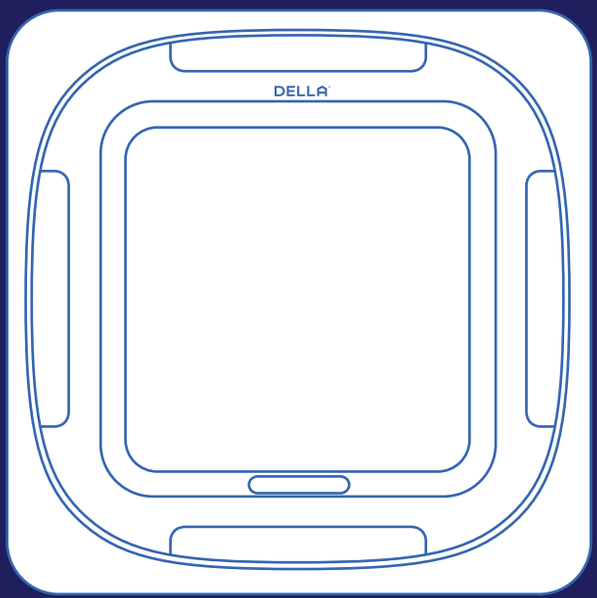
DELLA®



Cassette (CC) Series

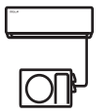
Instruction Manual
Installation and Operation Guide

Watch video
before Installation

Welcome to DELLA®

5 Things to know before installation

Thank You for trusting Della as your home comfort solution. We know no better how exicting it must be to have a new and functional AC to make your living space more comfortable. But AC installation, in reality, is far from being simple. Here are a few things you must know before installing the AC whether by yourself or by a professional HVAC technician. This will give you an idea of what to look out for installing an AC so that it can perform at its maximum efficiency and every dollar you invest in it pays off.



The installation location is critical

Not all places are created equal. Only proper placement of the AC will maximize efficency while balancing the interior aesthetic. As wall requires for the installation, you need to make sure to get the placement and location right the first time.

Page 18

Handle the refrigerant pipes perfectly

The refrigerant pipe is one of the most important, if not the most important, parts of the mini split AC system. So, be sure to understand what the entire process entails. You might need special-purpose tools to shorten and bend the pipe. Purchaseing lengthening pipes to match your connection might also be necessary. Any flow in the handling of the refrigerant pipes may cause a refrigerant leak or reduced efficiency. The cost to repair or re-install the refrigerant pipe can quickly frustrate and upset any DIYer, especially when trying to save money by not hiring a professional. Additional refrigerant might also be needed if you used lengthening pipes or find any leaks during your install. Further more, it's always a good idea to test for any refrigerant leaks after completing your installation by using soapy spray or professional detector tools. Please contact us if you need extra refrigerant.

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Bundle the line set correctly

The line set contains the refrigerant pipes, drain hose, and electrical wires. A good bundling prevent water condensation and protects it from extermal elements, as well as matching the exact distance of the installation. No one wants extra line set dangling around.

Page 48

Vacuum pumping the refrigerant circuit

Mini-split AC absolutely needs vacuum pumping in order to perform efficently and prevent refrigerant from reacting with air moisture and damaing the internal parts of the machine. With a vacuum pump and a micron gauge, the process does not take very long, but it is important to do it right.

Page 44

Safe electrical connection

A safe and properly electrical connection is crucial necessity for the installation. The voltage, power breaker protection, cable requirement and wiring must correspond to the specifications of each model. A poor connection can quickly becomes a fire hazard.

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QUICK TIPS

Most of the problems emerge from incorrect or poor installation. Installation performed by professional HVAC technician can greatly reduce the chance of having problems for years to come. On top of that, Della provide extended warranty for professional installation. If you need assistance or have questions, we are here for you.

support.dellahome.com

800-863-4143
6:00 a.m. - 4:00 p.m. PST
Monday - Friday

24/7 Live Chat

Table of Content

Warning and Safety

- Read this guide before installation. Failure to follow the safety instructions may result in property damage, serious injury, or death.
- Please Keep this manual.

Danger:
Indicates an IMMINENTLY hazardous situation that, if not avoided, will result in death, serious injury, or serious property damage.

Warning:
Indicates an POTENTIALLY hazardous situation that, if not avoided, will result in death, serious injury, or serious property damage.

Caution:
Indicates an POTENTIALLY hazardous situation that, if not avoided, will result in minor to moderate injury. It may also be used to indicate unsafe practice.

Attention:
Pay additional attention to the instruction.

DO NOT:
Indicates prohibited actions and / or practice.

About Refrigerant

- The air conditioner is pre-charged with refrigerant. Handle the air conditioner with care and check if there is any refrigerant leakage during installation. Refrigerants have no odor and can be toxic and flammable. Rapid evaporation of refrigerant may cause frostbite, cardiac arrhythmia, and / or irritation, as well as cause environmental damage.
- In the case of refrigerant leakage, shut down the appliance and disconnect from the power supply. An inspection must be performed by a qualified technician.

Warning and Safety

Additional Information About R454B Refrigerant

WARNING

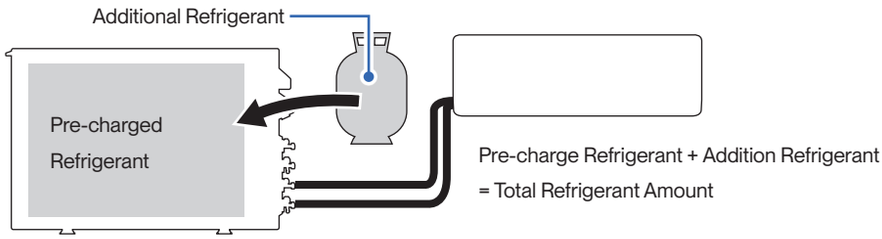
- In UL/CSA 60335-2-40, R454B refrigerant is classified as class A2L, which is mildly flammable. Therefore, R454B refrigerant is suitable for system needing additional refrigerant charge and which will limit the area of the rooms being served by the system. Similarly, the total amount of refrigerant in the system shall be less than or equal to the allowable maximum refrigerant charge. The allowable maximum refrigerant charge depends on the area of the rooms being served by the system.
- For R454B refrigerant, the maximum charge in a room shall be in accordance with the following:
  - $M_{max} = SF \times LFL \times h_0 \times A$
- or the minimum floor area A_{min} to install an appliance with refrigerange M_c (kg) shall be in accordance with:
  - $A_{min} = M_c / (SF \times LFL \times h_0)$
- M = Mass
- M_{max} = Maximum charge mass
- M_c = Mass charged
- A = Floor area
- LFL = Lower Flammable Limit, for R454B LFL is 0.296 kg / m³
- Maximum Charge (kg)

Refrigerant	LFL (kg/m³)	h_0 (m)	Floor Area (m²)						
			4	7	10	15	20	25	30
R454B	0.296	1.8	1.10	1.90	2.70	3.80	4.40	4.90	5.40
		2.5	1.48	2.59	3.70	5.55	7.40	9.25	11.10
		2.8	1.66	2.90	4.14	6.22	8.29	10.36	12.43

- Minimum Room Area (m²)

Refrigerant	LFL (kg/m³)	h_0 (m)	Charge Amount (M)						
			0.8 kg	1 kg	1.2 kg	1.4 kg	1.6 kg	1.8 kg	2.0 kg
R454B	0.296	1.8	3.00	3.75	4.50	5.26	6.01	6.76	7.51
		2.5	2.16	2.70	3.24	3.78	4.32	4.86	5.41
		2.8	1.93	2.41	2.90	3.38	3.86	4.34	4.83

- The total refrigerant charge should be calculated by adding the precharge amount and additional amount.



Warning and Safety

Additional Information About R454B Refrigerant

WARNING

- When Installing or using the appliance with R454B refrigerant, beware of the following symbols.
- This symbol means this appliance uses a flammable refirgerant.
  If the refrigerant is leaded and exposed to an external ignition source, there is a rist of fire.

- This symbol means that read the operation insturction carefully.

- This symbol means that personnel handling the equipment should reference to the installation manual.

- This symbol means information is available in the installation or operation instruction manual.

- Prior to any work on systems containing flammable refrigerants, always check the area to ensure that the risk of ignition is minimized. All possible ignition sources, such as cigarette, should be kept sifficiently far away from the site of installation, repairing, removing, and disposal during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment should be surveyed to make sure that there are no flammable hazards or ignition risk. "No smoking" sign shall be displayed.
- Installation or maintenance of refrigerant system shall be taken under a controlled procedure to minimize the risk of flammable gas or vapor being present while the work is being performed.
- All working personnal and others around the working area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off, and ensure that the conditions within the area have been made safe.
- The area shall be checked with an appropriate refrigerant detector prior to and during work to ensure the technician is aware of potentially flammable atmospheres.
- If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand.
- Ensure that the area is in the open or it is adequately ventilated before breaking into the system or conducting any work that will product heat. A degree of ventilation shall continue during the period that the work is carried out.
- The folliwing checks shall be applied to installations using flammable refrigerants:
  - The refrigerant charge amount is in accordance with the room size within which the refrigerant containing parts are installed.
  - The ventilation machinery and outlet are operating adequately and are not obstructed.
  - If an indirect refrigerating curcuit is being used, the secondary circuit shall be check for the presence of refrigerant.
  - Refrigerant pipe or components are installed in a position where they are unlilely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitable protected against being corroded.
- Detection of flammable refrigerants:
  - Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch or any other detector using naked flame shall not be used.
  - Electronic leak detectors shall be used to detect flammable refrigerant. Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.
  - Leak detection equipment shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25% maximum) is confirmed.
  - Leak detection fluids are suitable for use with most refrigerants, but the use of detergents containing chlorine shall be avoided as chlorine may react with the refrigerant and corrode the pipe work.
  - If a leak is suspected, all open flame shall be removed or extinguished.
  - If a leakage of refrigerant found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak.
  - Oxygen free nitogen shall be purged through the system both before and during the brazing process.

Warning and Safety

About Installation

- Do not install or store this appliance in a room with continuously operating ignition sources such as open flames, gas appliances, or electric heater.
- Do not install the appliance within 20" / 50cm of flammable substances such as alcohol, etc. Or pressurized containers such as spray cans.
- Do not alter, change, or modify the appliance.

- The room for the installation, use, repair, and / or storage of this air conditioner should be greater than 54 sq ft / 5m².
- Stop valve cover must be installed on the air conditioner to prevent possible refrigerant leak.
- Refrigerant leakage or damaged pipelines must be inspected and repaired by a qualified HVAC technician.
- The installation of refrigerant pipe work shall be kept to a minimum length.
- The appliance must be installed in accordance with applicable federal, state, and local regulations.

- Prevent children from accessing the work area during installation to prevent unforeseeable accident.
- The base of the outdoor unit must be firmly fixed.
- Carry out a test run after the installation.
- Installation of a mini split AC requires specialized training and equipment. Hire a licensed professional if not familiar with electrical wiring and HVAC system.
- The packaging materials are recyclable and should be disposed of in a separate waste bins.
- The appliance should not be installed in a location where the air outlet of the indoor or outdoor unit is obstructed. Obstruction of these opening may cause damage or malfunctions to the appliance.
- Imperial units (foot, inch, pound, ounce, fahrenheit degree, etc) used in this instruction manual are conversion from metric units (meters, centimeters, milimeters, gram, celcius degree, etc). Please refer to the metric units for the most accurate measurement.

About Power and Electricity

- Ensure that the power voltage corresponds to that stamped on the rating plate.
- A fuse or overload protection device with a suitable capacity for indoor unit must be installed.
- The appliance must be fitted with means for disconnection from the main power supply under over-voltage category III conditions. All electrical wiring must follow federal, state, or local regulations.
- When working on the electric terminals, ensure the appliance is disconnected from the power supply.
- Make sure the appliance is properly grounded to prevent electric shock.

- Do not bend, tug, or compress the power cord during installation to prevent damaging the power cord. Damaged electrical cord should be replaced by a qualified electrician.
- Do not use power extensions and / or multi-socket modules for appliance installation.

Warning and Safety

About Operation

- Do not disconnect the appliance from the power supply before shutting off the appliance. This might create a spark and potentially cause a fire.
- Do not place flammable substances near the appliance.
- Do not climb onto or place any objects on the appliance.
- Do not insert any objects into the appliance to prevent damage or injury.
- Do not obstruct the air inlet or outlet.
- Do not operate the appliance with wet hands.

- If the appliance is used in areas without the possibility of ventilation, precautions must be taken to prevent any leaks of refrigerant.
- Only use the appliance as instructed in this booklet. These instructions are not intended to cover every possible condition and situation. As with any electrical household appliance, common sense and caution are therefore always recommended for usage and maintenance.
- This appliance is designed and made for air conditioning in domestic environments only. It must not be used for any other purpose such as drying clothes or cooling foods.
- This appliance can be used by children 8 years old or above and persons with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.

Encountering Troubles

- In the case of the appliance emitting smoke, burning smell, leaking water, or making unusual noise, shut down the appliance and disconnect from the power supply immediately. Contact a qualified technician for inspection and repair.

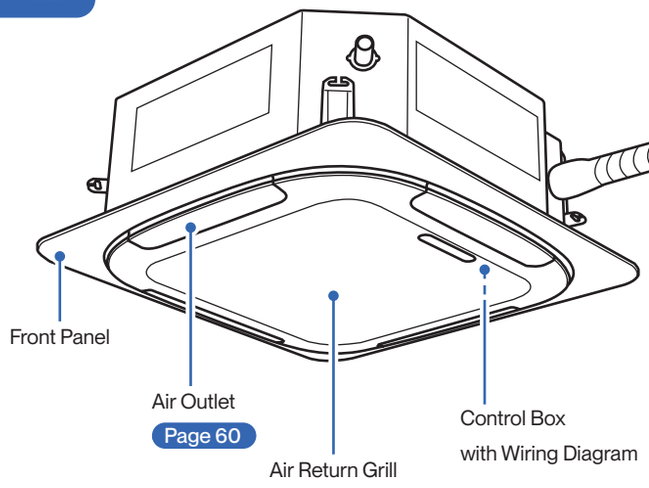
About Handling and Maintenance

- Do not attempt to disassemble, alter, or modify the appliance.
- Do not flush the air conditioner with water.
- Do not attempt to repair, relocate, modify or reinstall the air conditioner by yourself. Incorrect work could cause electric shocks, fire or damage. Contact a qualified technician.

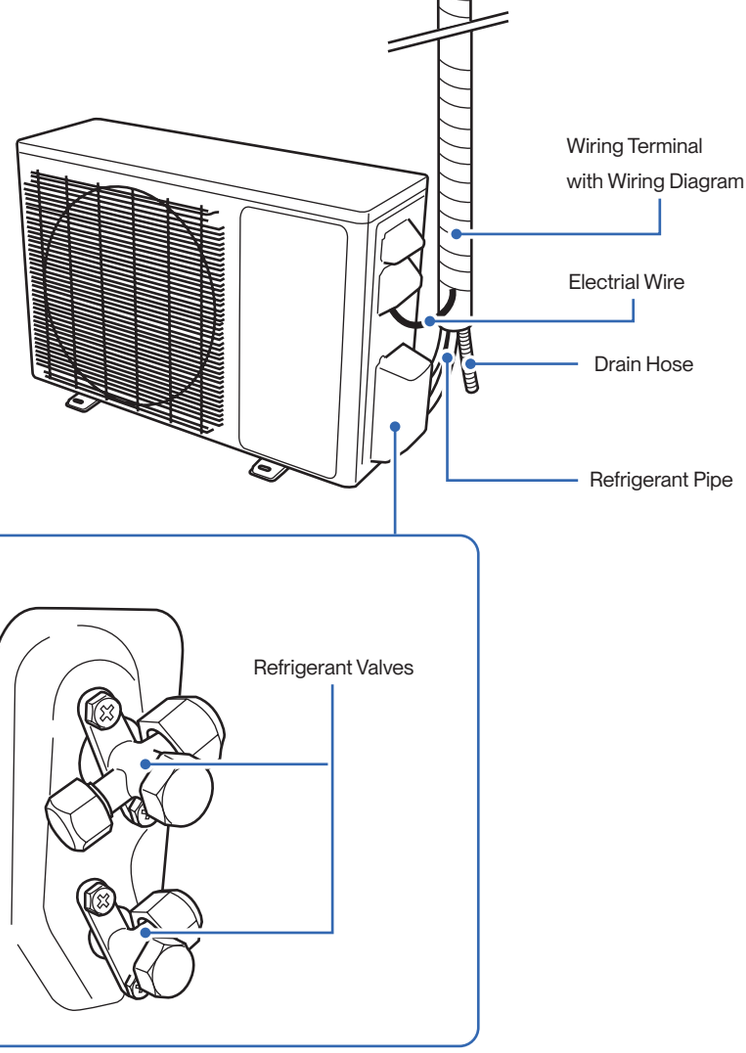
- Before cleaning the unit, the appliance must by shut down and disconnect from the power supply for at least 5 minutes.

Name of Parts

Indoor Unit



Outdoor Unit



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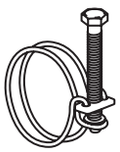
Name of Parts

Flexible Drain Hose
1x



Hose Clamp
1x

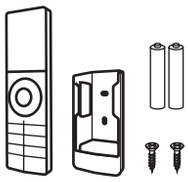
Phillips Pan Head Bolt
4x

Phippips Pan Head Screw
2x

Cable Clamp
2x

Rubber Pad
4x

Zip Tie
4x



Remote Control, Holder 1x
Battery 2x

Installation Template
1x

Tools Needed (Not included)

- Screw Driver
- Hole Saw
- Wall Saw / Power Saw
- Refrigerant Leak Detector / Liquid Leak Detector
- Allen Wrench
- Spanner
- Torque Wrench
- Measuring Tape
- Bullseye Spirit Level
- Power Drill
- Thermometer
- Vacuum Pump
- Drop-In Anchor
- M10 Threaded Rod
- M10 Washer
- Threaded Rod Wrench
- PVC Drain Pipes
- PVC pipe cutter
- Insulation Foam
- Floor MountFloor Mounting Base Kit / Wall Mount Kit
- Power Supply Cable
- Micron Gauge / AC manifold Gauge
- Copper Pipe Bender / Spring Bender
- HVAC sealant / Nylog
- Caulk
- Wall Sleeve and Cover
- Tubing Cutter*
- Pipe Reamer*
- Tubing Flaring Tool*
- Wire cutter*

NOTE: Tools marked with * are needed for shortening the refrigerant pipe and / or electrical wire to the exact desired length.
ONLY a qualified HVAC technician should attempt altering the pipe length and / or the wire length.

Product Specification (Cassette Unit)

		048-CC-9K2V	048-CC-12K2V	048-CC-18K2V	048-CC-24K2V
Power Supply		208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P
Rated Cooling Capacity (Btu / h)		9000	12000	18000	24000
Rated Heating Capacity (Btu / h)		9000	12000	18000	24000
Noise Level	Indoor Unit	32 - 43 dBA	32 - 45 dBA	37 - 48 dBA	37 - 51 dBA
Dimension	Indoor Unit	22.44" x 22.44" x 9.65" 570 mm x 570 mm x 245 mm	22.44" x 22.44" x 9.65" 570 mm x 570 mm x 245 mm	22.44" x 22.44" x 9.65" 570 mm x 570 mm x 245 mm	33.07" x 33.07" x 9.65" 840 mm x 840 mm x 245 mm
	Indoor Panel	25.59" x 25.59" x 2.36" 650 mm x 650 mm x 60 mm	25.59" x 25.59" x 2.36" 650 mm x 650 mm x 60 mm	25.59" x 25.59" x 2.36" 650 mm x 650 mm x 60 mm	37.40" x 37.40" x 2.87" 950 mm x 950 mm x 73 mm
Net Weight	Indoor Unit	32 lb / 14.5 kg	32 lb / 14.5 kg	32 lb / 14.5 kg	51.8 lb / 23.5 kg
	Indoor Panel	6 lb / 2.7 kg	6 lb / 2.7 kg	6 lb / 2.7 kg	13.2 lb / 6 kg
Suitable Area		Up to 400 sq. ft	Up to 550 sq. ft	Up to 1000 sq. ft	Up to 1500 sq. ft
Air Flow		113 - 193 CFM	112 - 211 CFM	149 - 259 CFM	284 - 492 CFM
Moisture Removal (per hour)		2.3 pints / 1.1 L	3.4 pints / 1.6 L	4.7 pints / 2.2 L	5.5 pints / 2.6 L
Refrigerant		R454B	R454B	R454B	R454B
Condensate Drain Connection Diameter		OD ø 32 mm	OD ø 32 mm	OD ø 32 mm	OD ø 32 mm

Before Installation

Before Installation

DELLA®

Product Specification (Outdoor Unit)

		048-TP-9K2V-24S-OUT	048-TP-12K2V-24S-OUT	048-TP-18K2V-23S-OUT	048-TP-23K2V-23S-OUT
Power Supply		208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P
Rated Cooling Capacity (Btu / h)		9500	12000	16000	23000
Rated Heating Capacity (Btu / h)		9500	12500	18000	25000
Cooling	Power Consumption	680 W	970 W	1390 W	1860 W
	Rated Current	3.0 A	4.4 A	6.2 A	8.3 A
Heating	Power Consumption	730 W	925 W	1360 W	2000 W
	Rated Current	3.3 A	4.2 A	6.1 A	9.0 A
Noise Level	Outdoor Unit	50 dBA	52 dBA	53 dBA	54 dBA
Dimension	Outdoor Unit	31.88" x 12.00" x 21.61" 810 mm x 305 mm x 549 mm	31.88" x 12.00" x 21.61" 810 mm x 305 mm x 549 mm	36.49" x 14.96" x 27.51" 927 mm x 380 mm x 699 mm	38.50" x 16.57" x 31.61" 978 mm x 421 mm x 803 mm
Net Weight	Outdoor Unit	52.7 lb / 23.9 kg	58.4 lb / 26.5 kg	90.41 lb / 41 kg	104.7 lb / 47.5 kg
Refrigerant		R454B	R454B	R454B	R454B

Product Specification (Outdoor Unit)

		048-TLP-MODU-1D2	048-TLP-MODU-1D3	048-TLP-MODU-1D4	048-TLP-MODU-1D5
Power Supply		208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P
Rated Cooling Capacity (Btu / h)		18000	27000	35000	42000
Rated Heating Capacity (Btu / h)		20000	28000	36000	42000
Cooling	Power Consumption	1370 W	2020 W	2930 W	3550 W
	Rated Current	6.1 A	9.1 A	13.1 A	15.9 A
Heating	Power Consumption	1410 W	1980 W	2680 W	3260 W
	Rated Current	6.3 A	8.9 A	12 A	14.6 A
Noise Level		58 dBA	62 dBA	65 dBA	65 dBA
Dimension		36.50" x 27.52" x 14.96" 927 mm x 699 mm x 380 mm	38.50" x 31.61" x 16.57" 927 mm x 803 mm x 421 mm	42.57" x 33.58" x 18.42" 1074 mm x 853 mm x 468 mm	42.57" x 33.58" x 18.42" 1074 mm x 853 mm x 468 mm
Net Weight		99.2 lb / 45 kg	127.9 lb / 58 kg	169.8 lb / 77 kg	198.4 lb / 90 kg
Refrigerant		R454B	R454B	R454B	R454B
Number of Indoor Unit Connection		2	3	4	5

