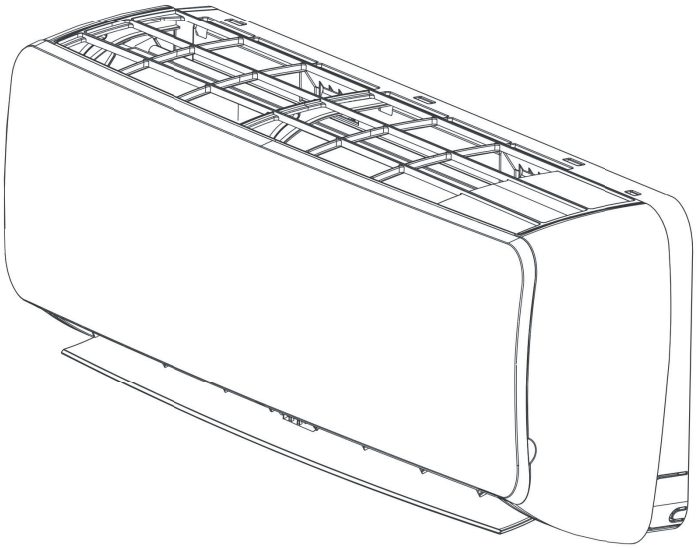
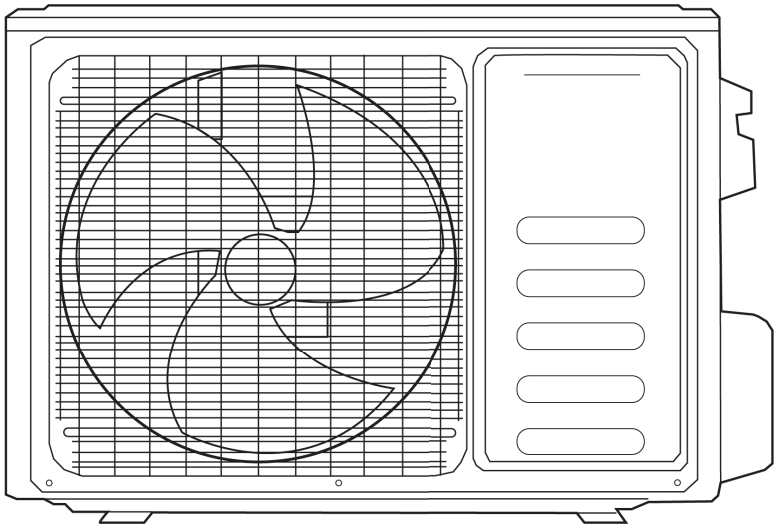
S SERIES MINI SPLIT HEAT PUMP





Owner's & Installation Manual

Outdoor Split System Unit 12k, 18K, 24K, 30K, 36K R32	*Mini Split Heat Pump*	*Version Date:* *10 / 21 / 26*

Initial Release ..... **05 / 13 / 26**

Revision A ..... 10 / 21 / 26

Condenser

AEPL** MH V 17 S0 63 1S 1 A

Brand

AEPL** = Any Brand

Product Category

S = Split System Condenser
P = Package Unit
M = Mini Split Condenser
T = Package Terminal
W = Window Unit
R = Through the Wall

Product Type

A = AC
H = Heat Pump

Compressor Type

S = Single Stage
T = Two Stage
V = Inverter

Efficiency (SEER2)

17 = 17 SEER2
18 = 18 SEER2

Air Flow

T = Top Discharge (Condenser)
S = Side Discharge (Condenser)
M = Multi-Position (Pkg Unit)
H = Horizontal (Pkg Unit)
D = Down Flow (Pkg Unit)

Nominal Capacity

06 = 0.5 Tons	30 = 2.5 Tons
09 = 0.75 Tons	36 = 3 Ton
12 = 1 Ton	42 = 3.5 Tons
18 = 1.5 Tons	48 = 4 Tons
24 = 2 Tons	60 = 5 Tons

