconds.
- The display will briefly show a keypad lock/unlock confirmation.
- When the keypad is locked, pressing any key displays "bL" on the screen.

9.8 Configuration checklist

Before proceeding with the system testing (Chapter 10), confirm that the following commissioning tasks have been completed:

- ☐ Unit powers on without active error codes.
- ☐ Firmware version has been verified via the Info & Commissioning menu (VE parameter).
- ☐ The temperature scale (°C or °F) has been set according to the customer's preference (CF parameter).
- ☐ The installation position (high wall or low wall) has been configured correctly (in the parameters).
- ☐ Heating/Cooling mode has been set as required (HC parameter).
- ☐ If applicable: Hotel mode has been enabled, and temperature setpoint limits have been configured (ho, HL, Hh, CL, Ch parameters).
- ☐ If applicable, the auxiliary heater type and operating mode have been configured (Ht, HE parameters).
- ☐ If applicable, the M7 wall controller has been connected and the remote function enabled (rF parameter).
- ☐ If applicable: ERV module has been enabled and control logic configured (Hr, Hn parameters).
- ☐ Wi-Fi has been configured using the INNOVA Butler app, or the customer has been informed how to do so.
- ☐ Buzzer volume has been set per the customer's preference (Ub parameter).

Once all commissioning tasks are completed, proceed to Chapter 10: Testing the Unit.

10. TESTING THE UNIT

After installation, it is crucial to test the AIO® Wall Mounted Pro unit to ensure proper operation.

To test the unit:

1. Check that the power supply is within an acceptable range and that the unit is properly grounded.
2. Set the unit to Cooling mode on the lowest temperature setting, and verify that it is blowing cold air into the room.
3. Turn the unit off.
4. Wait 10 minutes.
5. Set the unit to Heating mode at the highest temperature setting, and verify that it is blowing warm air into the room.
6. Test each fan speed.
7. If installed with a wall-mounted or remote controller, repeat steps 2-5 using the controller.
8. Ensure that the required clearances are not obstructed.

11. SELF-CERTIFYING THE INSTALLATION

To ensure the AIO® Wall Mounted Pro unit operates correctly, we recommend that the installation be self-certified and approved by INNOVA before the unit is used.

For more information on self-certification, see the Self-Certification Guide.

For information about the warranty ramifications of self-certifying the installation, refer to the warranty.

11.1 Post-installation certification checklist

The following items must be inspected after installation:

Appropriate use

- ☐ The AIO® Wall Mounted Pro unit's cooling and heating capacity is sufficient to condition the room where it is installed.
- ☐ No furniture, plants, or window coverings block the interior vents.

Mounting

- ☐ The wall bracket is securely hung, with at least two screws anchored in concrete or wood, and the other four screws are ¼" (6.4 mm) load-bearing wall anchors that support at least 50 lbs (22.7 kg) and can be removed cleanly from the wall.
- ☐ The unit is mounted level on the vertical axis and positioned at a 1/4" per foot (20.8 mm/m) slope to the right on the horizontal axis.
- ☐ The unit is flush to the wall with no gaps between the wall and the back of the unit. If the wall is not flat, ensure that insulation was added around the openings to the outside.
- ☐ The Anti-Lift Brackets are fastened to wood or concrete with ¼" (6.4 mm) load-bearing wall anchors that support at least 50 lbs (22.7 kg) and can be removed cleanly from the wall.

External vents

- ☐ The vent sleeve is sealed inside the wall with no gaps.
- ☐ Approved exterior grilles are installed.
- ☐ The exterior grilles are installed correctly.
- ☐ The exterior grilles are properly sealed.
- ☐ The external vent holes are 100% aligned internally with the AIO® Wall Mounted Pro unit's vent holes.
- ☐ Walls, plants, or other obstructions do not block the exterior vents.

Electrical

- ☐ The power receptacle is in good working condition, and the LCDI plug fits snugly, if using an LCDI cord.
- ☐ The circuit breaker is within the required specifications.

Drainage (if using for heating)

- ☐ The condensate drain is connected and working.
- ☐ The external condensate drain is pitched correctly.
- ☐ The external condensate drain's exterior wall drain hole is properly sealed.