Before Installation

Installation Preview

1. Choose the installation location
   Page 18
2. Ceiling hole, Refrigerant pipes, drain hose, and electrical wires preperation
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3. Install hanging rods
   Page 21-22
4. Hanging the indoor unit
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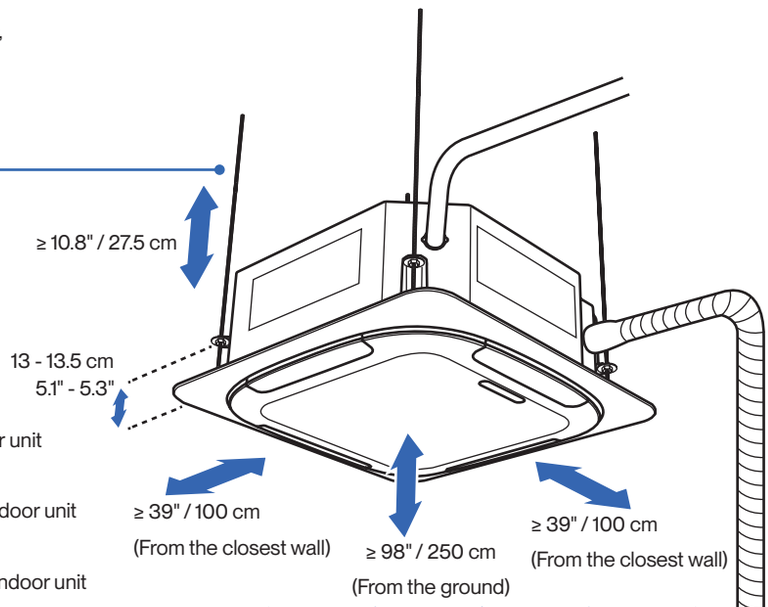
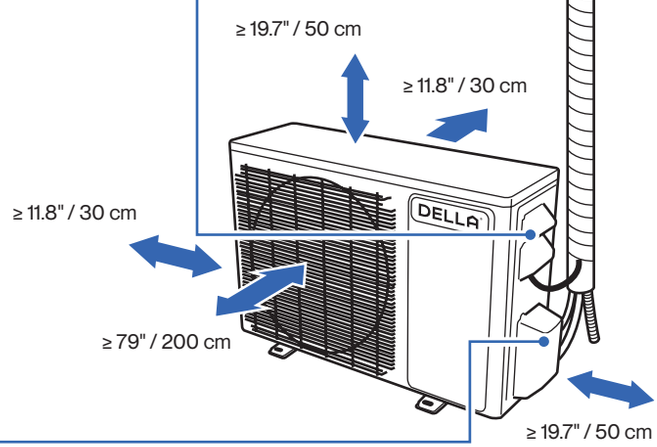


	9K	12K	14K	24K
Standard Length per Indoor Unit*	24.6 ft / 7.5 m			
Max. Distance per Indoor Unit*	49 ft / 15 m		65 ft / 20 m	
Max. Elevation per Indoor Unit*	33 ft / 10 m		49 ft / 15 m	

* For single zone connection



Power Supply and Breaker Size

		048-TP-9K2V-24S-OUT	048-TP-12K2V-24S-OUT	048-TP-18K2V-23S-OUT	048-TP-23K2V-23S-OUT
Power Supply		208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P
Cooling	Power Consumption	680 W	970 W	1390 W	1860 W
	Rated Current	3.0 A	6.2 A	6.2 A	8.3 A
Heating	Power Consumption	730 W	925 W	1360 W	2000 W
	Rated Current	3.3 A	4.4 A	6.1 A	9.0 A
Min. Circuit Ampacity		10 A	11 A	12 A	17 A
Min. Wire Size (American Wire Gauge)		16 AWG	16 AWG	16 AWG	14 AWG
Breaker Size		15 A	15 A	20 A	25 A

		048-TLP-MODU-1D2	048-TLP-MODU-1D3	048-TLP-MODU-1D4	048-TLP-MODU-1D5
Power Supply		208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P	208 V - 230 V / 60 Hz / 1P
Cooling	Power Consumption	1370 W	2020 W	2930 W	3550 W
	Rated Current	6.1 A	9.1 A	13.1 A	15.9 A
Heating	Power Consumption	1410 W	1980 W	2680 W	3260 W
	Rated Current	6.3 A	8.9 A	12 A	14.6 A
Min. Circuit Ampacity		16 A	18 A	22 A	28 A
Min. Wire Size (American Wire Gauge)		12 AWG	12 AWG	10 AWG	10 AWG
Breaker Size		25 A	30 A	35 A	45 A

Refrigerant and Pipe Set Info

		048-TP-9K2V-24S-OUT	048-TP-12K2V-24S-OUT	048-TP-18K2V-23S-OUT	048-TP-23K2V-23S-OUT
Standard Length		24.6 ft / 7.5 m	24.6 ft / 7.5 m	24.6 ft / 7.5 m	24.6 ft / 7.5 m
Max. Distance Between Indoor and Outdoor Unit		49 ft / 15 m	49 ft / 15 m	65 ft / 20 m	65 ft / 20 m
Max. Elevation Between Indoor and Outdoor Unit		33 ft / 10 m	33 ft / 10 m	49 ft / 15 m	49 ft / 15 m
Type of Refrigerant		R454B	R454B	R454B	R454B
Factory Refrigerant Pre-charge for up to 25 ft pipe		25.04 oz / 710 g	35.27 oz / 1000 g	45.50 oz / 1290 g	55.03 oz / 1560 g
Additional Refrigerant Charge		0.11 oz / ft (10 g / m)	0.11 oz / ft (10 g / m)	0.11 oz / ft (10 g / m)	0.11 oz / ft (10 g / m)
Liquid Line	Pipe Diameter	1/4”	1/4”	1/4"	1/4”
	Torque Parameter	18 - 20 N-M / 13.3 - 14.8 lbf-ft / 1.8 - 2.0 kgf-m	18 - 20 N-M / 13.3 - 14.8 lbf-ft / 1.8 - 2.0 kgf-m	18 - 20 N-M / 13.3 - 14.8 lbf-ft / 1.8 - 2.0 kgf-m	18 - 20 N-M / 13.3 - 14.8 lbf-ft / 1.8 - 2.0 kgf-m
Gas Line	Pipe Diameter	3/8”	3/8”	3/8”	1/2”
	Torque Parameter	30 - 35 N-M / 22.1 - 25.8 lbf-ft / 3.0 - 3.6 kgf-m	30 - 35 N-M / 22.1 - 25.8 lbf-ft / 3.0 - 3.6 kgf-m	30 - 35 N-M / 22.1 - 25.8 lbf-ft / 3.0 - 3.6 kgf-m	45 - 50 N-M / 33.2 - 36.9 lbf-ft / 4.6 - 5.1 kgf-m

Refrigerant and Pipe Set Info

		048-TLP-MODU-1D2	048-TLP-MODU-1D3	048-TLP-MODU-1D4	048-TLP-MODU-1D5
Standard Length		16.4 ft / 5 m	16.4 ft / 5 m	16.4 ft / 5 m	16.4 ft / 5 m
Max. Distance Between Indoor and Outdoor Unit		85 ft / 25 m	98 ft / 30 m	98 ft / 30 m	98 ft / 30 m
Max. Elevation Between Indoor and Outdoor Unit		49 ft / 15 m	49 ft / 15 m	49 ft / 15 m	49 ft / 15 m
Type of Refrigerant		R454B	R454B	R454B	R454B
Factory Refrigerant Pre-charge for up to 25 ft pipe		60.01 oz / 1700 g	77.66 oz / 2200 g	98.84 oz / 2800 g	120.02 oz / 3400 g
Additional Refrigerant Charge		0.11 oz / ft (10 g / m)	0.11 oz / ft (10 g / m)	0.11 oz / ft (10 g / m)	0.11 oz / ft (10 g / m)
Liquid Line	Pipe Diameter	1/4"	1/4"	1/4"	1/4"
	Torque Parameter	18 - 20 N-M / 13.3 - 14.8 lbf-ft / 1.8 - 2.0 kgf-m	18 - 20 N-M / 13.3 - 14.8 lbf-ft / 1.8 - 2.0 kgf-m	18 - 20 N-M / 13.3 - 14.8 lbf-ft / 1.8 - 2.0 kgf-m	18 - 20 N-M / 13.3 - 14.8 lbf-ft / 1.8 - 2.0 kgf-m
Gas Line	Pipe Diameter	3/8"	3/8"	3/8"	3/8"
	Torque Parameter	30 - 35 N-M / 22.1 - 25.8 lbf-ft / 3.0 - 3.6 kgf-m	30 - 35 N-M / 22.1 - 25.8 lbf-ft / 3.0 - 3.6 kgf-m	30 - 35 N-M / 22.1 - 25.8 lbf-ft / 3.0 - 3.6 kgf-m	30 - 35 N-M / 22.1 - 25.8 lbf-ft / 3.0 - 3.6 kgf-m
3/8" to 1/2" Lineset Adapter[1]	For Pipe Diameter	N/A	1/2"	1/2"	1/2"
	Torque Parameter	N/A	45 - 50 N-M / 33.2 - 36.9 lbf-ft / 4.6 - 5.1 kgf-m	45 - 50 N-M / 33.2 - 36.9 lbf-ft / 4.6 - 5.1 kgf-m	45 - 50 N-M / 33.2 - 36.9 lbf-ft / 4.6 - 5.1 kgf-m
3/8" to 5/8" Lineset Adapter[2]	For Pipe Diameter	N/A	N/A	5/8"	5/8"
	Torque Parameter	N/A	N/A	60 - 65 N-M / 44.3 - 48.0 lbf-ft / 6.6 - 6.6 kgf-m	60 - 65 N-M / 44.3 - 48.0 lbf-ft / 6.6 - 6.6 kgf-m

NOTE: [1] [2] 3/4" to 1/2" Lineset converter and 3/8" to 5/8" Lineset converter should only be used with indoor unit that equiped with 1/2" or 5/8" gas line.

Installation Info

Picking a Installation Location for the Cassette Indoor Unit

- Ensure the installation complies with the minimum clearance space surrounding the unit and is within the maximum piping length and maximum elevation defined in the installation information.
  Page 16, 17
- Make sure the ceiling and it's structure is strong enough to hold the weight of the unit and prevent it from vibration.
- Make sure the air return grill and outlet are clear of any obstruction.
- The unit should be installed to a place where it is accessible for maintenance.
- Do not install the unit in a kitchen where aerosolized grease, odor, and/or smoke may be present.
- Do not installi the unit in a laundry room or by a swimming pool.
- There should not be any heat source near the indoor unit.
- Avoid installing the unit near windows or doors.

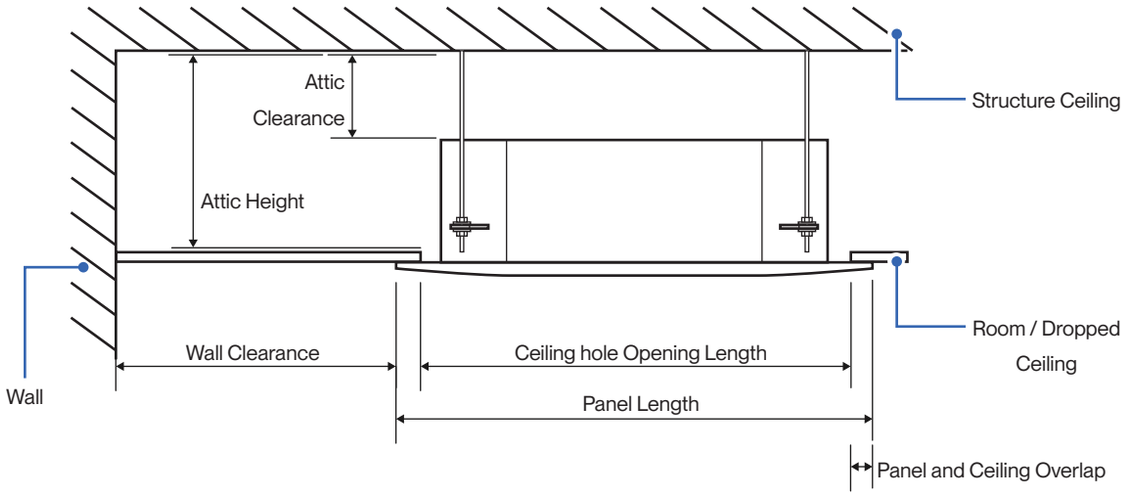
Picking a Installation Location for the Outdoor Unit

- Do not install the outdoor unit near a heat source, steam, or flammable gas.
- Do not install the outdoor unit in windy or dusty locations.
- Do not install the outdoor unit in places where people often pass.
- Avoid installing the outdoor unit in places where it will be exposed to direct sunlight.
  NOTE: If necessary, build a protection that does not interfere with the airflow.
- Make sure there is enough space around the outdoor unit to circulate air.
  Page 14
- Outdoor unit must be placed in a safe and solid location.
- The outdoor unit should ideally be placed on a elevated concrete pad.
- If installing in snowy region, it is recommended the outdoor unit to be installed above the seasonal snow level.

Indoor Unit Installation

Open Ceiling Hole for Installation

1. Before installation work, make sure the structure ceiling is strong enough to hold the weight of the indoor unit.
2. Plan out the installation location in accordance to the clearance measurement table below.
3. Cut open the ceiling for the installation. Make sure the opening size is smaller than the cassette unit panel.

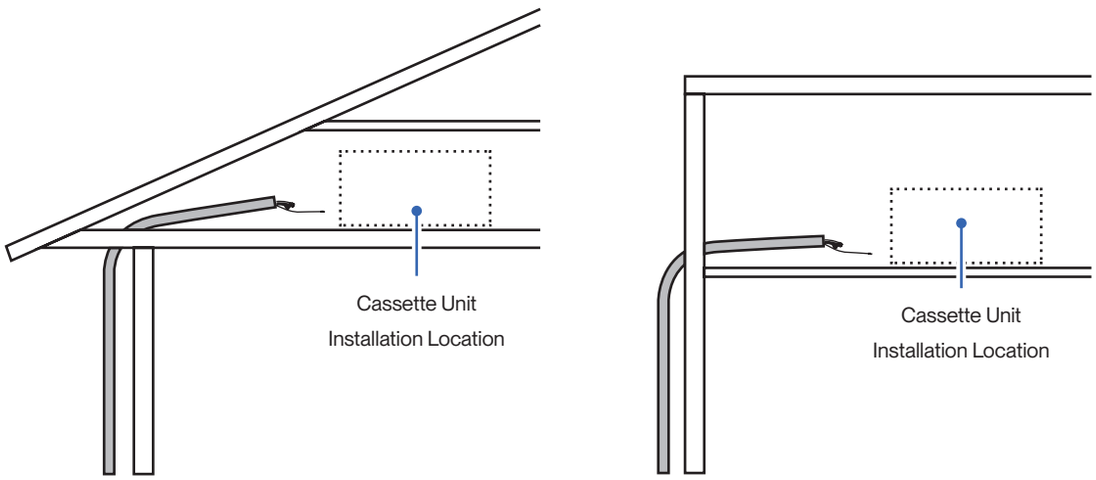


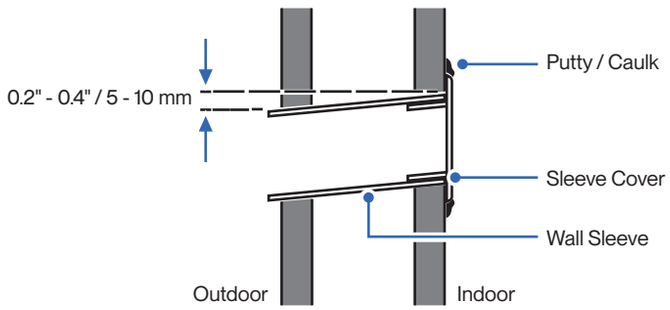
	048-CC-9K2V-IN	048-CC-12K2V-IN	048-CC-18K2V-IN	048-CC-24K2V-IN
Attic Clearance	> 2" / 50mm	> 2" / 50mm	> 2" / 50mm	> 2" / 50mm
Attic Height	> 10.8" / 275mm	> 10.8" / 275mm	> 10.8" / 275mm	> 10.8" / 275mm
Wall Clearance	> 39" / 1000mm	> 39" / 1000mm	> 39" / 1000mm	> 39" / 1000mm
Panel Length	25.59"x 25.59"	25.59"x 25.59"	25.59"x 25.59"	37.40"x 37.40"
	650mm x 650mm	650mm x 650mm	650mm x 650mm	950mm x 950mm
Panel and Ceiling Overlap	~ 1" / 25mm	~ 1" / 25mm	~ 1" / 25mm	~ 1" / 25mm

Indoor Unit Installation

Prepare Refrigerant Lineset, Drain Pipe, and Electrical Cable

1. Route the refrigerant lineset, drain pipe, and electrical cable from the cassette unit installation location to the outdoor unit installation location.
   Detail information on handling refrigerant line set on Page 28 .
   Detail information on drain pipe on Page 24-26 .
2. Make sure the drain pipe is slanted downward to prevent condensation and water from backflowing into the cassette unit.
3. Depending on the building, you can route the lineset toward the outside through an opening on the wall or the soffit.





- Always insert the sleeve into the wall hole and seal the surrounding with putty / caulk.
  This will prevent water, insects, or small animals from getting into the house.

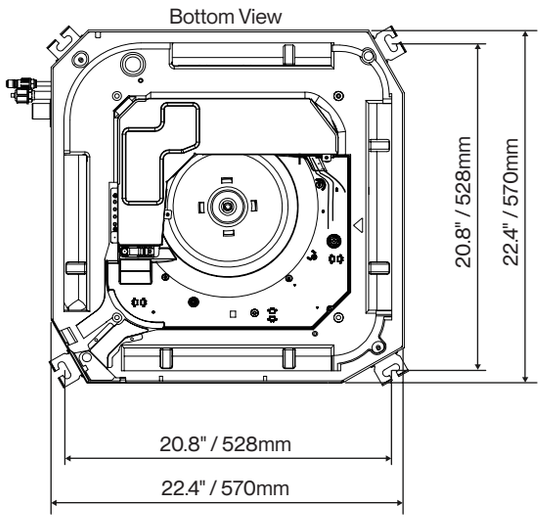
Installation

Indoor Unit Installation

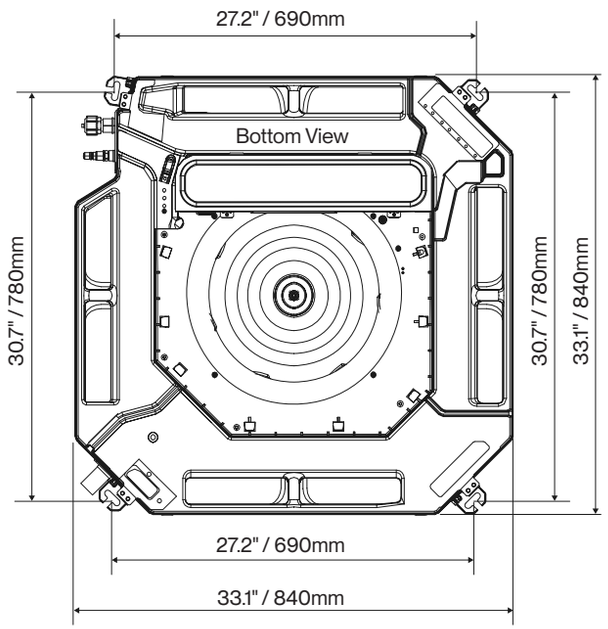
Attaching Threaded Rods for Hanging

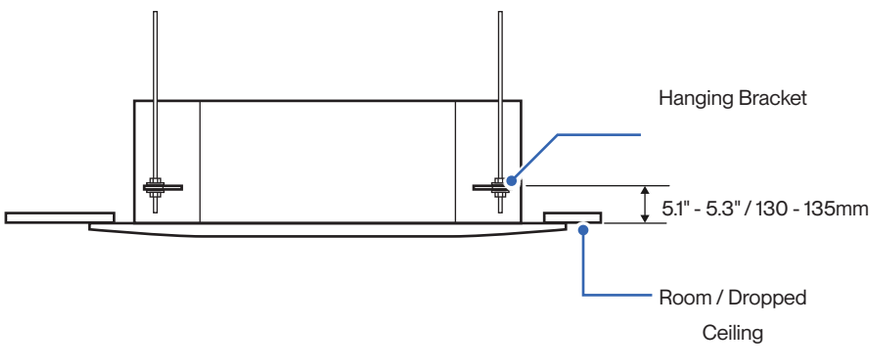
1. Reference the graphics below and mark the threaded rods attaching locations.
   Make sure the cassette refrigerant ports and drain port is facing the pre-routed refrigerant lineset and drain pipe.
2. Drill pilot holes on the marks.
3. Choose and attach the suitable anchor for your structure ceiling.
4. Cut M10 threaded rods into correct length and attach them into the anchors.

048-CC-9K2V-IN
048-CC-12K2V-IN
048-CC-18K2V-IN



048-CC-24K2V-IN

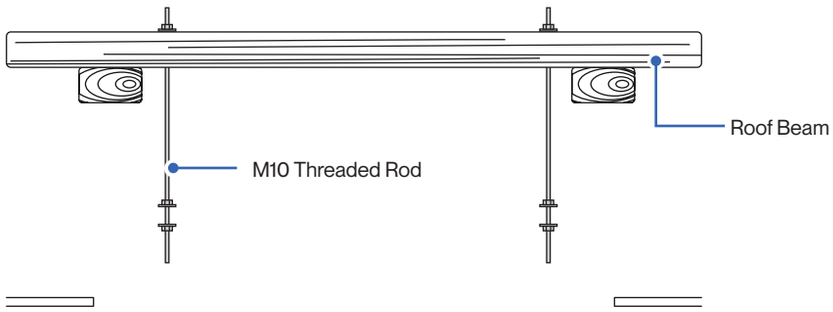




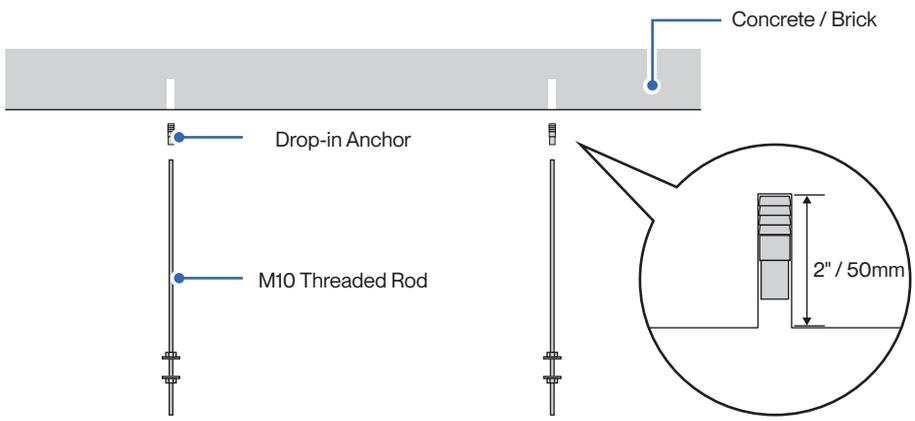
Indoor Unit Installation

Attaching Threaded Rods for Hanging

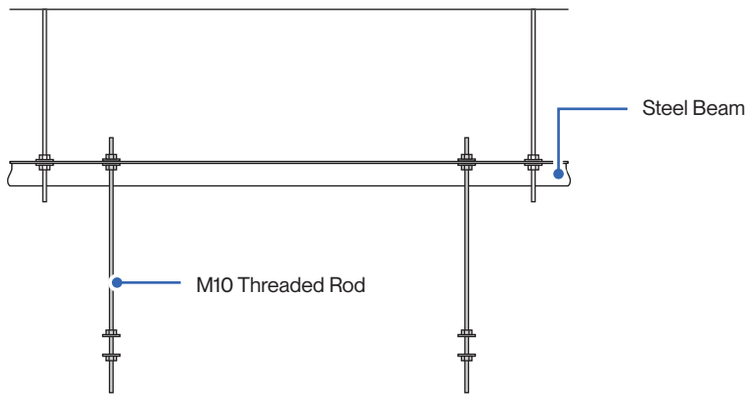
On Wood Beam



On Concrete / Brick



On Steel Beam



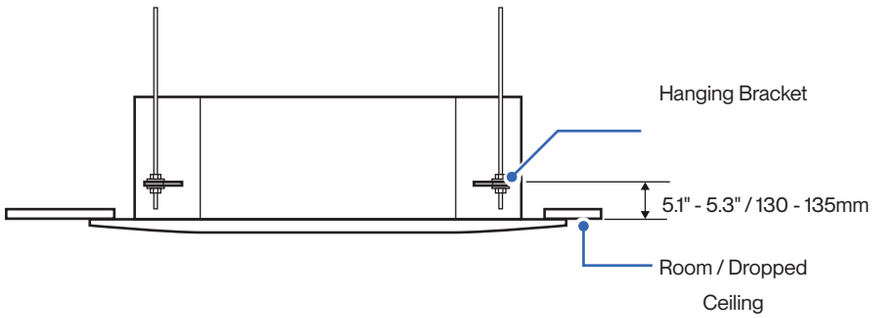
- It is recommended to use threaded rod wrench to tighten the threaded rod into the drop in anchor and make sure it can support the weight of the cassette unit and withstand operating vibration.

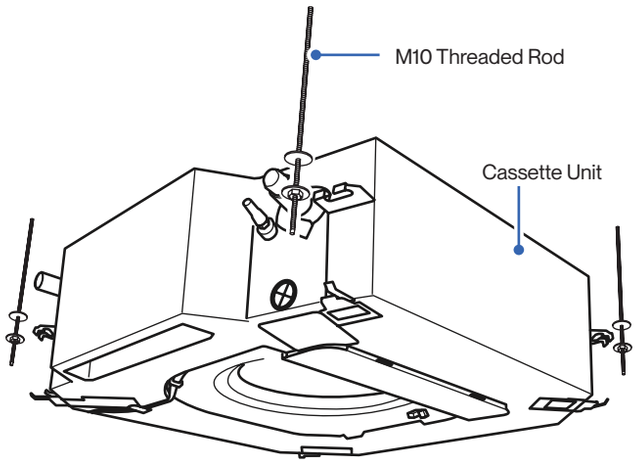
Indoor Unit Installation

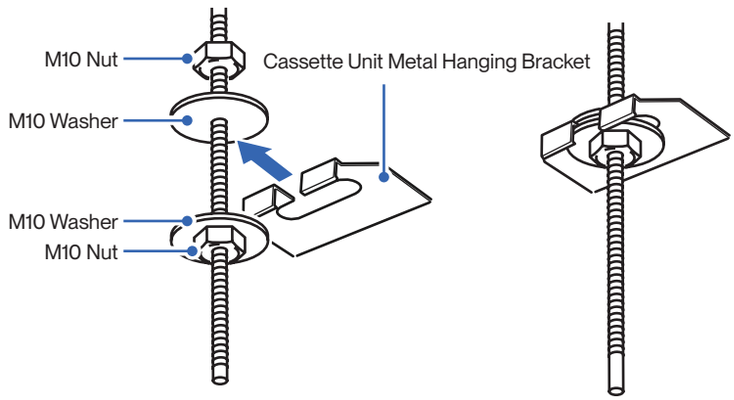
Hanging the Cassette Unit

1. Attach M10 nuts and M10 washers to the threaded rod at the hanging height.
2. Align the cassette unit into the ceiling opening and hang the hanging brackets to the M10 washers.
3. Level the unit all around with a bullseye spirit level and tighten the M10 nuts to secure the unit in place.

- Lift the cassette unit to the ceiling with 2 people, or with the help of a power lifter. Carring the cassette unit alone without assisstant would result in injury.
- A bull's eye level is recommended to be used to level the cassette unit. The cassette unit is equipped with a built-in drain pump and float switch. Failing to level the unit may cause float switch to malfunction and cause water leakage.







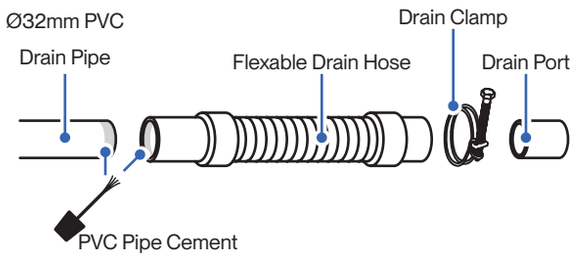
Indoor Unit Installation

Connecting the Drain Pipe to the Cassette Unit

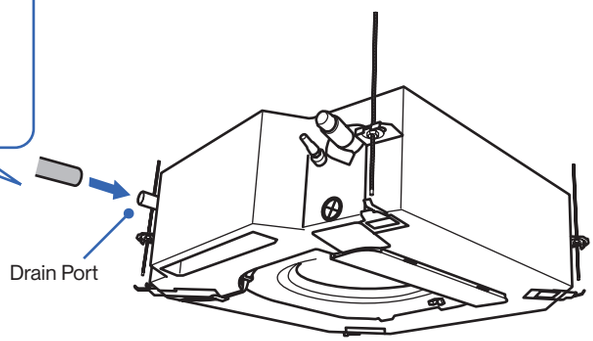
1. Attach drain pipe to the cassette unit.
2. Make sure the connection is tightly secured.
3. Wrap the connection and the drain pipe with insulating foam.

- The drain pipe connection must be wrapped with insualting foam to prevent condensation from building up on the pipe's surface, which may result in water dripping in the ceiling.
- The following should be used for drain pipe installation:

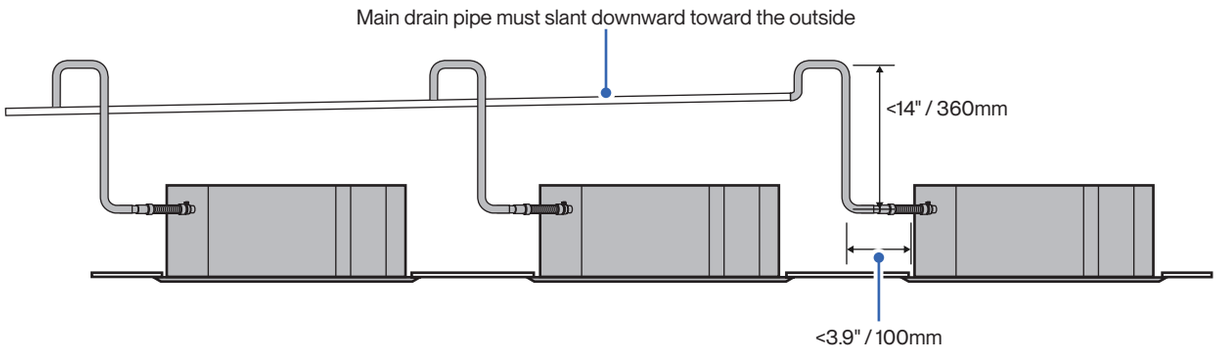
Drainage Pipe Material	Ø32mm Polyvinyl Chloride (PVC) pipe
Heat Insulation Material	10mm think Foamed Polyethylene Insulation Plate



- For the ease of future maintenance and servicing, use a drain clamp to secure the drain hose to the drain port.



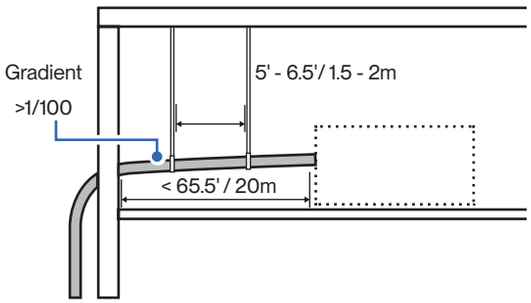
Upward Drainage



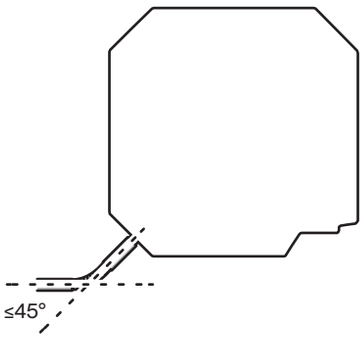
- Cassette unit has a drain pump that support upward drainage.
- Make sure the drain pipe lead upward no higher than 14" / 360mm and back downward to the main drain pipe.

Indoor Unit Installation

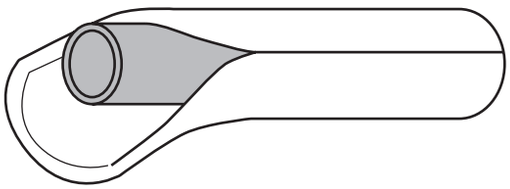
Connecting the Drain Pipe to the Cassette Unit



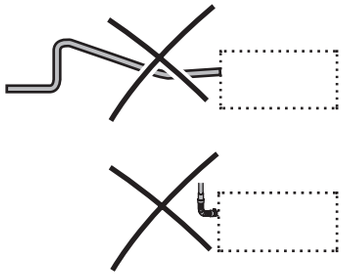
- The total pipe length traveling outside should be kept within 65.5' / 20m.
- When using a long drain pipe, hang the pipe in place every 5' - 6.5' / 1.5 - 2m.
- Dran pipe should slope down at a gradient over 1/100.



- The flexable hose should be kept within 45° from the drain port.



- Wrap the drain hose, drain pipe, and all connections with insulation foam. (10mm think foamed polyethylene insualtion plate)



- Do not slant the drain pipe upward.
- Do not bend the flexable pipe upward.
- Upward drainage installation should be straightly followed on Page 24.

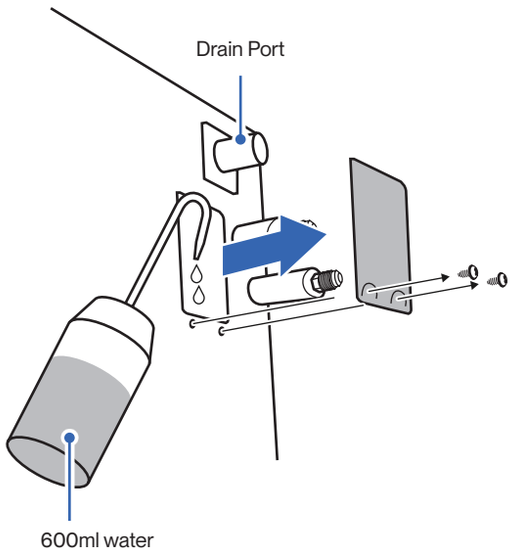
Indoor Unit Installation

Drainage Test

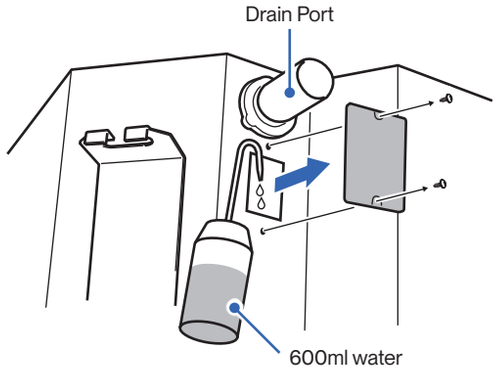
- Drain pipe should be tested after the installation and make sure there is no leak.
- Remove the cover from the cassette unit.
- Slowly stow 600ml of water into the drain channel inside the unit. Avoid touching the drain pump motor.
- Disconnect the water level switch and power 220V AC to the terminal board, and the drain pump will start up by itself.
- After running the drain pump for 2 minutes, reset the water level pin. the drain pump motor will stop after 22 minutes.

- Any leakage along the drain line must be addressed before using the AC.

9K - 18K



24K



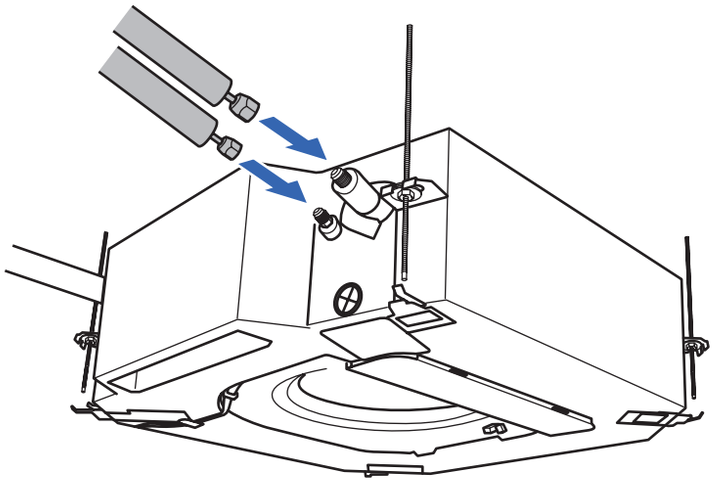
Indoor Unit Installation

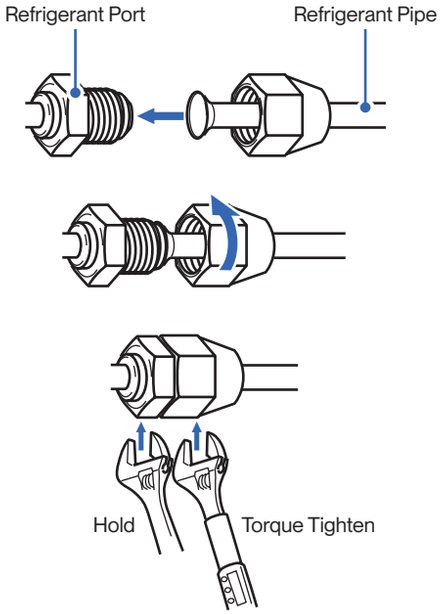
Connecting the Refrigerant Pipe to the Cassette Unit

1. Remove the protective caps on the cassette unit's refrigerant ports.
2. Align refrigerant pipes straight to the refrigerant ports, and hand tighten the flaring nuts.
3. Tighten the flaring nuts with torque wrench to the spec.
4. Wrap and cover the connection with insulating foam and tape.

QUICK TIPS

- A thin layer of nylog can be applied to the inside of the flare to provide better seal. (OPTIONAL)
- Make sure no nylog is on the outside of the flare.





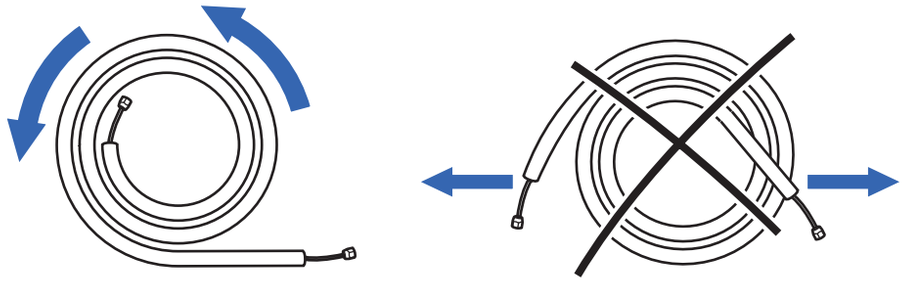
Pipe Diameter	1/4"	3/8”	1/2”	5/8”
Torque Parameter	18 - 20 N-M 13.3 - 14.8 lbf-ft 1.8 - 2.0 kgf-m	30 - 35 N-M 22.1 - 25.8 lbf-ft 3.0 - 3.6 kgf-m	45 - 50 N-M 33.2 - 36.9 lbf-ft 4.6 - 5.1 kgf-m	60 - 65 N-M 44.3 - 48.0 lbf-ft 6.1 - 6.6 kgf-m

- Connection must be torque tighten to prevent leak. Do not over tighten.
- Refrigerant piping and torque requirement for specific model is on Page 16, 17 .
- Refrigerant pipe and its connection must be insulated to prevent condensation from forming on the surface which would result in a water leak.

Indoor Unit Installation

Preparing the Refrigerant Pipe

1. Unroll the included refrigerant pipe.



- Do not pull the refrigerant pipe to prevent the pipe from kinking or bending.

2. Remove the cover and make sure the ports are clean and smooth.

Imperfect Flaring

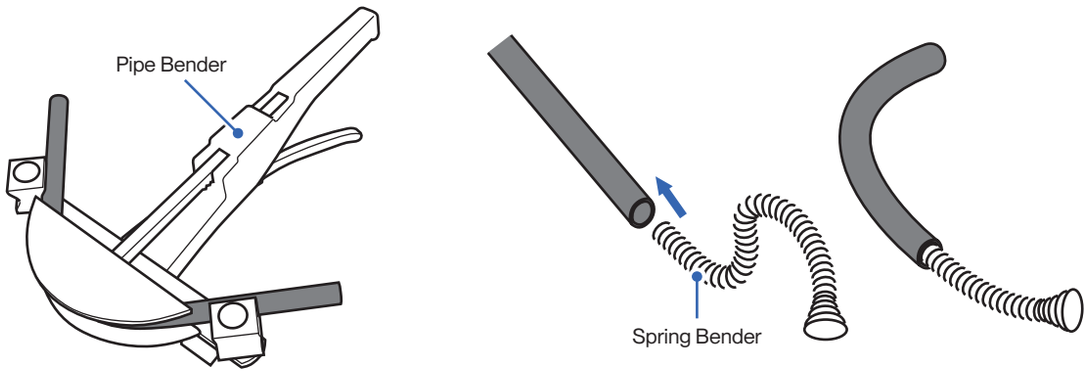
Dirty Flaring

3. In the case of a imperfect flaring or the pipe needs to be shorten for the installation, refrigerant pipe should be cut and flare by qualified technician.

Page 29

QUICK TIPS

- Use a pipe bender or spring bender to shape the refrigerant pipes along wall and corners. Bending the pipe without bending tools would easily kink or damage the pipe, which would cause refrigerant starvation, or leakage in the system.



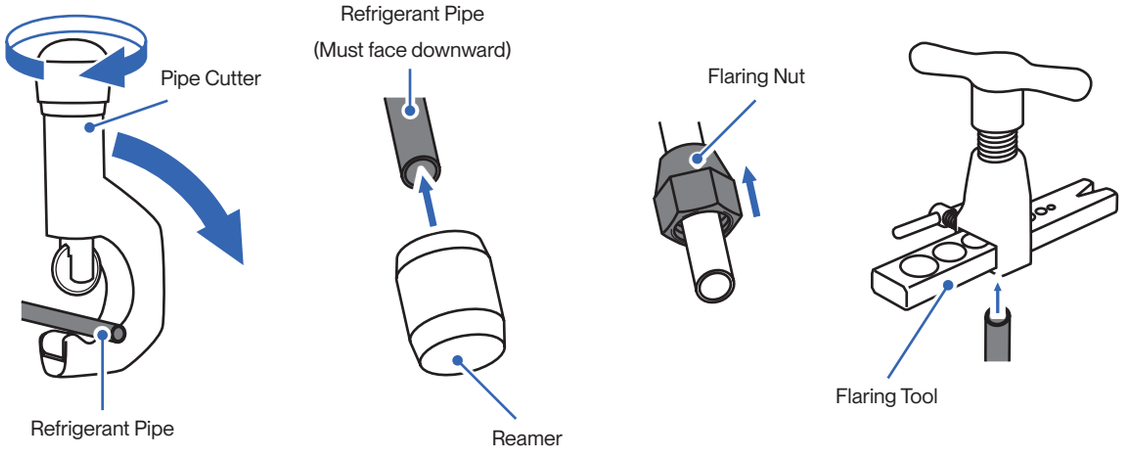
Indoor Unit Installation

Cutting and Flaring Refrigerant Pipe

WARNING

- Any refrigerant pipe alternation should only be done by qualified technician. Incorrect work may cause refrigerant leak, reduce cooling / heating efficiency, damage to the unit. Warranty does not cover any damage(s) caused by incorrect refrigerant pipe alternation.

1. Cut the copper pipe with a pipe cutter.
2. Remove any burrs or rough edges with a reamer with the pipe facing downward.
   NOTE: The opening of the pipe must face toward the ground to prevent chips or dust from entering the pipe.
3. Insert the flare nut to the pipe.
4. Use the flaring tool to flare the copper pipe. The flaring angle must match to that of the refrigerant lines from the unit.

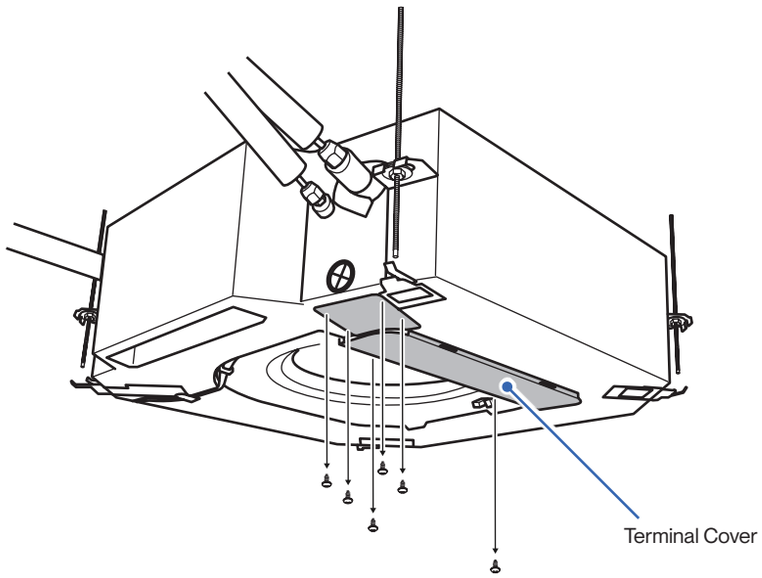


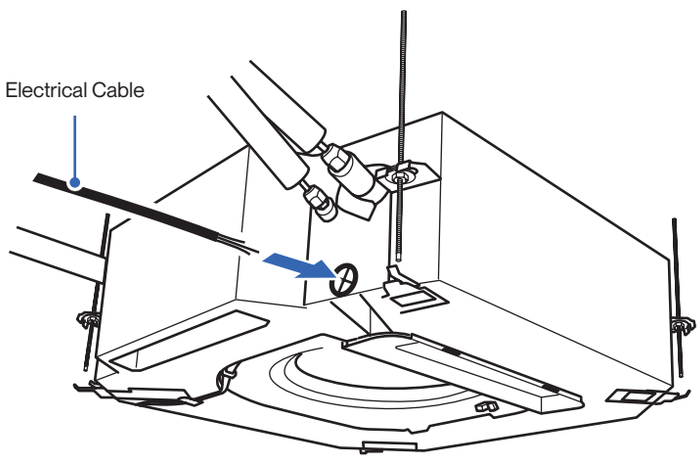
Indoor Unit Installation

Connecting the Electrical Cable to the Cassette Unit

1. Remove the terminal covers from the cassette unit.
2. Insert the electrical cable through the opening on the unit casing into the terminal box.
3. Connect the wires to the corresponding termanal and secure the cable using the cable clamp.