12. FINAL STEPS AFTER INSTALLATION

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

- ☐ **Clean-Up:** Remove all packaging materials and wipe the unit clean of dust or debris with a damp cloth.
- ☐ **User Handoff:** Review the following with the user:
  - Key features and specifications of the unit
  - Basic operating instructions
  - Routine maintenance requirements
- ☐ **Protect the unit**
  - If the unit is installed in an environment with salt, chemical, or acidic air exposure, 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 in a construction environment, protect it with a tight plastic wrap and do not operate it until all dust and debris in the environment have been removed.

⚠CAUTION

Failure to properly wrap the unit and disconnect its power in dusty or active construction or renovation environments can result in damage to internal components and void the warranty.

13. DIMENSIONS

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

AIO Wall Mounted Pro Dimensions (V 5.0).pdf

Figure 27.

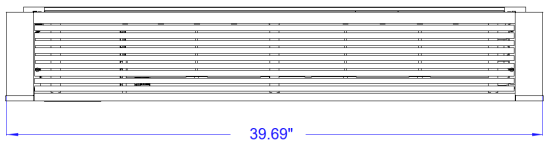


Figure 28.

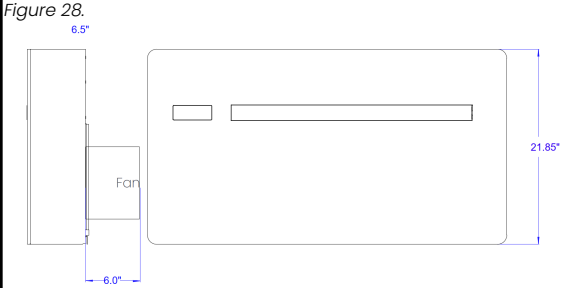
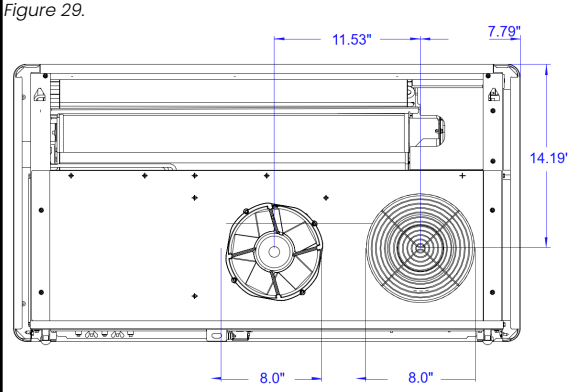


Figure 29.



14. WIRING DIAGRAMS

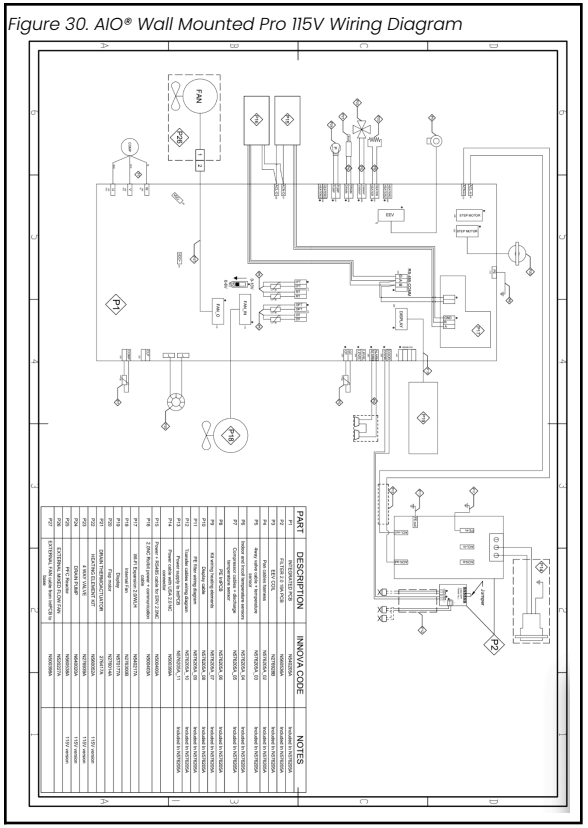
The following are the wiring diagrams for AIO® Wall Mounted Pro units.

14.1 AIO® Wall Mounted Pro 115V Wiring Diagram

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

AIO Wall Mounted Pro 115V (Heat Pump Only) Wiri...