NOTE: Exact electrical diagram can be found on the back of the terminal cover.

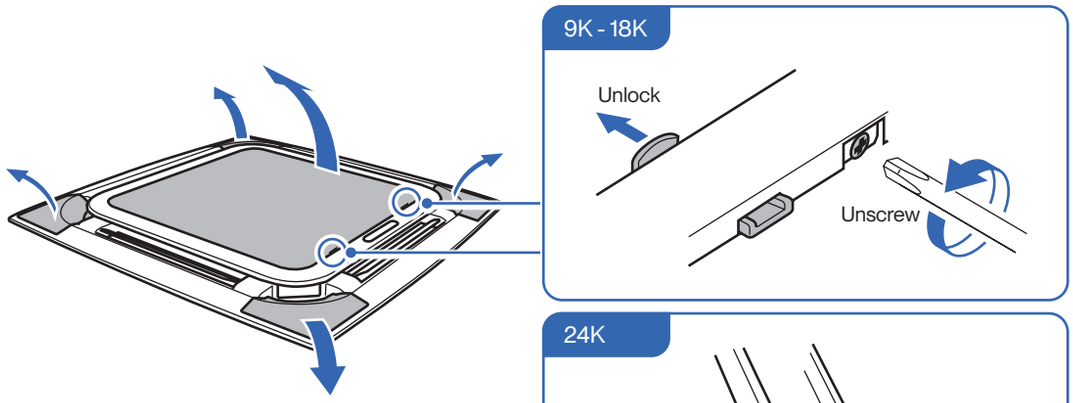


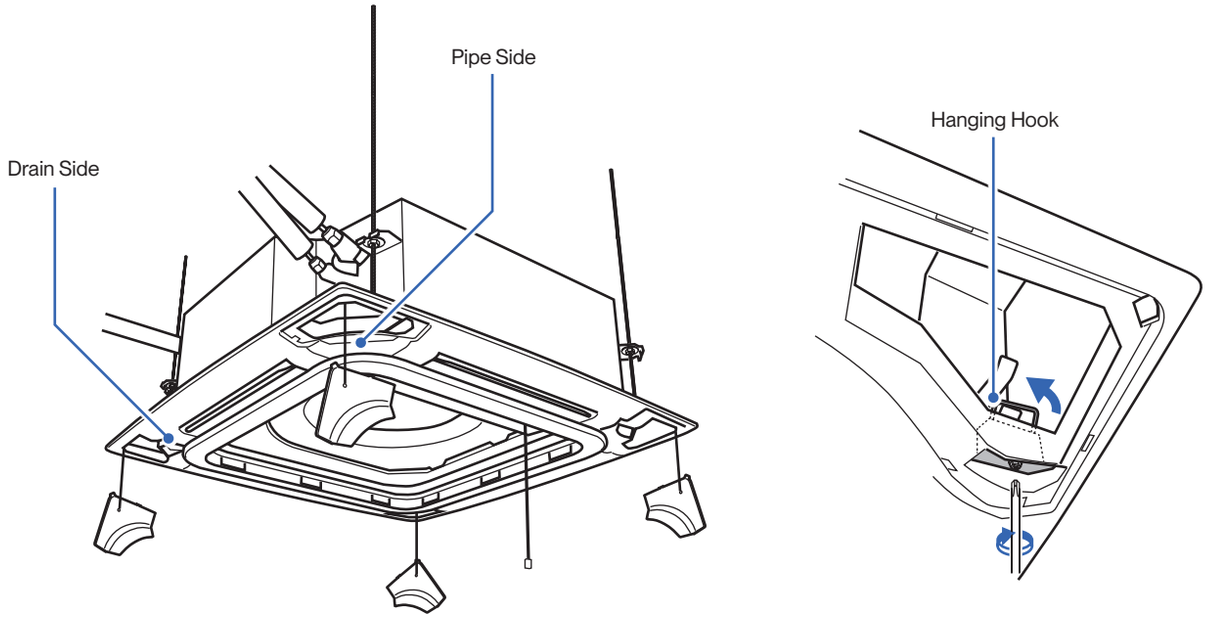


Indoor Unit Installation

Attaching the Front Panel

1. Remove the air return grill and detach the panel corner covers from the panel.
2. Align the panel to the cassette unit. The panel has markings at the corners to help determind the drain corner and refrigerant port corner.
3. Hang the hanging hooks on the panel to the metal taps on the unit, then tighten the screws until the panel is lightly press against the ceiling.





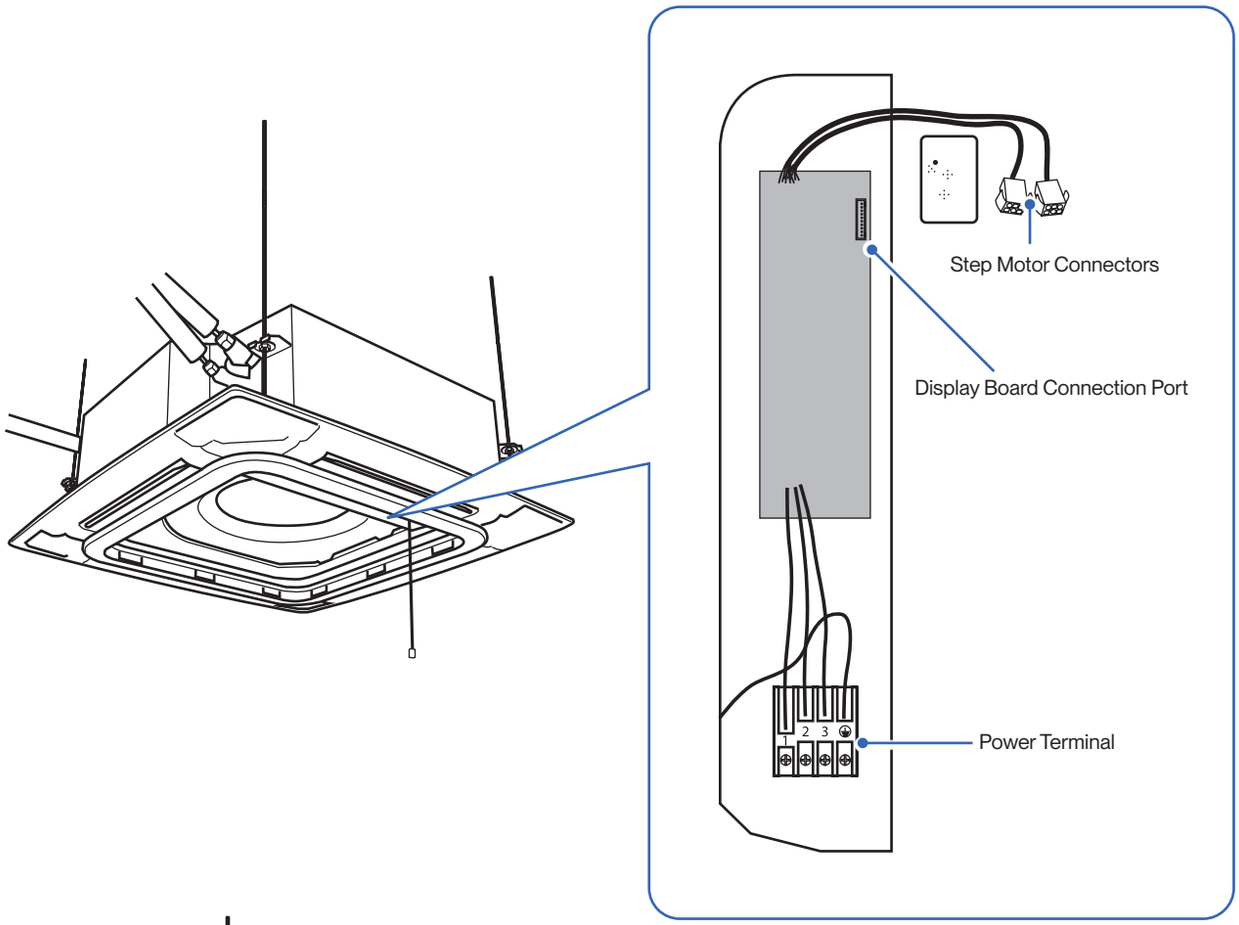
QUICK TIPS

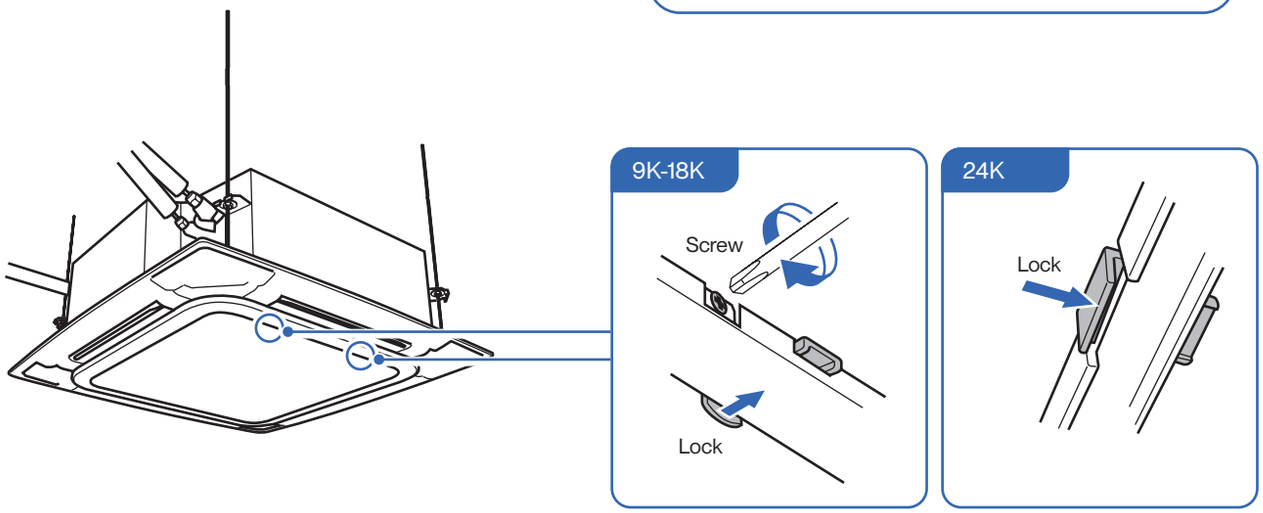
- Markings on the panel indicates the pipe and drain side.
- Arrange the electrical cable from the panel so that it does not get pinched between the panel and the cassette unit.

Indoor Unit Installation

Connecting the Cable from the Panel to The Cassette Unit

1. Connect the cables from the panel to the ports on the cassette unit.
2. Manage the cables using zip ties and arrange them away from movable parts and avoid obstructing the air return.
3. Attach the terminal covers back to its original place.
4. Reattach the air return grill onto the panel.





Outdoor Unit Installation

Secure the Outdoor Unit (Ground Installation)

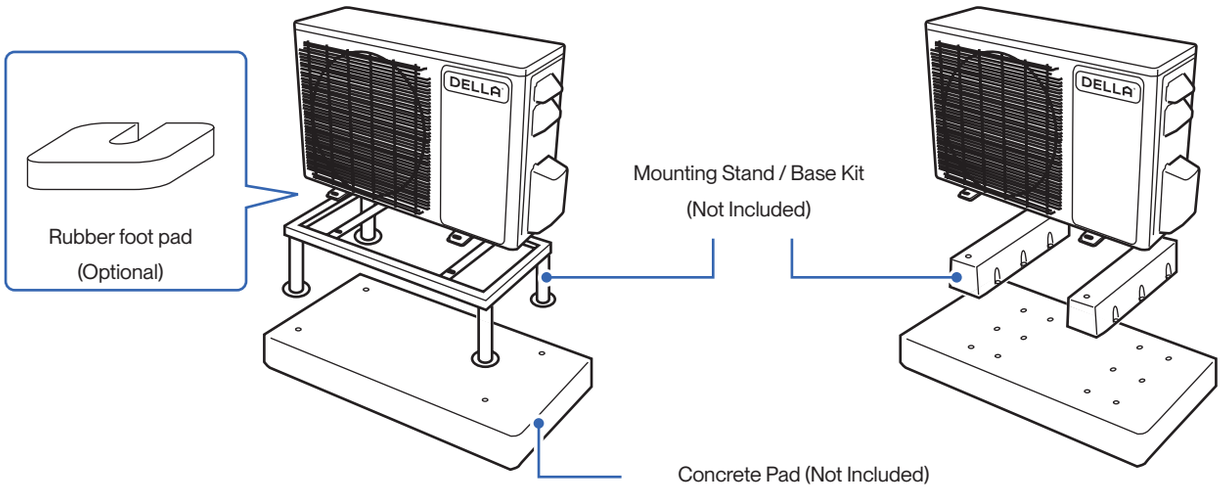
1. Place a concrete pad on the installation location.

   NOTE: You do not need a concrete pad if the ground is concrete.

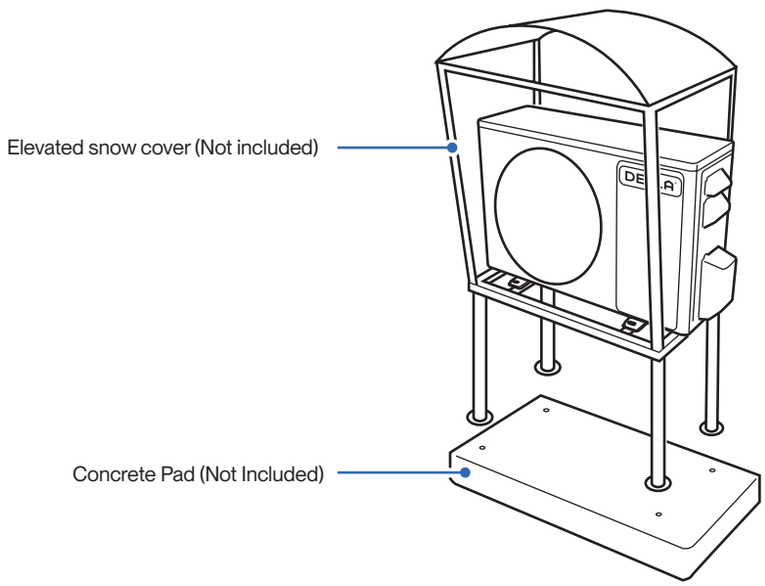
2. Mount the indoor unit on a mounting stand or base kit.

   NOTE: Rubber foot pads can be placed between the outdoor unit and the mounting kit to reduce vibration or noise.

3. Drill holes on the concrete pad or concrete ground.
4. Secure the mounting stand or base kit on the concrete with concrete anchor bolts.



- Outdoor unit should be installed on a elevated mounting stand with snow cover if using in a snowy region.

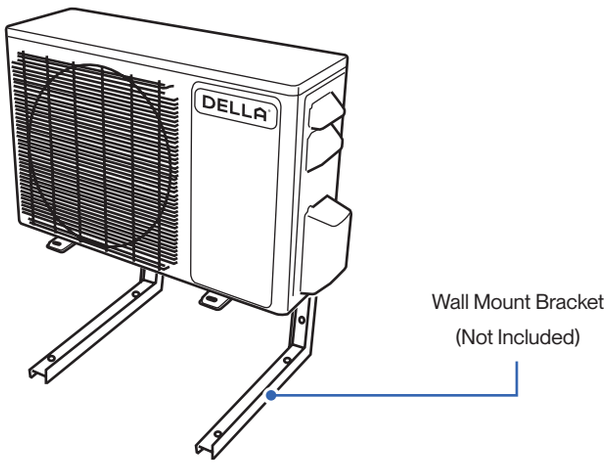


Outdoor Unit Installation

Secure the Outdoor Unit (Wall Installation)

The outdoor unit can be fixed on a wall mounting bracket if there is no ground mounting option.

1. Measure the distance between the outdoor unit's legs.
2. Mount the wall mounting bracket on the wall.
3. Secure the outdoor unit on the wall mounting bracket.



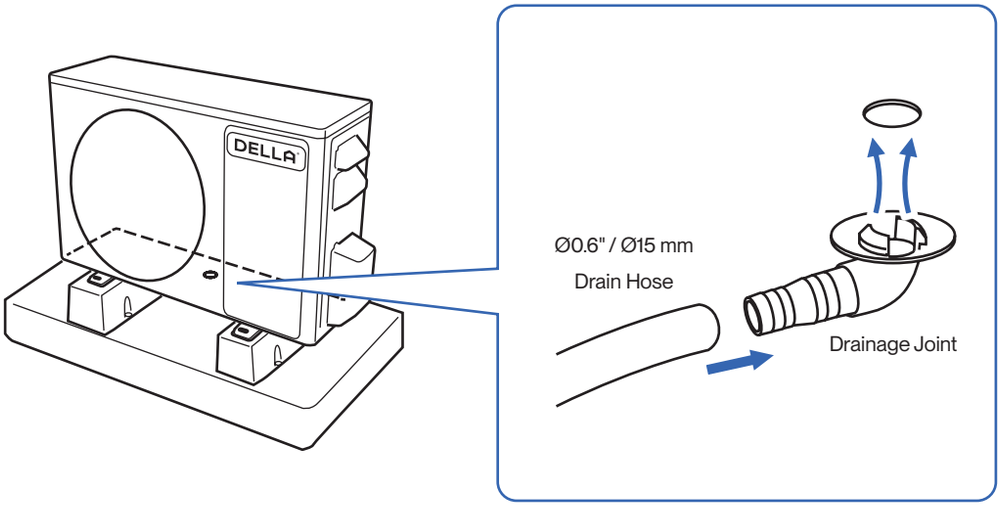
CAUTION

- The wall mounting bracket and the wall must be able to support at least 4 times the weight of the outdoor unit.

Attach Drainage Port and Hose

Outdoor unit drainage helps prevent condensation or frost inside the unit during cold weather.

1. Drainage joint installation is recommended for heat pump models.
2. Insert drainage joint into the bottom hole of the outdoor unit.
3. Connect one end of the drain hose to the joint and the other end to your desired drainage point.



Indoor and Outdoor Unit Installation

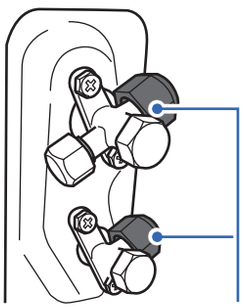
Connect the Refrigerant Pipes to the Outdoor Unit

1. Unscrew the screws on the valve cover, press it down gently and remove the cover from the outdoor unit.
2. Remove plastic caps from the end of the valves.
3. Align the refrigerant pipes to the outdoor unit valve, then tighten the nut by hand.
4. Use a torque wrench to tighten the nut according to the torque requirement.

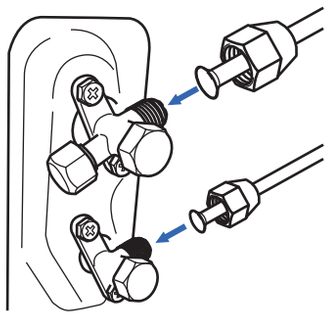
QUICK TIPS

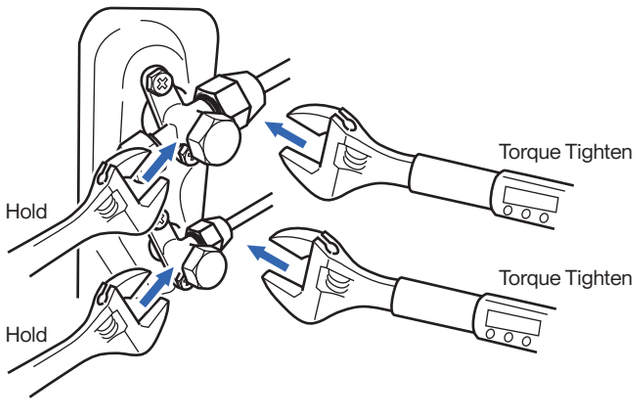
- A thin layer of nylog can be applied to the inside of the flare to provide better seal. (OPTIONAL)
- Make sure no nylog is on the outside of the flare.

Thin layer of nylog
(OPTIONAL)



Remove Plastic Caps





Pipe Diameter	1/4"	3/8”	1/2”	5/8”
Torque Parameter	18 - 20 N-M 13.3 - 14.8 lbf-ft 1.8 - 2.0 kgf-m	30 - 35 N-M 22.1 - 25.8 lbf-ft 3.0 - 3.6 kgf-m	45 - 50 N-M 33.2 - 36.9 lbf-ft 4.6 - 5.1 kgf-m	60 - 65 N-M 44.3 - 48.0 lbf-ft 6.1 - 6.6 kgf-m

- Connection must be torque tighten to prevent leak. Do not over tighten.
- Refrigerant piping and torque requirement for specific model is on Page 16, 17 .

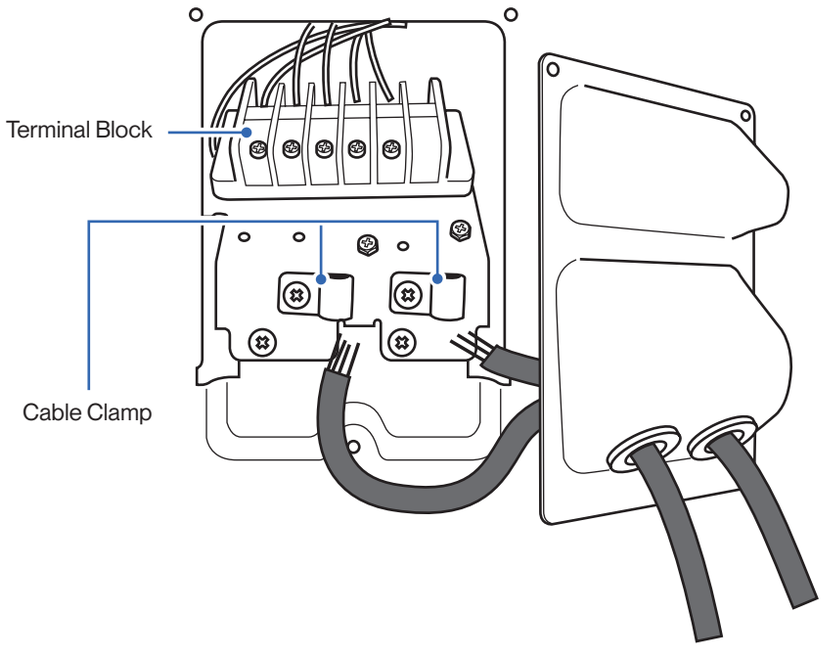
Indoor and Outdoor Unit Installation

Connect the Electrical Wire

WARNING

- Electrical wiring must be done by a qualified technician or electrician. Failing to connect the wires correctly will cause short circuit, a fire, and property damage.
- Do not use the communication cable as power supply cable.

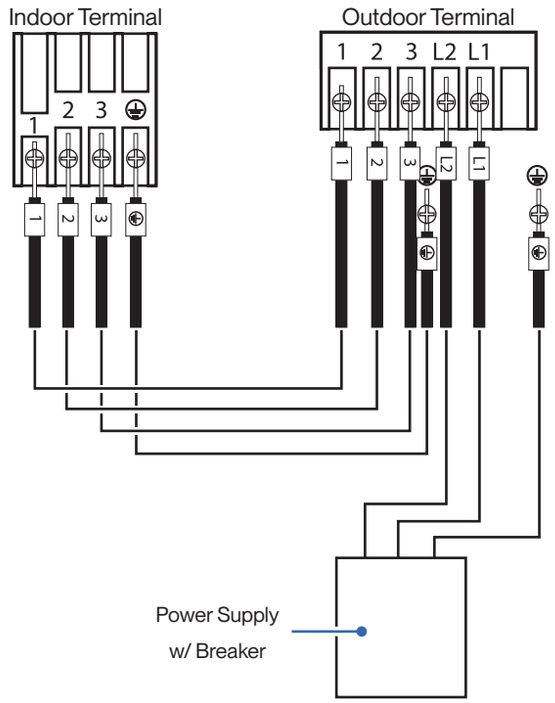
1. Unscrew the screws from the wiring cover, press the cover downward gently, and remove from the outdoor unit.
2. Unscrew the cable clamp.
3. Insert the electrical cable from the indoor unit through the opening on the cover, then connect the wires to the outdoor unit terminal.
4. Insert power supply cable (not included) to the opening on the cover, then connect the wires to the outdoor unit terminal.
5. Turn off any power from the power supply, and connect the wires to the power supply circuit box.
   Exact power supply cable and breaker size requirement on Page 15
6. Reinstall the wiring cover to its original place.



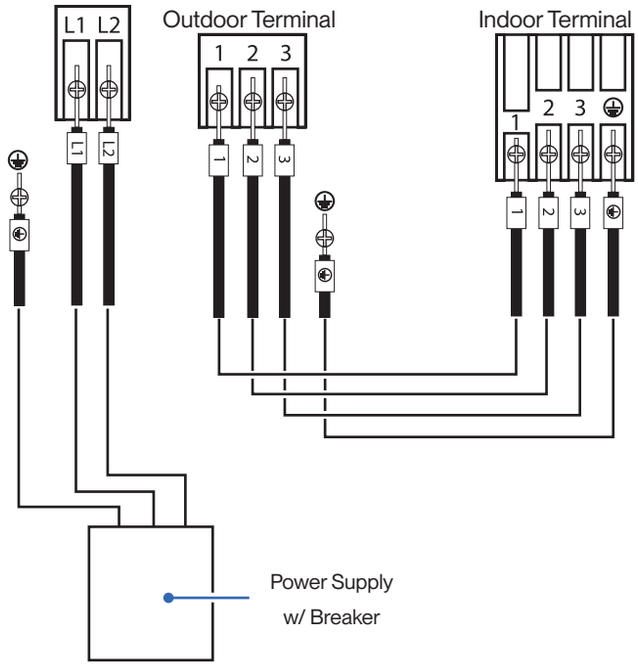
Indoor and Outdoor Unit Installation

Connect the Electrical Wire

For Single Zone Outdoor Unit



For Multi Zone Outdoor Unit

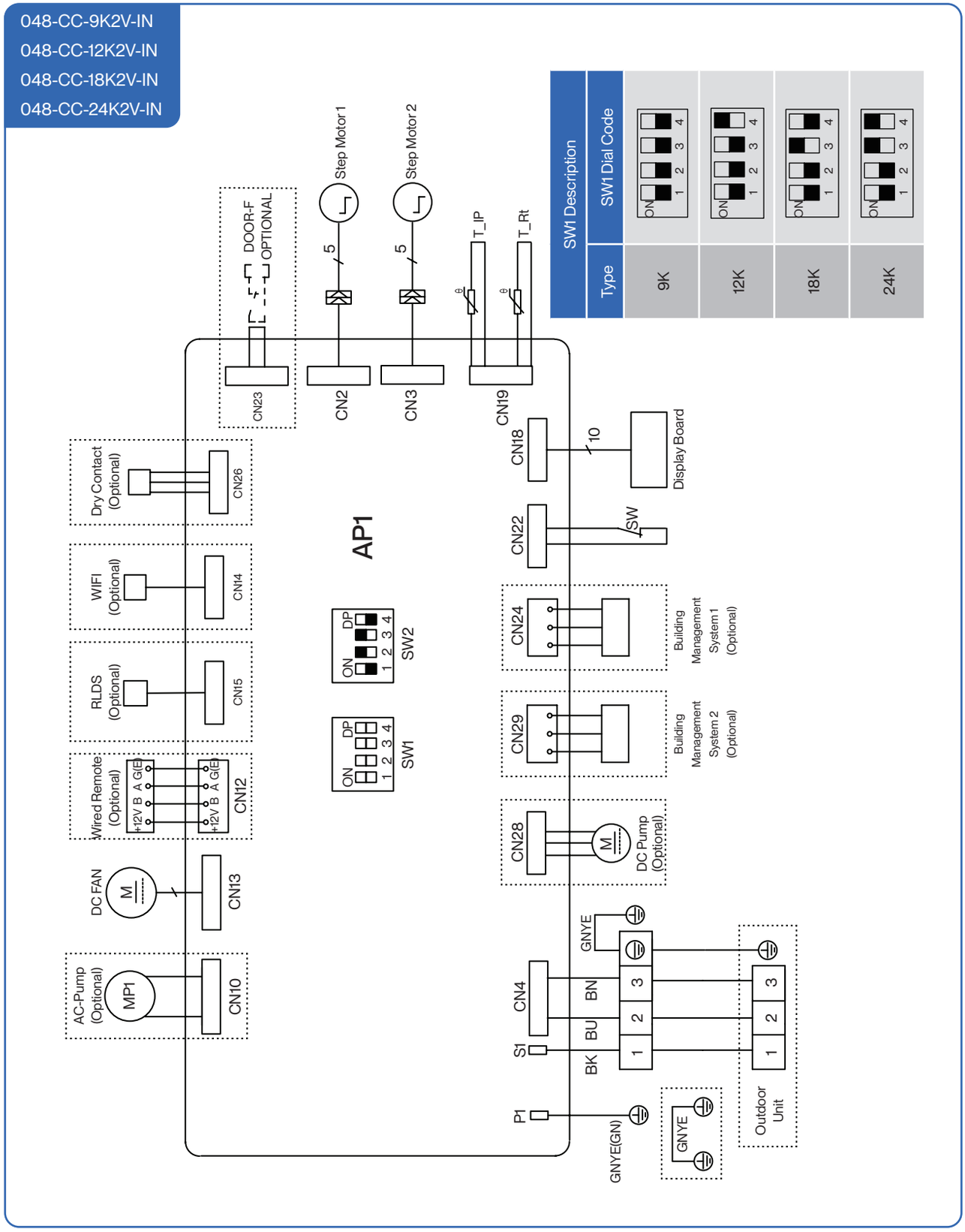


DELLA®

Indoor and Outdoor Unit Installation

Indoor Unit Circuit Diagram (Cassette Type)

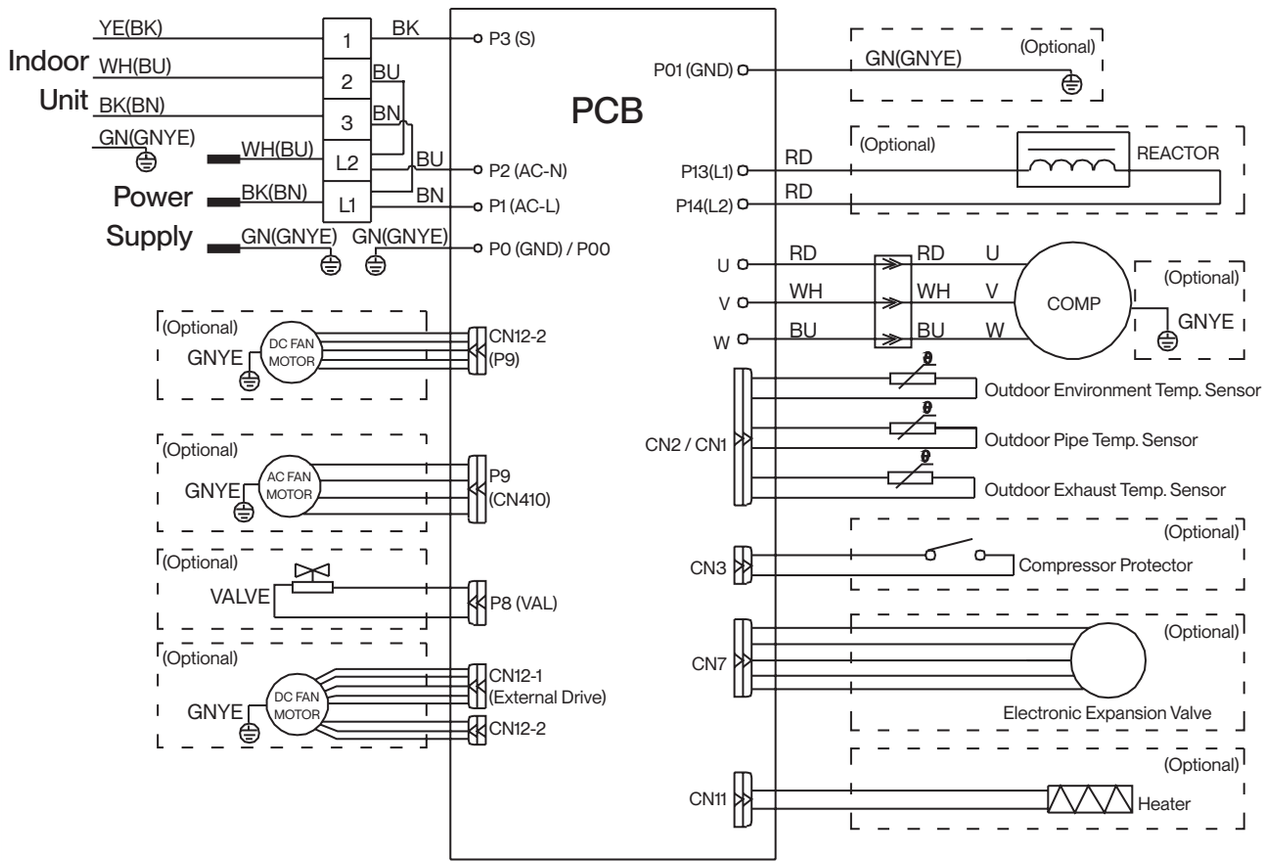
048-CC-9K2V-IN
048-CC-12K2V-IN
048-CC-18K2V-IN
048-CC-24K2V-IN



Indoor and Outdoor Unit Installation

Outdoor Unit Circuit Diagram

048-TP-9K2V-24S-OUT
048-TP-12K2V-24S-OUT
048-TP-18K2V-23S-OUT
048-TP-23K2V-23S-OUT

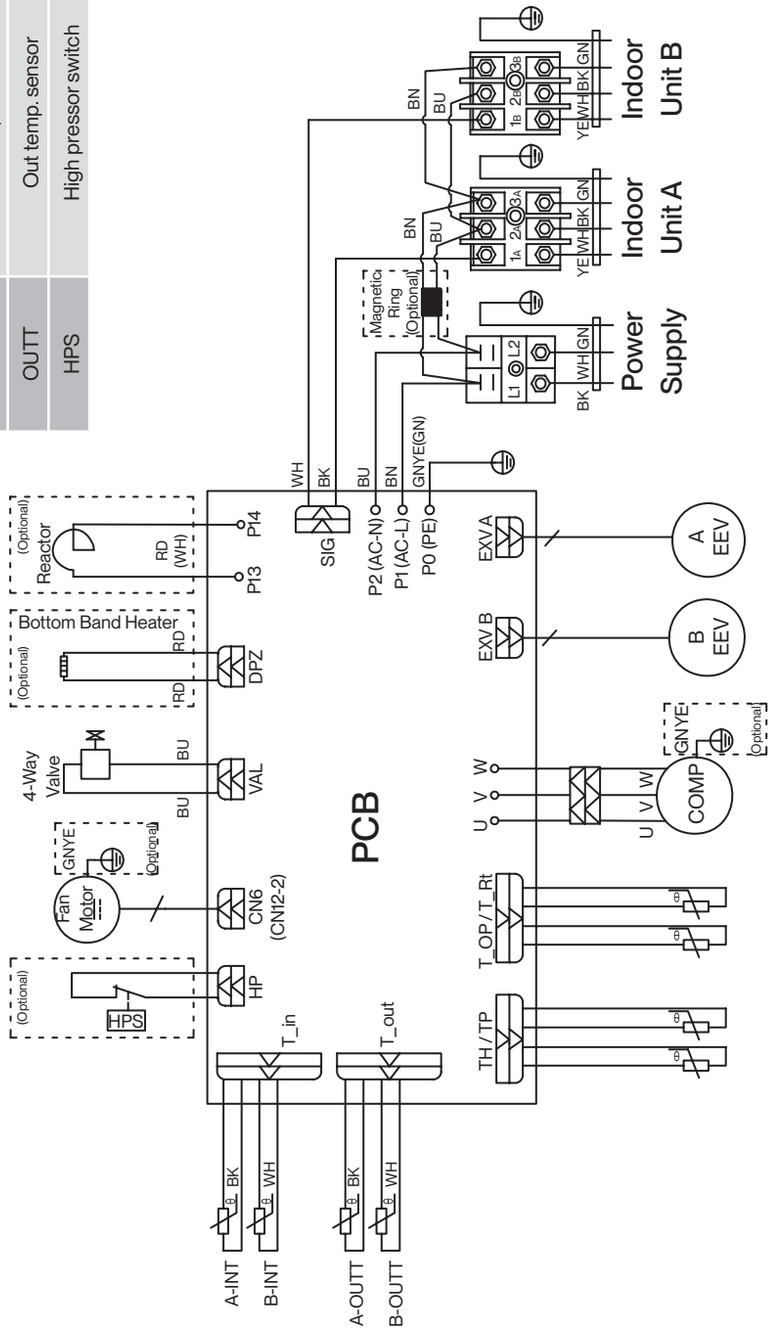


Indoor and Outdoor Unit Installation

Outdoor Unit Circuit Diagram

048-TLP-MODU-1D2

Abbreviation	
OHT	Outdoor suction temp. sensor
OPT	Outdoor pipe temp. sensor
ORT	Outdoor temp. sensor
OET	Outdoor exhaust temp. sensor
INT	In temp. sensor
OUTT	Out temp. sensor
HPS	High pressor switch

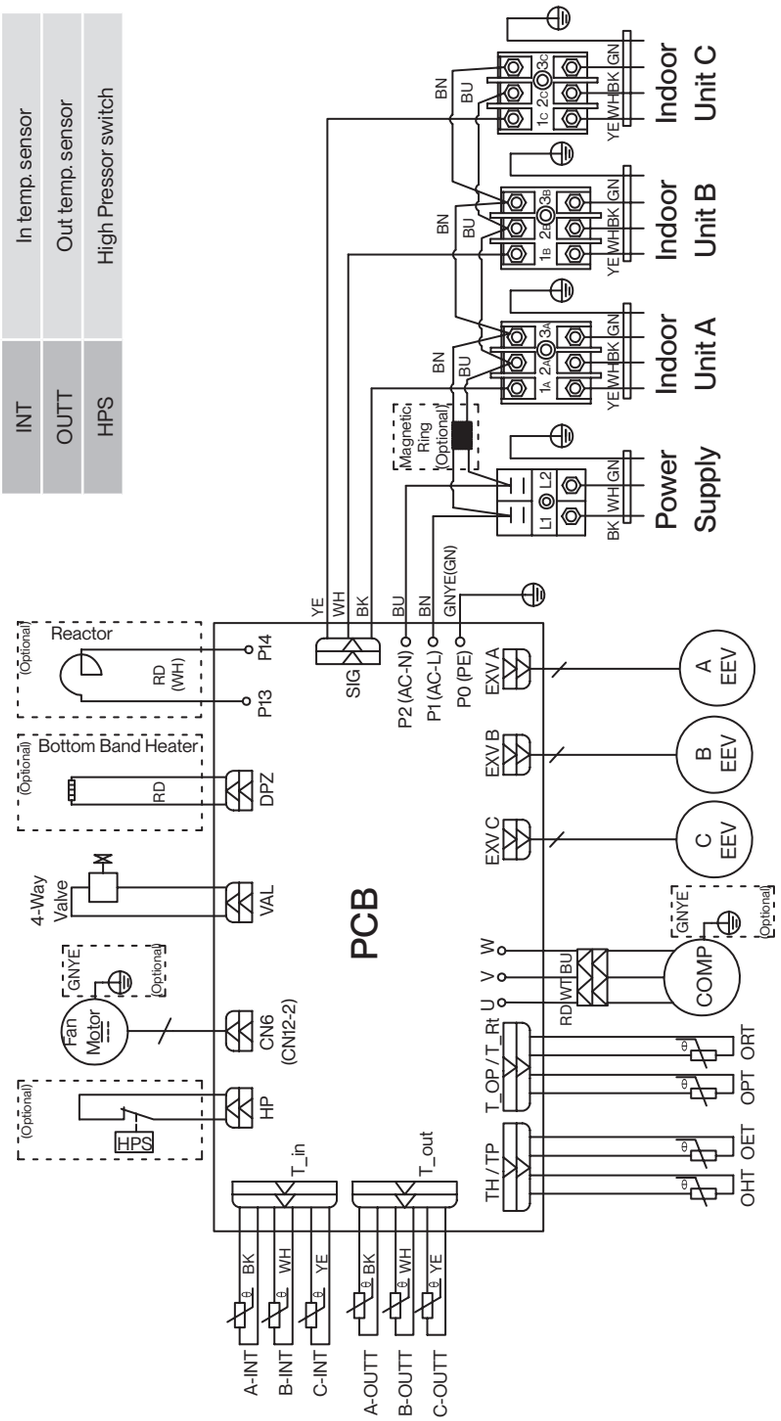


Indoor and Outdoor Unit Installation

Outdoor Unit Circuit Diagram

048-TLP-MODU-1D3

Abbreviation	
OHT	Outdoor suction temp. sensor
OPT	Outdoor pipe temp. sensor
ORT	Outdoor temp. sensor
OET	Outdoor exhaust temp. sensor
INT	In temp. sensor
OUTT	Out temp. sensor
HPS	High Pressor switch