Figure 30. AIO® Wall Mounted Pro 115V Wiring Diagram

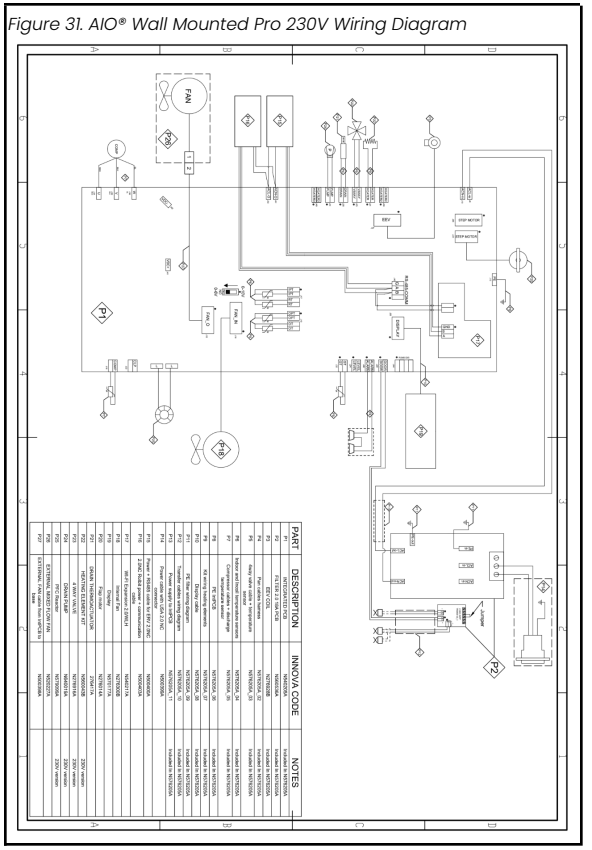


14.2 AIO® Wall Mounted Pro 230V Wiring Diagram

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

AIO Wall Mounted Pro 230V Wiring Diagram (V 5....

Figure 31. AIO® Wall Mounted Pro 230V Wiring Diagram

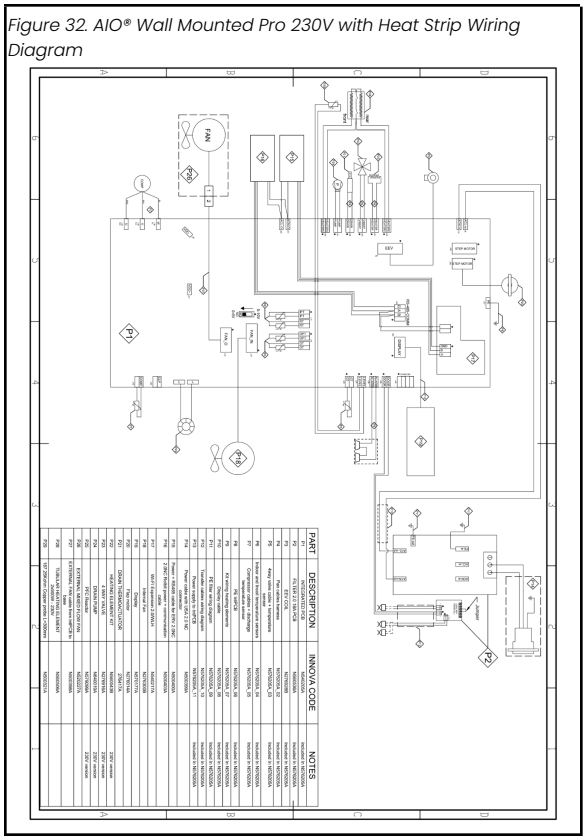


14.3 AIO® Wall Mounted Pro 230V with Heat Strip Wiring Diagram

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

AIO Wall Mounted Pro 230V (with Electric Heater) ...

Figure 32. AIO® Wall Mounted Pro 230V with Heat Strip Wiring Diagram



15. WARRANTY

15.1 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.

15.2 Optional extended coverage

- **Additional 2-Year Parts & Labor Warranty:** Extends the basic coverage to 4 years labor and 7 years parts.
- **Extended 10-Year Parts Warranty:** Extends parts coverage to 10 years total.
- **Extended 5-Year Full Warranty:** Extends complete 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.

15.3 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 local 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.

For detailed terms and conditions, click the link below:

AIO Warranty Terms and Conditions - 2026 - INN...

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.

innova.co | **USA:** 216-710-1000 **Canada:** 416-739-1000

MADE IN ITALY

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