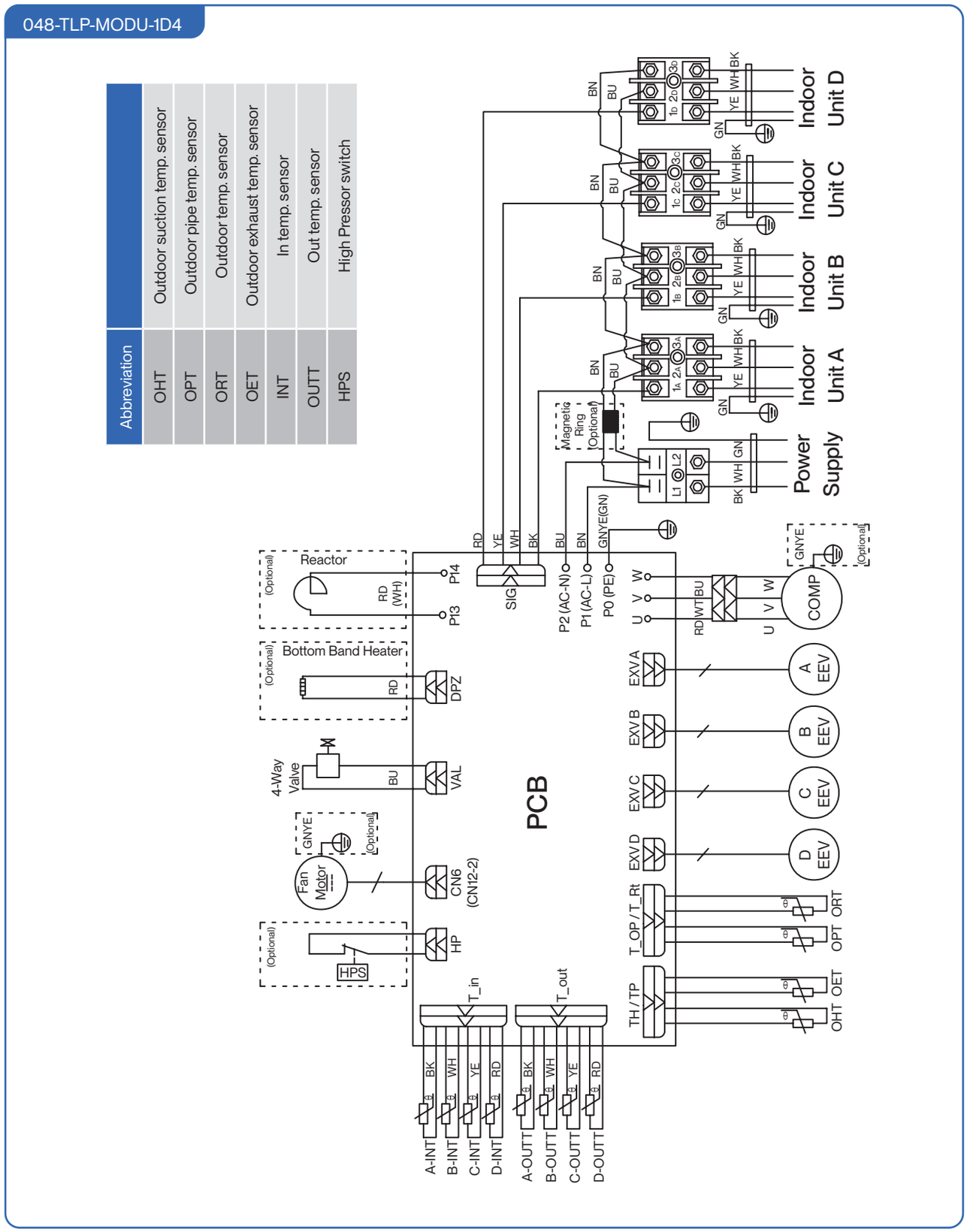


Indoor and Outdoor Unit Installation

Outdoor Unit Circuit Diagram

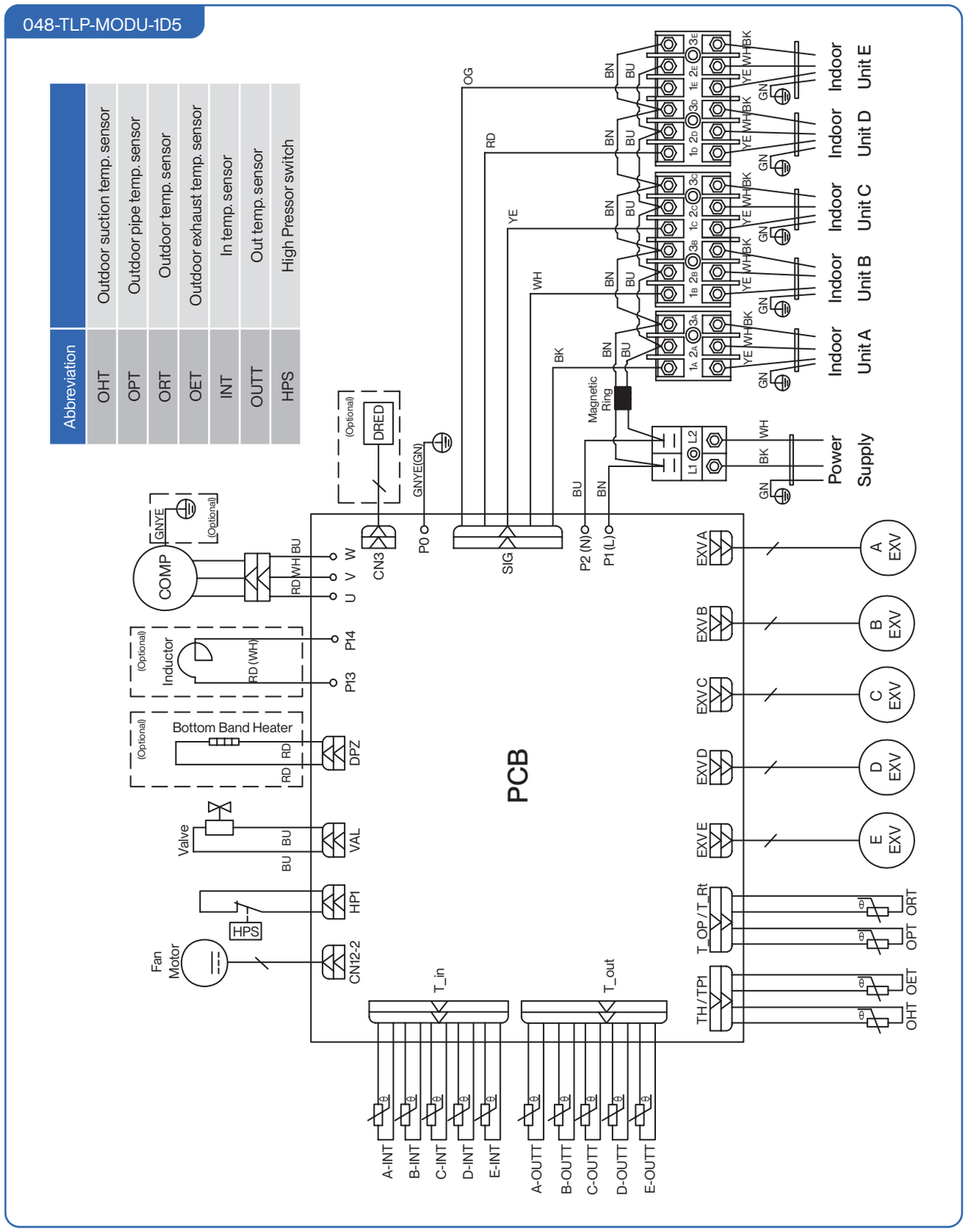
048-TLP-MODU-1D4

Abbreviation	
OHT	Outdoor suction temp. sensor
OPT	Outdoor pipe temp. sensor
ORT	Outdoor temp. sensor
OET	Outdoor exhaust temp. sensor
INT	In temp. sensor
OUTT	Out temp. sensor
HPS	High Pressor switch



Indoor and Outdoor Unit Installation

Outdoor Unit Circuit Diagram



Indoor and Outdoor Unit Installation

Vacuum Pumping, Leak Test (Using Micron Gauge) *RECOMMENDED, and Adjust Refrigernat Level

1. Remove the protective caps from the service port, low-pressure valve (Lo·R), and high-pressure valve (Hi·R).
2. Connect the charging hose with a push pin to the service port.
3. Connect a the vacuum pump to the other end of the charging hose and the micron gauge in between the service port and the pump.
4. Open the valve adapter on the charging set, then turn on the vacuum pump to vacuum the system.
5. Let the vacuum pump run until the micron gauge indicate the value of 500 micron or lower.
6. Close the valve adapter on the charging set and turn off the vacuum pump.
7. Leave the system connected with the micron gauge for 5 minutes, then make sure the gauge indication does not exceed 500 micron.
   NOTE: In the case of a leak, and the micron level increases above 500 micron, reconnect all the connection joints on the refrigerant line, and redo the vacuum pumping.
8. Disconnect the pressure hose and the micron gauge from the service port.
9. The air conditioner comes with enough refrigerant for the standard length pipe set, add refrigerant charge if you use a lengthened refrigerant line.
   Page 15
10. Turn on the air conditioner and confirm it can power on properly, and then turn it off.
    Page 58
11. Fully open the low pressure valve (Lo·R) and high pressure valve (Hi·R)
12. Put the protective caps back on the service, low-pressure valve, and high-pressure valve.
13. Tighten the caps.

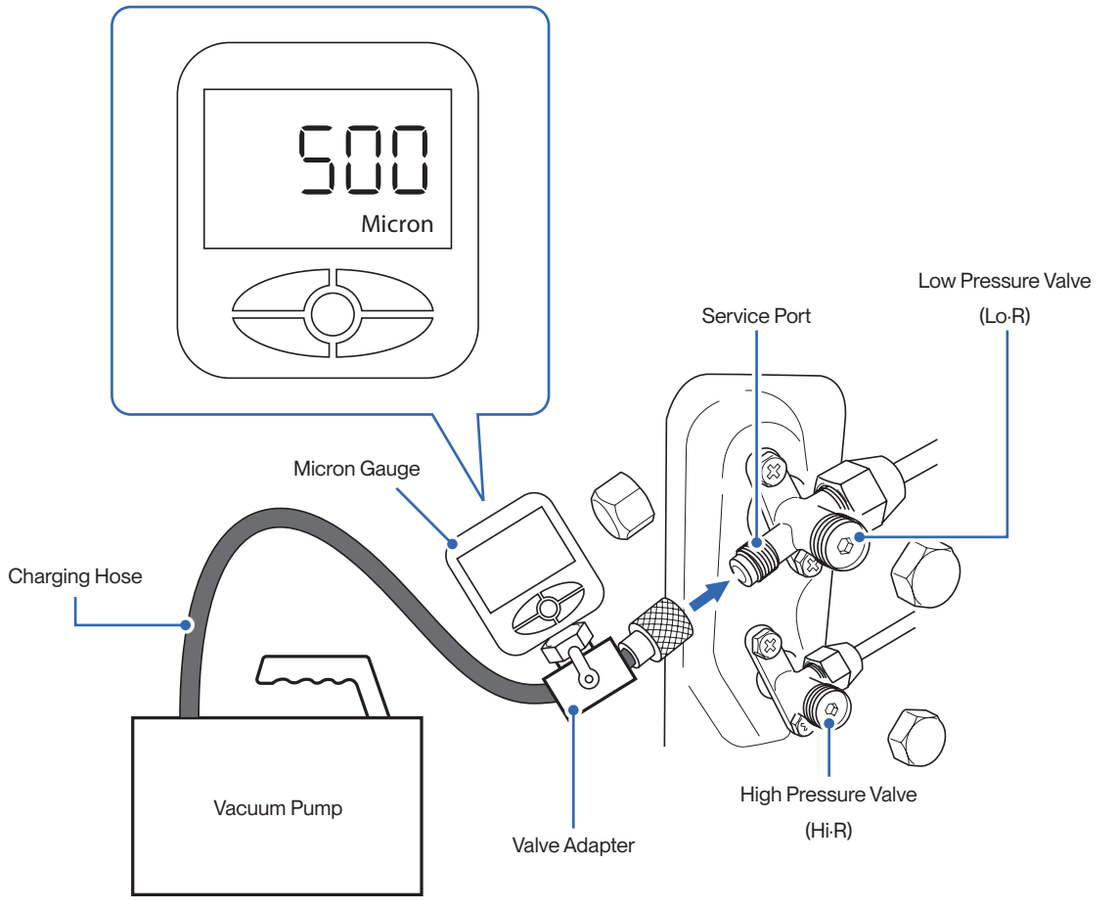
- Only add refrigerant if you use a lengthened refrigerant line. There is no need to adjust or recover any amount refrigerant if you use a standard or shortened refrigerant line.
- Do not open the refrigerant valve until vacuum pumping is completed.
- Stop and disconnect the vacuum pump from the system before opening the refrigerant valve.
- Each indoor unit connected to the multizone outdoor unit must vacuumed respectively.

Additional Refrigerant

- Additional Refrigerant Amount (ounce)
  [0.11 × (Total Install length (ft) - 25)] oz
- Additional Refrigerant Amount (gram)
  [10 × (Total Install length (m) - 7.5)] g

Indoor and Outdoor Unit Installation

Micron Gauge Connection

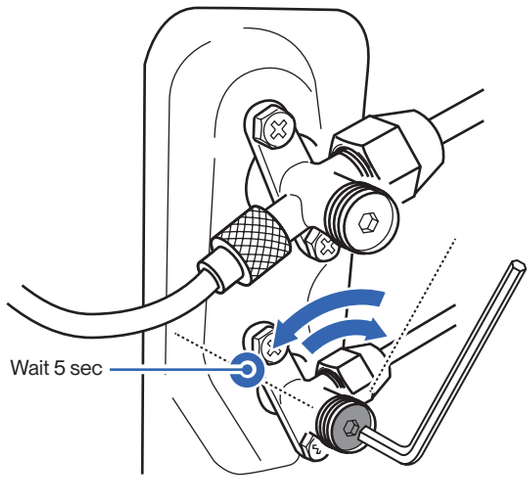


Indoor and Outdoor Unit Installation

Vacuum Pumping, Leak Test (Using Manifold Gauge), and Adjust Refrigernat Level

- Analog manifold gauge is less accurate and measure vacuum at a lower resolution than a digital micron gauge. DELLA recommend using micron gauge for vacuum pumping mentioned on Page 44.

1. Remove the protective caps from the service port, low-pressure valve (Lo·R), and high-pressure valve (Hi·R).
2. Connect the pressure hose with a push pin from the manifold gauge to the service port.
3. Connect the charging hose from the manifold gauge to the vacuum pump.
4. OPEN the low-pressure valve (Lo·M) and CLOSE the high pressure valve (Hi·M) on the manifold gauge.
5. Turn on the vacuum pump to vacuum the system.
6. Let the vacuum pump run for at least 15 minutes and make sure the gauge indicates −0.1 Mpa (−76 cmHg).
   NOTE: Depending on your refrigerant line set length and vacuum pump power, it might takes longer time.
7. Close the pressure valve (Lo·M) and turn off the vacuum pump.
8. Leave the system connected with the manifold gauge for 5 minutes, then make sure the gauge indication does not exceed 0.005 Mpa.
   NOTE: In the case of a leak, and the pressure value increases, reconnect all the connection joints on the refrigerant line, and redo the vacuum pumping.
9. Open the high-pressure valve (Hi·R) for 1/4 turn, then close the valve after 5 seconds.



10. Check all connection joints with refrigerant leak detector or liquid leak detector.
11. The air conditioner comes with enough refrigerant for the standard length pipe set, add refrigerant charge if you use a lengthened refrigerant line.
    Page 15
12. Turn on the air conditioner and confirm it can power on properly, and then turn it off.
    Page 58
13. Disconnect the pressure hose from the service port, then fully open the low pressure valve (Lo·R) and high pressure valve (Hi·R).
14. Put the protective caps back on the service, low-pressure valve, and high-pressure valve.
15. Tighten the caps.

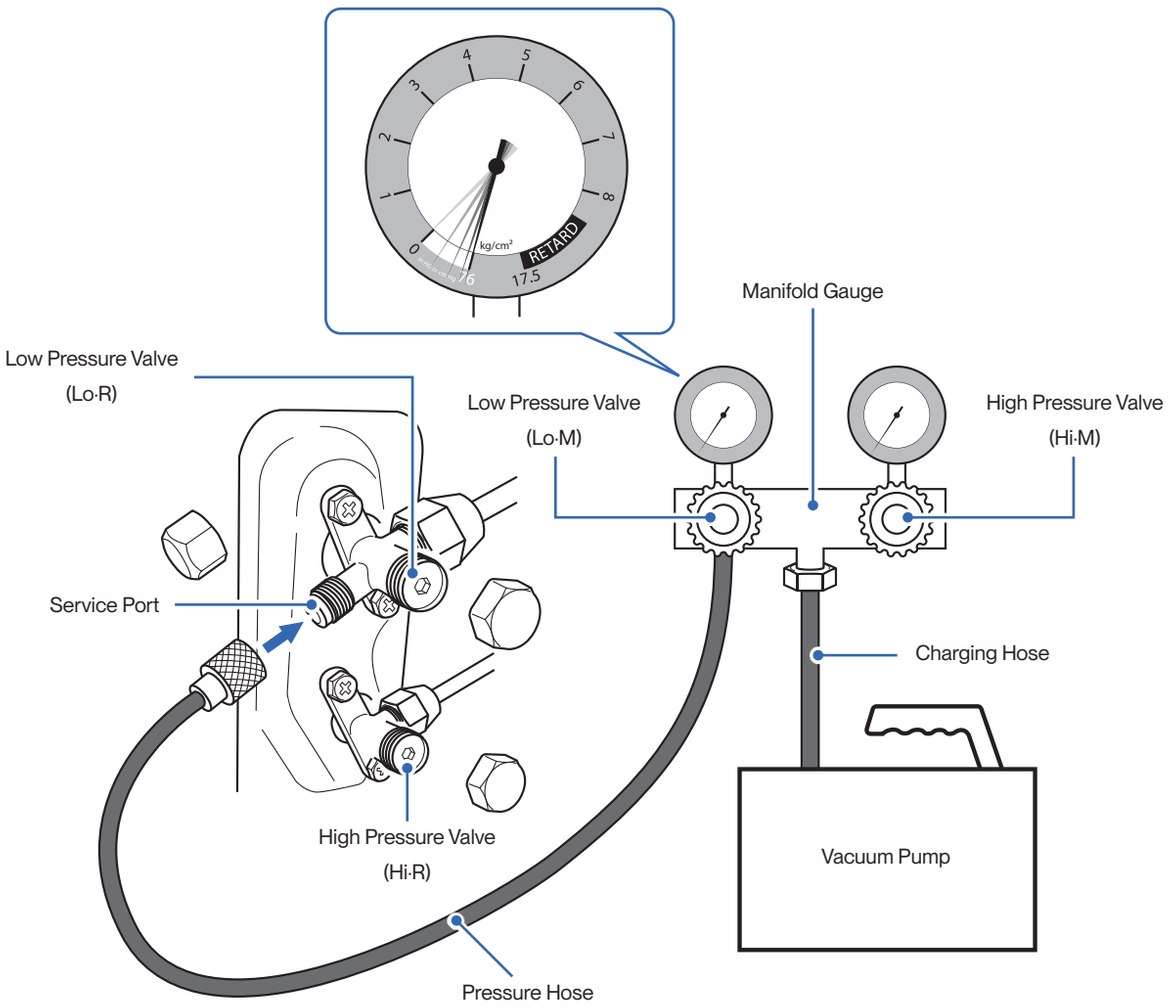
- Only add refrigerant if you use a lengthened refrigerant line. There is no need to adjust or recover any amount refrigerant if you use a standard or shortened refrigerant line.
- Do not open the refrigerant valve until vacuum pumping is completed.
- Stop and disconnect the vacuum pump from the system before opening the refrigerant valve.
- Each indoor unit connected to the multizone outdoor unit must vacuumed respectively.

Additional Refrigerant

- Additional Refrigerant Amount (ounce)
  [0.11 × (Total Install length (ft) - 25)] oz
- Additional Refrigerant Amount (gram)
  [10 × (Total Install length (m) - 7.5)] g

Indoor and Outdoor Unit Installation

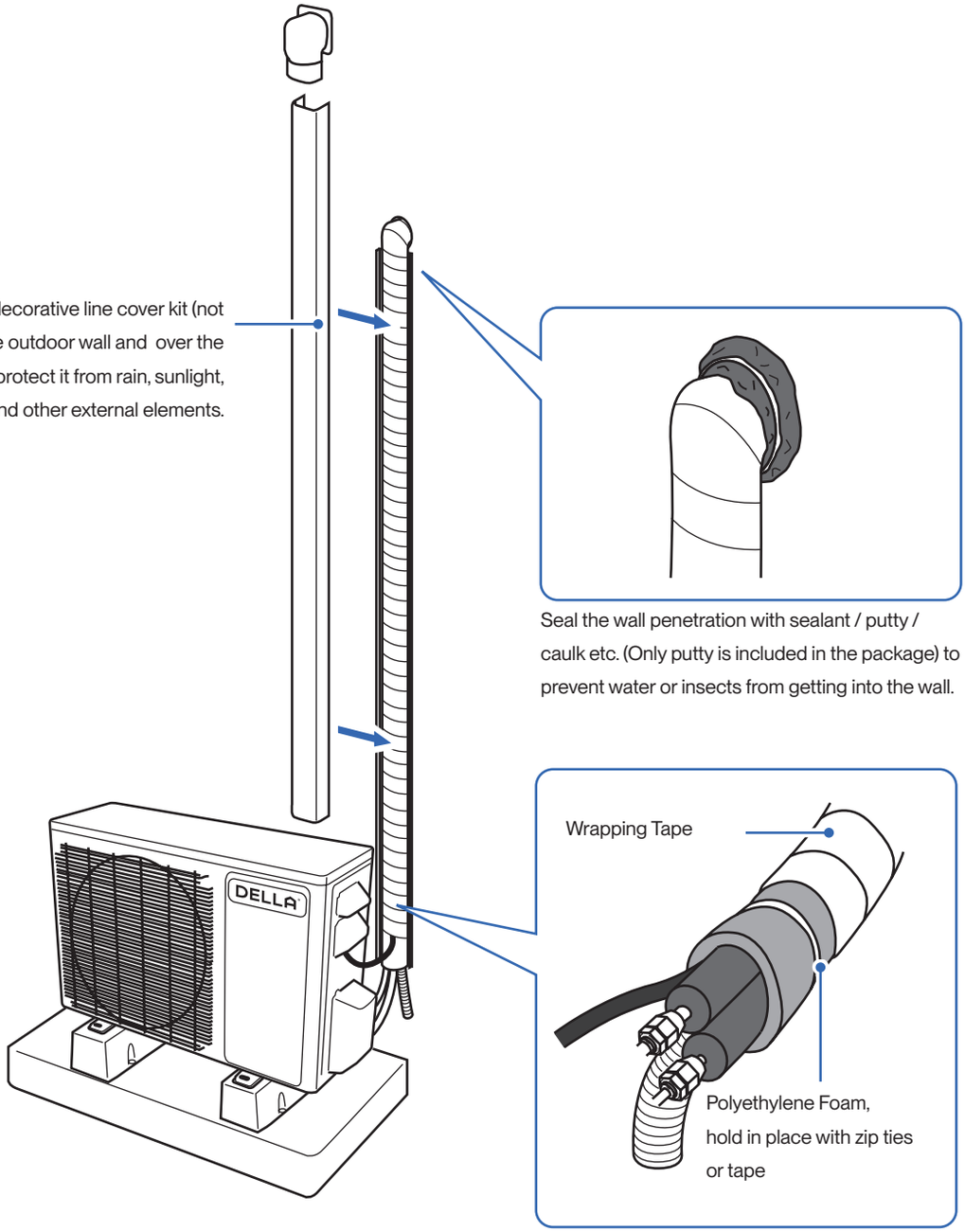
Manifold Gauge Connection



Finishing

Line Set Insulation, Bundling, and Finishing Touch

Refrigerant Pipes, drain hose, and electric cable must be properly arranged and bundled with insulation tape to maximize the unit's efficiency and prevent condensation or water leak.



QUICK TIPS

- When wrapping and bundling the line set, avoid over tightening to prevent the insulating materials from over compression.
- Make sure all connection joints are properly insulated.

Finishing

Check List

Go through the following list and check your installation.

☑ the check box for each confirmation.

Check List	Status
Are the indoor and outdoor unit kept at least the minimum distance away from the closest wall and obstacle?	☐
Is the indoor unit securely mounted on the ceiling?	☐
Are all the panels on the unit secured and would not fall out?	☐
Is the drain hose properly attached?	☐
Are the refrigerant pipes securely connected and no refrigerant leakage?	☐
Are all pipes, hoses, and cable bundled and wrapped with insulation tape?	☐
Is the system properly vacuumed?	☐
Is all the wall opening sealed off?	☐
Are the refrigerant valves fully opened?	☐
Do the power supply and voltage match the unit rating? (Check before connecting to power supply)	☐
Is the electrical wiring in the unit connected and secured?	☐
Are the units properly grounded?	☐
Is the power breaker, fuse, or protection device installed?	☐
Can the remote control send control commands to the air conditioner?	☐

- Any failures, accidents, or damages caused by improper installation are not covered by the warranty.

Finishing

Test Run

After the installation, test run the system and take sure it performs and works properly without water leak or abnormal noise.

1. Turn on the power supply.
2. Turn on the air conditioner using the remote control after 2 hours.
3. Test the unit at the lowest temperature in COOL mode.
4. Test the unit at the highest temperature in HEAT mode.
5. Test each mode for at least 8 minutes.
   - Measure the air temperature at the air outlet.
   - Check if water drains properly from the drainage hose.
   - Check if the louver and deflectors move properly.
6. If everything is operating normally, return to normal setting and turn off the air conditioner.
7. Inform the user to read the operation instruction before use, and demonstrate to the user how to use the air conditioner, the necessary knowledge of service and maintenance, and a reminder of accessories storage.

- Wait for at least 2 hours before turning on the air conditioner after installation. Make sure the air conditioner is powered during the wait time and let the system to balance the refrigerant pressure and calibrate sensors.

QUICK TIPS

Contact us if you encounter any problems during or after the installation.

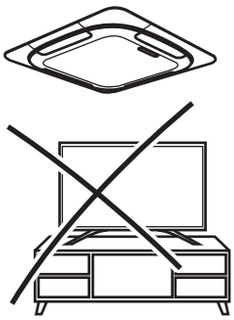
support.dellahome.com

800-863-4143
6:00 a.m. - 4:00 p.m. PST
Monday - Friday

24/7 Live Chat

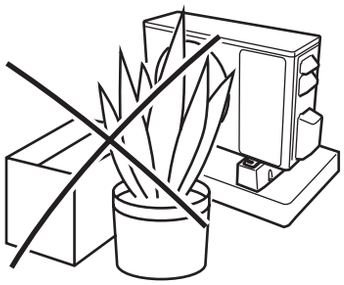
Before Using

Operation Tips



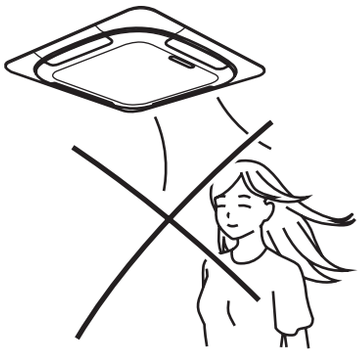
Avoid placing TV, radio or large furniture under the air conditioner.

- It may block wind flow or interfere with the remote control.



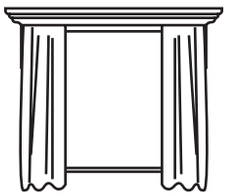
Avoid putting plants or objects around the outdoor unit.

- It may lower the air conditioner efficiency or cause malfunction.



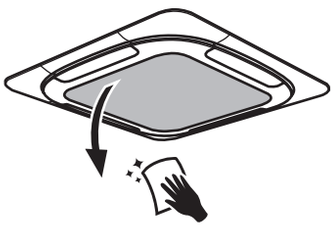
Avoid direct wind flow to people, pets, or plants.

- Expose to direct wind flow for extended period of time may have a negative impact on your health.



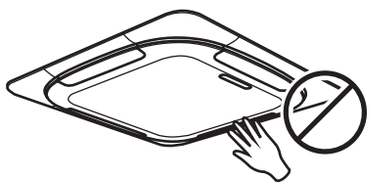
Close windows and blinds.

- The air conditioner can cool or warm the area with better efficiency.



Follow cleaning and maintenance routine.

- Regular cleaning and maintenance are needed for the best efficiency and prevent bad odor or water leak.

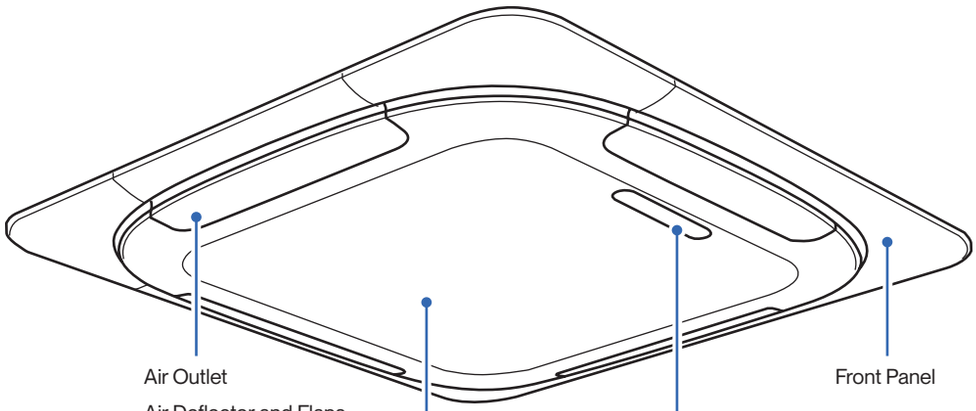


DO NOT manually adjust the deflector and flaps.

- It may cause injury to the user and damages to the air conditioner.

Before Using

Indoor Unit and Front Panel



Display

Button	Function
	Manual Power Button

LED Indicator	Function
	Lights up when AC is operating
	Indicator of temperature, timer, and error code
	Light up when a timer is set
	Light up when the AC is defrosting

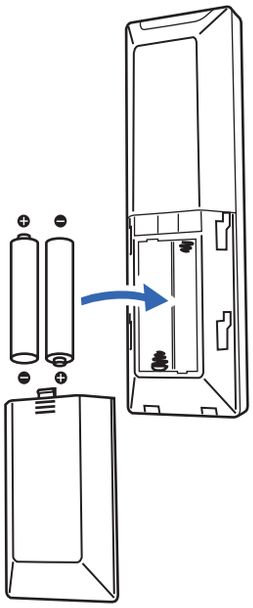
NOTE: The graphical representation might have slight differences than the actual product.

Before Using

Remote Control (Inserting Battery)

1. Push and slide the back cover off the remote control.
2. Insert 2 LR03 AAA 1.5 v batteries into the battery compartment.
3. Reinstall the back cover to the remote control.

- After new batteries are inserted into the remote control, the display screen will lights up for 3 seconds. Leave it for 10 seconds, the display will automatically turn off.
- The default temperature unit will automatically turn into degree Fahrenheit.
  To change temperature unit, follow instruction on Page 66.

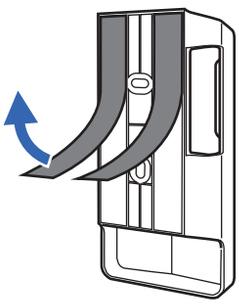


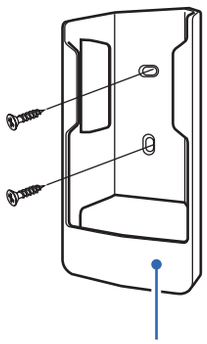
- Do not use rechargeable batteries.
- Replace the old batteries with new ones of the same type.
- Do not dispose batteries as unsorted municipal waste.

Remote Control (Remote Control Holder)

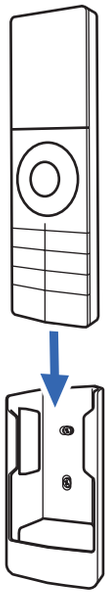
1. Attach the remote control holder to a wall by using the double sided adhesive tape or provided screws.
   NOTE: Wall anchor might needed if you install it on a dry wall.
2. Insert the remote control into the holder.

- Avoid exposing the remote control to direct sunlight.





Remote Control Holder



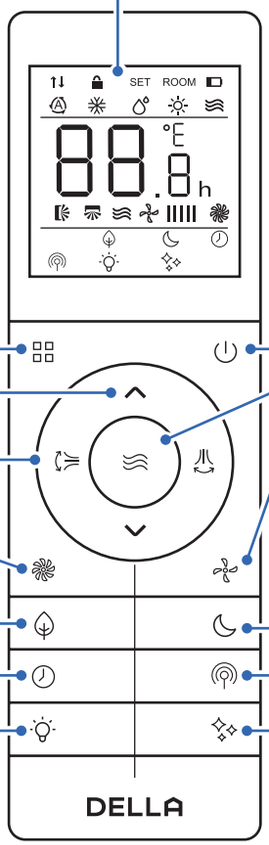

SET
ROOM
°F
h
DELLA

Just Right, Always.

Made to live with you, Della puts controls in your hands so that you can easily dail in a stress-free space that helps you feel more you.

Before Using

Remote Control



Display
Indicate operating status, temperature or timer setting

Mode Button
Select operation mode
Page 58

Increase / Decrease Button
Adjust temperature / timer setting

Air Flow Button
Control deflector & flaps to direct air flow
Page 60

Turbo Button
Temporary boosting the air conditioner performance
Page 61

ECO Button
Enable the air conditioner to be more energy efficient
Page 62

Timer Button
Enable ON / OFF timer setting
Page 63

Display Button
Turn ON / OFF the indoor unit display
Page 64

Power Button
Turn ON / OFF the air conditioner
Page 58

Fan Button
Select fan speed
Page 59

Quiet Button
Enable the air conditioner to run in quiet mode
Page 61

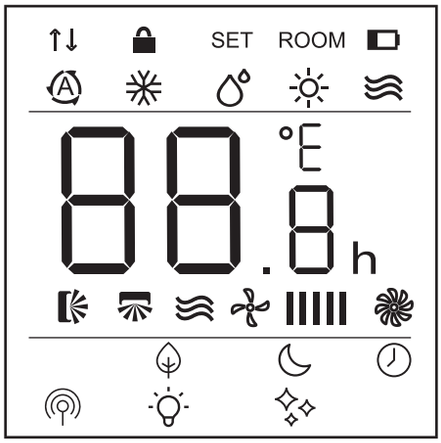
Sleep Button
Enable the air conditioner to operate a pre-set program suited for sleep time
Page 62

Vicinity Sensor Button
Let the air conditioner adjust temperature automatically according to the detected temperature around the remote control
Page 64

Self Clean Button
Enable the air conditioner to clean its internal parts
Page 65

Before Using

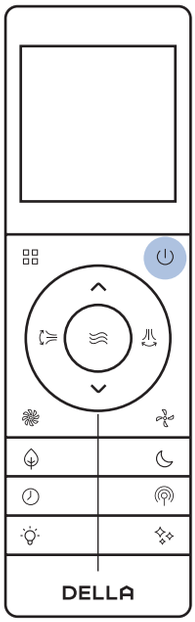
Remote Control



LED Indicator	Function
↑↓	Signal Indicator
	Child Lock
SET	Indicate Set Temperature
ROOM	Indicate Room Temperature
	Low Battery
A	Auto Mode
	Cool Mode
	Dehumidify Mode
	Heat Mode
	Fan Mode
88.8	Indicate Temperature Value
°F °C	Temperature Unit Degree Fahrenheit / Celsius

LED Indicator	Function
	Horizontal & Vertical Air Flow Indicator
	Quiet Mode
	Fan Speed
	Turbo Mode
	Eco Mode
	Sleep Mode
	Timer
	Vicinity Sensor Mode
	Indoor Unit Display Indicator
	Self Clean

Basic Operation



Power ON

Press ⏻ .

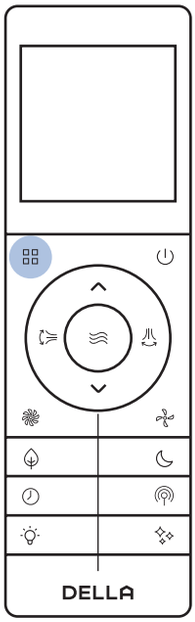
- The air conditioner will start operating.

Power OFF

Press ⏻ .

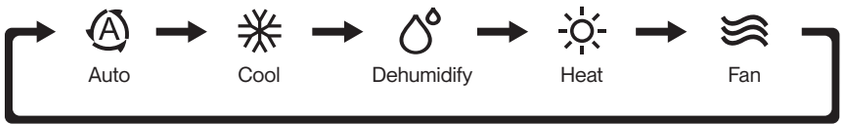
- The air conditioner will stop operating.

Basic Operation



Select Operation Mode

Press ⊞ to select operation mode.



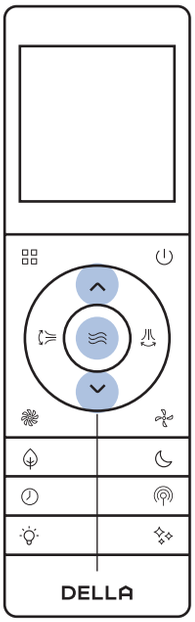
- It may takes a few minutes for the air conditioner to switch between modes.
- During Heat mode, the air conditioner can automatically activate defrost cycle, which is essential to remove frost on the condenser for heat exchange function. This procedure usually last for 2 - 10 minutes. When defrosting, indoor unit fan will stop operating. Once defrosting is completed, it will resume heat mode automatically.

Auto mode operation

Set temp. < Room temp.	Cool
Set temp. > Room temp.	Heat
Set temp. = Room temp. ± 1.8°F / 1°C	Fan

- Auto mode allows the AC to automatically select operation mode based on the above logic.
- Each mode will operate for at least 6 minutes before switching.
- Auto mode does not support sleep mode and eco mode operation.

Basic Operation



Adjust Temperature

Press ^ v to adjust temperature setting .

- Temperature setting will adjust by 1°F / 1°C increment for each time the button is pressed.
- Press and hold the buttons to adjust temperature continuously.
- Temperature can only be set between 61°F - 88°F / 16°C - 31°C.

Set Fan Speed

Press ≋ to select your desired fan speed.

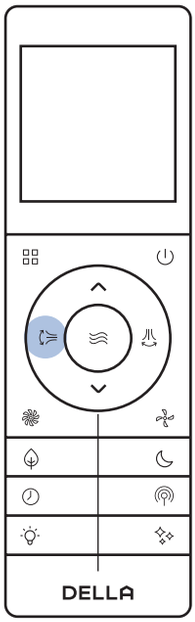
	Auto	Cool	Dehumidify	Heat	Fan
^ v Temperature Setting	61°F - 88°F / 16°C - 31°C				N/A
≋ Fan Speed	All Fan Speed	All Fan Speed	≋ I only	All Fan Speed	All Fan Speed

- The AC performs the best within operational ambient temperature.
- When the ambient temperature is too high, the AC may trip the circuit breaker protection and cause the system to shut down.
- When the ambient temperature is too low, the AC may generate excessive moisture, leading to water dripping from the outdoor unit.

	Indoor Temperature	Outdoor Temperature
Cool / Dehumidify Mode	63°F - 90°F / 17°C - 32°C	5°F - 131°F / -15°C - 55°C
Heat Mode	32°F - 80°F / 0°C - 27°C	-13°F - 86°F / -25°C - 30°C

Basic Operation

Basic Operation



Adjust Air Flow

Press to oscillate horizontal flaps.

Press one more time. → The flaps will stop at the position it was in when you pressed the button.

NOTE: Cassette unit does not support vertical oscillation, pressing would not have any action.

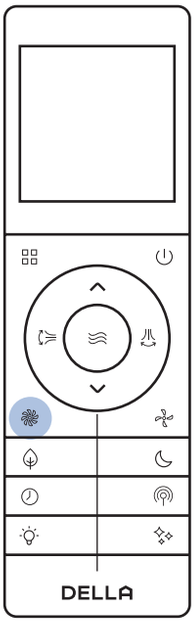
QUICK TIPS

- When holding the horizontal flaps in place. It is recommended to hold the flaps in the up most position during cool mode. Vice versa, it is recommended to hold the flaps in the down most position during heat mode.

- Cold air tends to sink.

- Warm air tends to rise.

Advance Function



Turbo Mode

Using turbo mode can boost the air conditioner performance in a short amount of time.

Press .

- The air conditioner will operate in boosted fan speed.
- Turbo mode is not available when the air conditioner is operating in dehumidification mode.

To stop turbo mode, press again or press / / .

Advance Function

Quiet Mode

The air conditioner will operate at the minimum noise level under quiet mode.

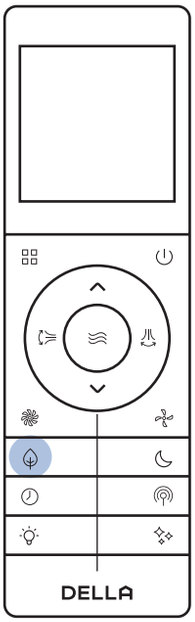
Press .

- The air conditioner will operate in the lowest fan speed.
- Quiet mode is not available when the air conditioner is operating in dehumidification mode.

To stop quiet mode, press again or press / / .

DELLA

Advance Function



ECO Mode

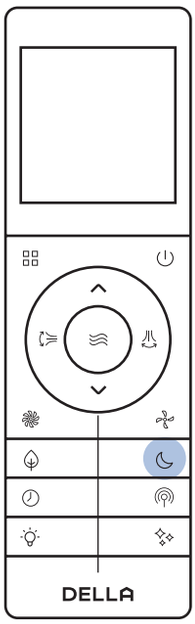
The air conditioner will operate with maximum energy efficiency.

Press .

- ECO mode is only available when the air conditioner is operating in cool or heat mode.
- The set temperature for cool mode and heat mode will be limited.

Press again or set the temperature beyond the ECO mode limit to cancel ECO mode.

	ECO + Cool	ECO + Heat
Temperature Setting	79°F - 88°F / 26°C - 31°C	61°F - 77°F / 16°C - 25°C



Sleep Mode

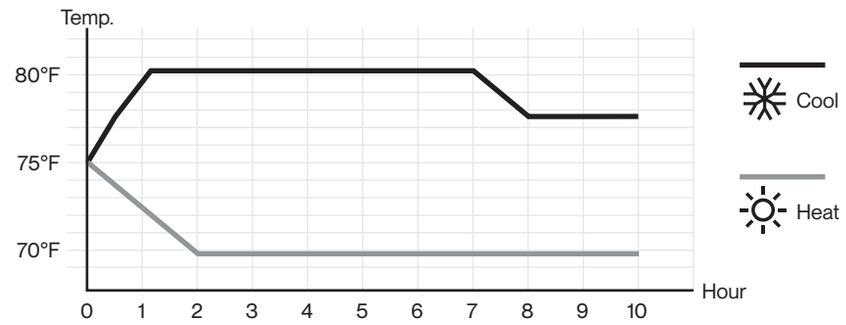
In sleep mode, the air conditioner will operate a pre-set program which is suitable during sleep.

Press .

- Sleep mode will operate for 10 hours and then switch back to previously set mode.
- Sleep mode is not available when the air conditioner is operating in auto, dehumidify or fan mode.

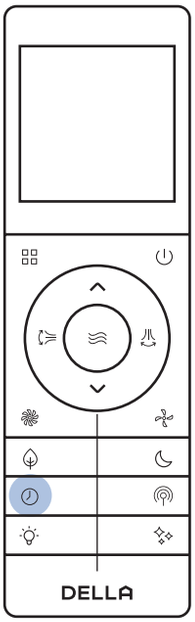
Press again to stop sleep mode.

Sleep mode operation



NOTE: This graph is for informational reference only. The actual product may changes temperature at a different rate depending on the initial set temperature in sleep mode.

Advance Function



Timer Function (Shutdown Timer)

Set a timer to automatically turn OFF the air conditioner.

Press ⏲ when the air conditioner is ON.

Press ∧ ∨ to set the desired turn off time.

Press ⏲ to confirm the timer setting.

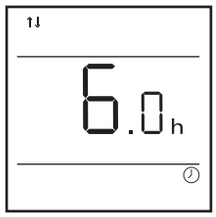
Timer Function (Start-up Timer)

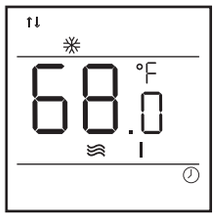
Set a timer to automatically turn ON the air conditioner.

Press ⏲ when the air conditioner is OFF.

Press ∧ ∨ to set the desired turn off time.

Press ⊞ , ∧ ∨ and ≋ to select your desired operation mode, temperature setting, and fan speed for when the air conditioner is turn ON.

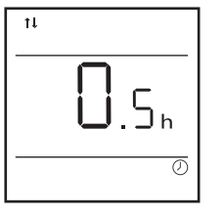


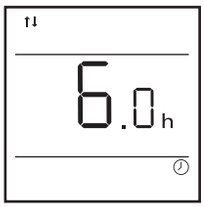


Press ⏲ to confirm the timer setting.

QUICK TIPS

- Both the shutdown and start-up timer can be set between 0.5 - 24 hours.





Timer default at 6 h

- While entering the setting, make sure to press the button within 5 seconds after the previous button was pressed. otherwise, the entire process will reset and you will have to start over.
-

Timer Set

→ Press ⏲

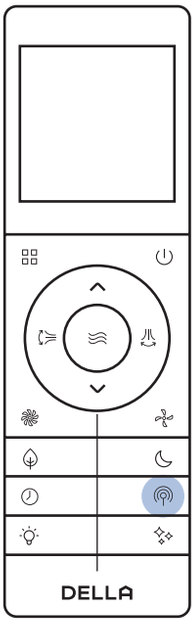
→ Edit timer setting → Press ⏲ to confirm

→ Without pressing any button for 5 sec → Cancel timer

Advance Function

DELLA

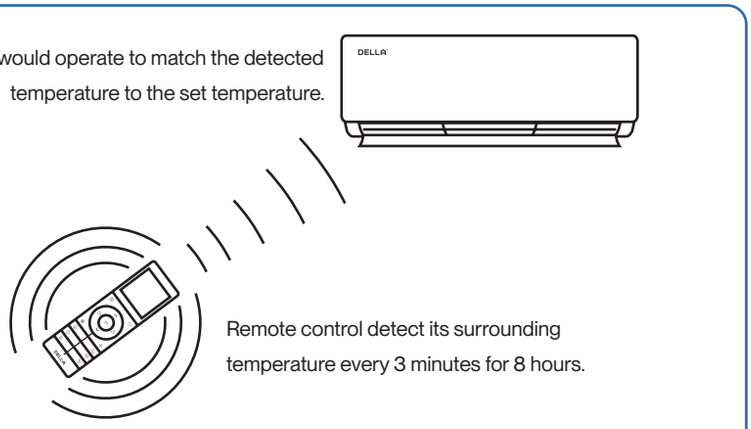
Advance Function



Vicinity Sensor

Vicinity sensor function turns your remote control into a portable thermostat that automatically controls the unit to adjust the temperature of the room you are in.

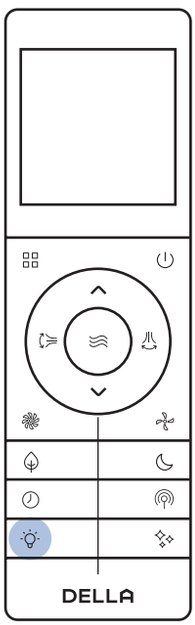
Press to activate vicinity sensor function.



NOTE: The remote control must be pointed towards the indoor unit to prevent lost of communication.

- In the case of the temperature detected by the remote control and the indoor unit thermostathas has a difference greater than 11 °F / 6 °C, the AC would use the temperature data from the indoor unit for temperature adjustment, instead of that from the remote control.

Press again to stop vicinity sensor function.



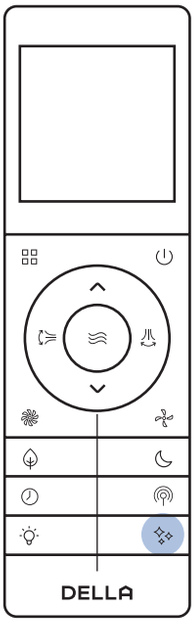
Display ON / OFF

Switch ON / OFF the LED display on the indoor unit front panel.

Press to turn OFF the indoor unit display.

Press again to turn ON the indoor unit display.

Advance Function

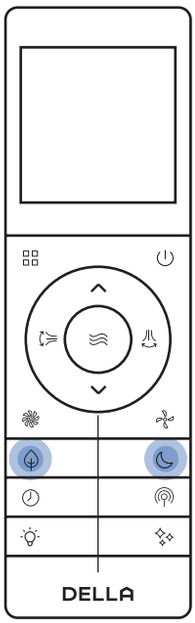


Self Cleaning

Self cleaning function allows the air conditioner to clean the interior parts and helps carry away the accumulated dirt, bacteria, etc. from the indoor evaporator.

Press ✧✧ when the air conditioner is OFF.

- AC will display on the indoor unit display.
- The self cleaning function will run for 30 minutes, then it will return to the previously operating mode once it is finish.
- It is recommended to operate this function when the indoor ambient temperature is under 86°F / 30°C, and the outdoor ambient temperature is between 41°F - 86°F / 5°C - 30°C.
- It is suggested to run the self cleaning function once every 3 months.
- It is normal that the unit makes some noise during self cleaning process as plastic materials expand and contract with temperature change.



Child Lock

Child lock function will disable all input from the remote control until unlocked.

Press and hold and for 3 seconds to activate child lock.

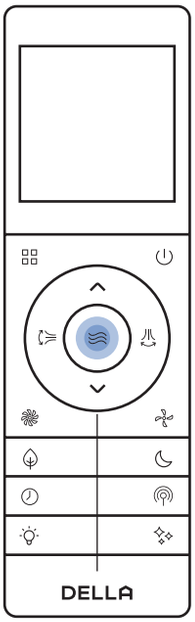
- will display on the remote control display.

Press and hold and for 3 seconds again to dectivate child lock.

Advance Function

DELLA

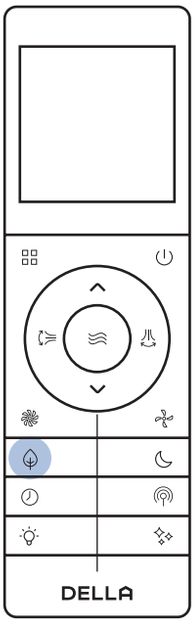
Advance Function



°F / °C

Press and hold for 5 seconds.

- The temperature unit will switch between °F and °C.



Forced Defrost

To maximize heat efficiency, you can force the outdoor unit to perform a defrost cycle before using heat mode.

In heat mode, press 10 times within 8 seconds.

- code will display on the indoor unit, and the AC will enter defrost cycle.

During the defrost cycle, your indoor unit will blow cold air temporarily.

Once the defrost cycle ends, the AC will automatically resume heat mode operation.

Advance Function

Wi-Fi Set up

To set up the DELLA+ app to control your AC.

1. Search “DELLA+” on Apple app store or Google Play, or scan the QR code below to download the application.
2. Register an account in the app.
3. Follow the in app instructions to add and pair your Della AC to the app and complete the Wi-Fi set up.

DELLA+ App Download

Download on the App Store

GET IT ON Google Play

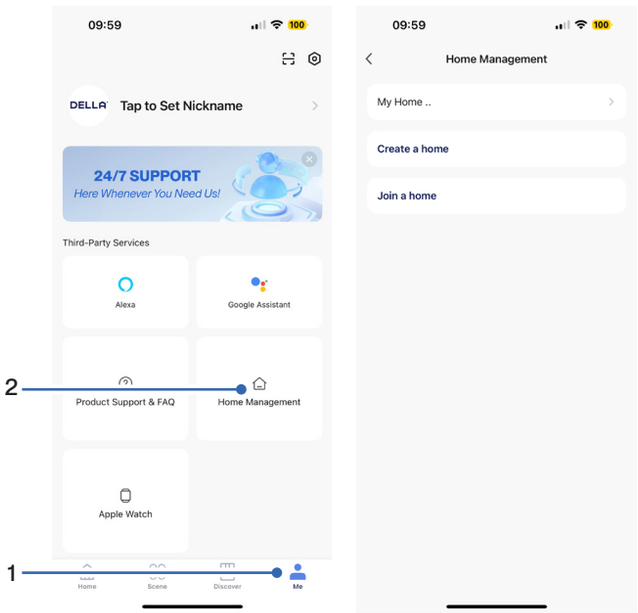
You can also scan the download QR code

Household Set up (Optional)

Create and Join home to control your Della AC via the Della+ app from multiple devices and multiple accounts.

1. Click "Me" on the Della+ app.
2. Choose "Home Management".
3. Follow the in app instructions to create or join a home.

NOTE: Pairing your Della AC with a different account outside the household will remove the original pairing. Only one household can be paried at a time.



- The Della+ application is free, however, data charges may apply when downloading or using the application.
- Della+ can be altered without notice for quality improvement and also be deleted depending on the circumstances of manufacturing firms.
- All trademarks, logo, brand names are the property of their respective companies. Use of these names, brands, and trademarks does not imply endorsement. Della assumes no responsibility with regard to the performance or use of these products.

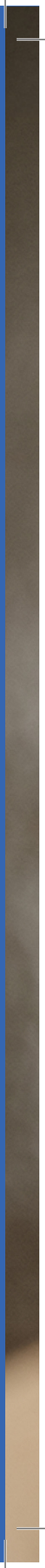
QUICK TIPS

Check out detailed tutorial on the most updated application on dellahome.com/support.

Advance Function

We work remotely, too.

The Della app combines smart technology with simple, user-friendly design, providing a seemless experience and endless customization. Automated smart features work behind the scenes to dialin your environment and improve your everyday, so you can focus on other, more interesting things.




DELLA
Custom Unit Name
Indoor 76°
70°F
Outdoor 81°
Mode
Fan Speed
Sleep
Airflow
NORMAL
Schedule
Timer
More

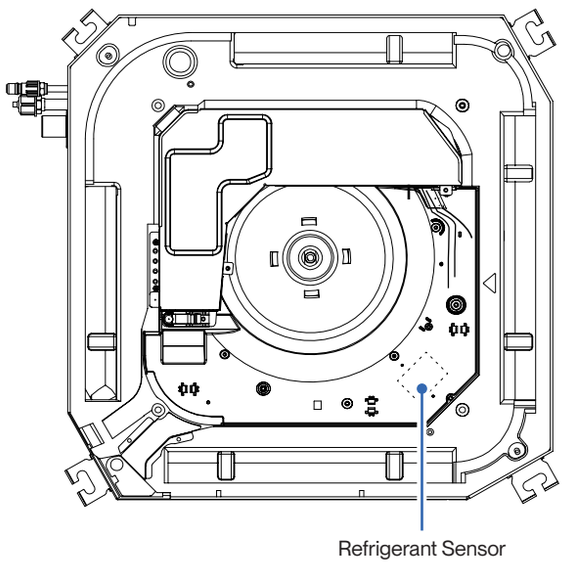
DELLA®

Advance Function

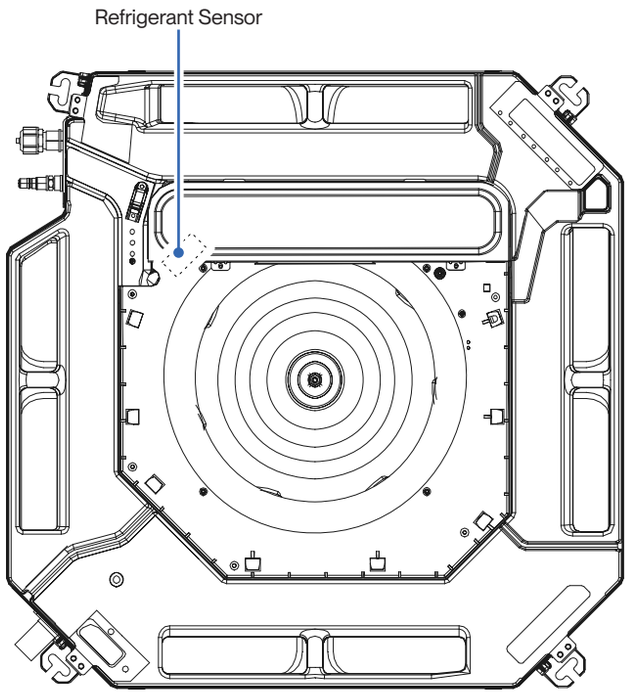
Refrigerant Sensor

- This unit is equipped with a refrigerant leak detector for safety and the unit must be electrically powered at all time after installaion for the sensor to work effectively and properly other than during servicing.
- The refrigerant sensor automatically detects the condition of the machine while in operation, and it will automatically start air flow circulation and stop the compressor if refrigerant concentration reaches a pre-set level.

048-CC-9K2V-IN
048-CC-12K2V-IN
048-CC-18K2V-IN



048-CC-24K2V-IN



Error Code	Description
Hd	Refrigerant Leak Protection
Fd	Refrigerant sensor communication error

- An error code would displayed in the case of a leak detection.
- The refrigerant sensor has a lifespan of about 15 years and shuld be replaced within the range of its service life.
- The refrigerant sensor must be maintained by a professional and only specified sensor by the manufacturer should be replaced.

Advance Function

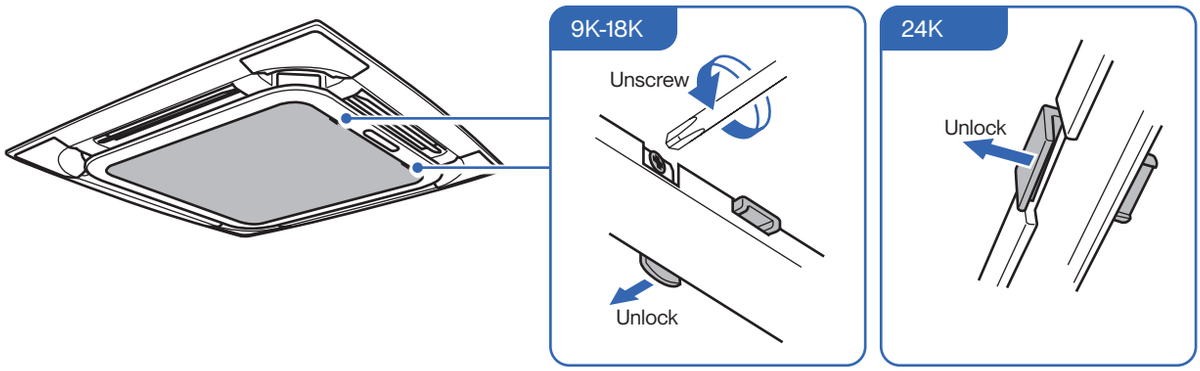
Care and Maintenance

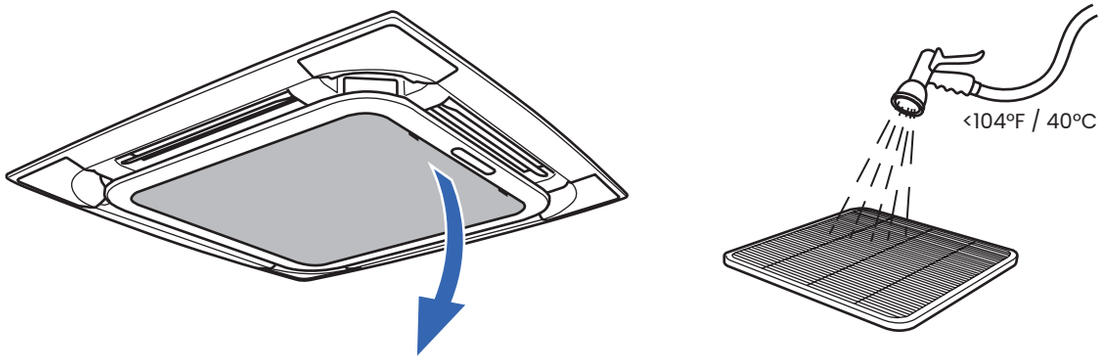
CAUTION

- Before cleaning the unit, you must shut down the machine and cut off the power supply for at least 5 minutes.
- Never flush the air conditioner with water.

Clean the Air Filter

1. Push the locking tabs and detach the air intake grill from the cassette unit.
2. Clean the grill and air filter with a vacuum cleaner or rinse it with mild soap and water.
3. Air dry the grill and air filter.
4. Put the air intake grill back to its original position after it is dry.





- Do not touch the any components inside the cassette unit with bare hands after removing the air intake grill.
- Check and clean the air intake grill and filter regularly to prevent dust accumulation.
- Clean the air filter frequently if the operating environment is dusty or has bad air quality.
- Do not dry the air intake grill with dryer or heater. It might cause the intake grill to deform or warp.

Care and Maintenance

DELLA®

Care and Maintenance

Maintenance Routine

- Clean the air filter screen every 3 months.
- Use the self clean function to clean the indoor unit every 3 months.
  Page 65
- Call your HVAC technician to check on the refrigerant level every 3 - 4 years.
- Regularly check and remove any obstacles from the outdoor unit.

Planning to Not Operate the Air Conditioner for a Long Period

- Take out the batteries from the remove control and disconnect the power supply of the air conditioner.

Using the Air Conditioner After a Long Idle Period

- Clean the unit and the air filter screen.
- Remove any obstacles at the air inlet and outlet of both the indoor and outdoor unit.
- Make sure drain pipe is unobstructed.
- Install batteries into the remove control and connect the power supply to the air conditioner.

Troubleshooting

Before consulting repair or warranty, please check the following troubleshooting guide.
In the case of an persistent problem, contact a qualified technician for diagnosis and repair.

WARNING

- When encountering persisting problem, stop operation and turn off the breaker. Continue operation in an abnormal condition may cause electric shock, fire, or damage to the unit.
- Do not attempt to repair or modify the unit by yourself. Incorrect work may result in electric shock, fire or injury.

Problem	Possible Cause / Explanation / Solution
The appliance is non operational	When pressing the power button soon after operation was stopped - Protective delay switch will delay the operation for 3 - 5 minutes if the air conditioner is turned on immediately after it is turned off.
	When switching between operation modes - The internal protection is activated, wait for a few minutes for the AC to resume normal operation.
	The unit is currently has a turn ON timer activated.
	The circuit breaker is tripped. Reset the circuit breaker.
	Faulty electric connection, mismatch outlet voltage, or damaged electronic control board. Contact a qualified technician.
The appliance suddenly stopped during operation	An internal protection tripped after a sudden voltage fluctuation. Check the circuit breaker and reset if necessary.
	The environment temperature is too high or too low.
	The AC automatically activate de-frost process. This is not a malfunction.
	Air filter is too dirty. Clean the air filter.
	Some objects are obstructing air inlet or outlet of the indoor and / or the outdoor unit. Remove the obstructing object.
Strange odor from the air flow	Air filter is too dirty. Clean the air filter.
	The smells of the room, furniture, or cigarettes are absorbed into the unit and then discharged. Remove odorous objects from the room.
Strange Noise	In the case of water flowing noise - The noise may caused by the refrigerant flow, or the internal water flow during cold / dry mode. This is not a malfunction.
	In the case of plastic cracking noise - The noise may caused by the thermal expansion.

Having Problems?

DELLA®

Troubleshooting

Problem	Possible Cause / Explanation / Solution
Mist comes out from the air outlet	This occurs when the air in the room becomes cold in cool or dry mode. This does not indicate a problem.
No cool air in cold mode	When switching between operation modes - The internal protection is activated, wait for a few minutes for the AC to resume normal operation.
	Check and make sure the temperature setting is below the environment temperature.
No warm air in heat mode	When switching between operation modes - The internal protection is activated, wait for a few minutes for the AC to resume normal operation.
	Check and make sure the temperature setting is below the environment temperature.
	The AC automatically activate de-frost process. This is not a malfunction. Wait 2 - 10 minutes for the AC to complete defrosting.
	Frost built up on the outdoor unit. If the AC does not automatically activate de-frost process, force defrost process following instruction on page 66.
Insufficient air flow, either cold or hot	Some objects are obstructing air inlet or outlet of the indoor and / or the outdoor unit. Remove the obstructing object.
	Other heat source of heat in the room. Remove the heat source.
	The fan speed is set to minimum. Try to set at a higher fan speed.
The unit does not respond to the remote control commands	Remote Control is too far away from the indoor unit.
	There is an obstruction between the remote control and the indoor unit.
	The battery power has run out in the remote control. Replace the battery.
	Child lock function is activated. Deactivate child lock on the remote control.
The display on the indoor unit is not lit	The display is set to off on the remote control. Use the remote control to turn it on.
	Power failure. Check the power supply / circuit breaker.
Water dripping from the outdoor unit	The indoor unit internal is too dirty and clogged the drainage port. Contact qualified technician for cleaning.
	Condensation formed on the uninsulated drainage hose / refrigerant pipe in the line set. Contact qualified technician to properly insulate the water hose / refrigerant pipes.
	Improper drainage hose installation.

Having Problems?

Troubleshooting

WARNING

Switch off the air conditioner immediately and cut off the power supply in the event of:

- Strange, loud noises during operation.
- Faulty electronic control board.
- Faulty fuses or switches.
- Spraying water or objects inside the appliance.
- Frequent circuit breaker tripped during operation.
- Abnormally hot or damaged power cord or plug.
- Very strong smells discharging from the appliance.

Error Code

Error Code	Description
E0	Indoor and outdoor communication failure
E1	Indoor ambient temperature sensor failure
E2	Indoor fancoil temperature sensor failure
E3	Outdoor fancoil temperature sensor failure
E4	Abnormal system malfunction (lack of fluroine)
E5	Model configuration error
E6	Indoor PG/DC fan failure
E7	Outdoor ambient temperature sensor failure
E8	Outdoor exhaust temperature sensor failure
E9	Outdoor IPM module failure / Compressor drive failure
EA	Outdoor current sensor failure
Eb	PCB and display screen communication failure
EC	Outdoor modules communication failure

Having Problems?

DELLA®

Troubleshooting

Error Code	Description
EE	Outdoor EEPROM fault
EF	Outdoor DC fan failure
EH	Outdoor compressor top failure
EU	Outdoor voltage sensor failure
Ej	Outdoor central coil temperature sensor failure
En	Outdoor air pipe temperature sensor failure
Ey	Outdoor liquid pipe temperature sensor failure
P0	IPM module protection
P1	Overvoltage and undervoltage protection
P2	Overcurrent protection
P3	Other protections
P4	Protection against excessive outdoor exhaust temperature
P5	Cooling protection against overcooling
P6	Cooling and anti overheating protection
P7	Heating and anti overheating protection
P8	Protection against high or low outdoor temperature
P9	Compressor drive protection (abnormal load)
PA	Communication failure / Mode conflict

Having Problems?

Troubleshooting

Error Code	Description
F0	Infrared human sensing sensor failure
F1	Battery module failure
F2	Exhaust temperature sensor failure protection
F3	Failure protection of outer tuber temperature sensor
F4	Abnormal protection of refrigerant circulation
F5	PFC protection
F6	Compressor missing / Reverse phase protection
F7	Module temperature protection
F8	Abnormal commnication of 4-way valve
F9	Module temperature sensor circuit malfunction
FA	Compressor phase current detection fault
Fb	Cooling and heating overload protection limit frequency reduction
FC	High power protection limit / Frequency reduction
FE	Module current (compressor phase current) protection limit / Frequency reduction
FF	Drive protection limit / Frequency reduction
FH	Drive protection limit / Frequency reduction
FP	Anti condensation protection limit / Frequency reduction
FU	Anti freezing protection limit / frequency reduction
Fj	Exhaust protection limit / Frequency reduction
Fn	External AC current protection limit / frequency reduction

Having Problems?

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Troubleshooting

Error Code	Description
Fy	Fluorine deficiency protection
H1	High pressure switch malfunction
H2	Low pressure switch malfunction
bf	TVOC sensor failure
bc	PM2.5 sensor failure
bj	Humidity sensor failure
bE	CO2 sensor malfunction
bd	Fresh air fan failure
d4	Water full protection
d5	Access control protection
Hd	Refrigerant Leak Protection
Fd	The communication of the refrigerant sensor is abnormal

Having Problems?

Troubleshooting

Error codes shown on the air conditioner display panel only indicates communication problems between parts. For technicians attempt to identify the exact problematic parts or componants, visit our page on **dellahome.com/pages/cassette-troubleshooting** for detailed model specific diagnostic handbook.

dellahome.com/pages/cassette-troubleshooting

Disposal Guideline

This appliance contains refrigerant and other potentially hazardous materials. When disposing of the appliance, follow all federal, state, and local regulations. DO NOT dispose of this product as normal household waste or unsorted municipal waste.

When disposing of this appliance, you have the following options:

- Dispose of the appliance at a designated municipal electronic waste collection facility.
- When buying a new appliance, the retailer will take the old appliance.
- The manufacturer may take back the old appliance.
- Sell the appliance to a certified scrap metal dealer.

DELLA®

Warranty

QUICK TIPS

Scan the QR code or visit our page on **dellahome.com/pages/warranty** to sign up for warranty coverage on your new DELLA appliance.

dellahome.com/pages/warranty

WARRANTY COVERAGE

DELLA distributor (hereinafter “Company”) warrants this product against failure due to defect in materials or workmanship under normal use and maintenance as follows: All warranty periods begin on the date of purchase. If a part fails due to defect during the applicable warranty period, Company will provide a new or remanufactured part, at Company’s option, to replace the failed defective part at no charge for the part. This limited warranty is subject to all provisions, conditions, limitations and exclusions listed below.

STANDARD WARRANTY

- The standard warranty period is one (1) year for the entire unit and all parts, with no registration required.

EXTENDED WARRANTY

- The extended warranty peroid for a complete new Della system (outdoor and indoor unit) is lifetime on all parts and compressor.
- In order to qualify for the free extended warranty the unit must be:
  1. Registered within one hundred (100) days of purchase.
  2. Must be with the original owner.
  3. In the same address of residence that you entered with your registration.

WARRANTY PARTS REPLACEMENT

- Some parts may need to be returned to Della. The limited lifetime warranty covers only parts that need to be replaced
  For more information, please contact Della.

Warranty

Warranty

LIMITED WARRANTY STATEMENT

LIMITATIONS OF WARRANTIES: ALL IMPLIED WARRANTIES AND/OR CONDITIONS (INCLUDING IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE OR PURPOSE ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY OR CONDITION LASTS, SO THE ABOVE MAY NOT APPLY TO YOU THE EXPRESS WARRANTIES MADE IN THIS WARRANTY ARE EXCLUSIVE AND MAY NOT BE ALTERED ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON, WHATSOEVER.

THIS LIMITED WARRANTY DOES NOT COVER:

1. Labor or other costs incurred for diagnosing, repairing, removing, installing, shipping, servicing or handling of either defective parts, or replacement parts, or new units.
2. Product cleaning required prior to warranty service and repair.
3. Normal maintenance as outlined in the installation and servicing instructions or Owner's Manual, including filter cleaning and/or replacement and lubrication.
4. Failure due to faulty installation or repairs, damage, misapplication, abuse, improper servicing, lack of or in-sufficient maintenance, unauthorized alteration or improper operation.
5. Failure to start due to voltage conditions, improper wiring, blown fuses, open circuit breakers, or damages due to the inadequacy or interruption of electrical service.
6. Failure or damage due to floods, winds, fires, lightning, accidents, corrosive environments (rust or residue etc.) or other conditions beyond the control of the Company.
7. Damages due to chemicals (volatile organic compounds, sulfur, acids, etc.) or particulates.
8. Failure or damage of coils, piping or other parts due to corrosion, when installed in corrosive environments or within one (1) mile of seacoast.
9. Parts not supplied or designated by Company, or damages resulting from their use.
10. Products installed outside the 48 contiguous United States, except the District of Columbia and Hawaii, and Canada.
11. Electricity or fuel costs or increases in electricity or fuel costs from any reason whatsoever, including additional or unusual use of supplemental electric heat.
12. Any cost to replace, refill or dispose of refrigerant, including the cost of refrigerant.
13. Shipping damage or damage as a result of transporting the unit.
14. Accessories such as condensate pumps, line sets and so forth are not covered.
15. Any special, indirect or consequential property or commercial damage of any nature whatsoever. Some states do not allow the exclusion of incidental or consequential damages, so the above limitation may not apply to you.
16. Consumable components, such as air filters, are not covered under parts warranty.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. In jurisdictions where warranty benefits conditioned on registration are prohibited by law, registration is not required, and the STANDARD warranty period shown above will apply.

Warranty

DELLA®

Compliance Information

Radio Frequency Interference

Model: 048-CC series

ID: 2ANDL-TYWE1S

FCC Caution

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the seperation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

www.dellahome.com
support@dellahome.com
800-863-4143
6:00 a.m. – 4:00 p.m. PST Monday – Friday