Refrigerant

1 = R410a
2 = R454b
3 = R32

Electrical

1 = 208/230 V, 1 Phase, 60 Hz
2 = 120 V, 1 Phase, 60 Hz

Series

S

Zones

1 = 1 Zone
2 = 2 Zone
3 = 3 Zone
4 = 4 Zone
5 = 5 Zone

Revision

A

Air Handler

AEPL** AW M 17 E1 23 2S 1 A

Brand
AEPL** = Any Brand

Product Category
A = Air Handler

Application
A = Upflow/Downflow
U = Upflow
D = Downflow
M = Multi-Position
C = Ceiling Mounted
W = Wall Mounted

Cabinet Finish
M = Mini Split

Efficiency (SEER2)
17 = 17 SEER2
18 = 18 SEER2

Expansion Device
F = Flowrater
T = TXV
E = Electronic Expansion Valve

Nominal Capacity

06 = 0.5 Tons	30 = 2.5 Tons
09 = 0.75 Tons	36 = 3 Ton
12 = 1 Ton	42 = 3.5 Tons
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1 = R410a
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Electrical
1 = 208/230 V, 1 Phase, 60 Hz
2 = 120 V, 1 Phase, 60 Hz

Series
S

Zones
1 = 1 Zone
2 = Multi Zone

Revision
A

Thank you for purchasing our high quality mini split. To ensure prolonged, consistent operation, ***read this Owner's Manual carefully before using your mini split***. After reading the manual thoroughly, store it in a safe place for future reference. Consult this manual if you have questions about your mini split's regular operation or any irregularities that may occur.

This mini split is intended for residential use.

i. Remote Controller Presets

Your mini split remote controller does not come preset by the manufacturer as a cooling only unit or a heat pump. Every time you replace the remote controller batteries, an arrow will flash over "Heat" or "Cool" on the LCD screen.

You can preset the remote controller according to the mini split model you purchased, as follows:

- Press any button when the arrow flashes over "Heat" to set the controller to heat pump mode.
- Press any button when the arrow flashes over "Cool" to set the controller to cooling only mode.
- If you don't press any button within 10 seconds, the remote controller will automatically set itself to heat pump mode.

NOTE
If the mini split you purchased is a heat pump and you preset the remote controller to the cooling only mode, you **CAN NOT** preset the heating operation with the remote controller.

ii. Auto-Restart Function

Your mini split comes from the manufacturer with the auto-restart function preset. If the auto-restart function is not needed, follow the steps below to deactivate it:

1. Make sure the mini split is turned on.
2. Press the **SLEEP** button 10 time in 8 seconds until you hear 3 short beeps. This deactivates the auto-restart function.
3. To activate the auto-restart function, repeat the previous procedure until you hear 4 short beeps.

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1. Use the correct power supply in accordance with the rating plate requirement. Otherwise, hazardous situations, like fire, may occur.
2. Keep the power supply circuit breaker plug clean. Connect the power supply cord firmly to the breaker. Insufficient contact may result in electric shock or fire.
3. Do not use the power supply circuit breaker or pull out the plug to turn the unit off while it is operating. This may cause sparking that can lead to a fire.
4. Knotting, pulling, or cutting the power supply cord may break it, which can lead to electric shock or fire.
5. Never insert foreign objects into the unit. The fans rotate at a high speed, which may cause an injury.
6. Sitting directly under cold airflow for extended periods of time is harmful to your health. Instead, direct the air away from your body.
7. In the event of a malfunction, turn off the mini split by remote controller before cutting off the power supply.
8. Do not repair this appliance by yourself. If you repair it incorrectly, you may experience electric shock, etc.
9. Do not direct the airflow toward gas burners or stoves.
10. Do not touch the operation buttons when your hands are wet.
11. Do not put any objects on the outdoor unit.
12. It is the user's (your) responsibility to ensure the mini split is grounded according to local codes and ordinances by a licensed technician.

This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.

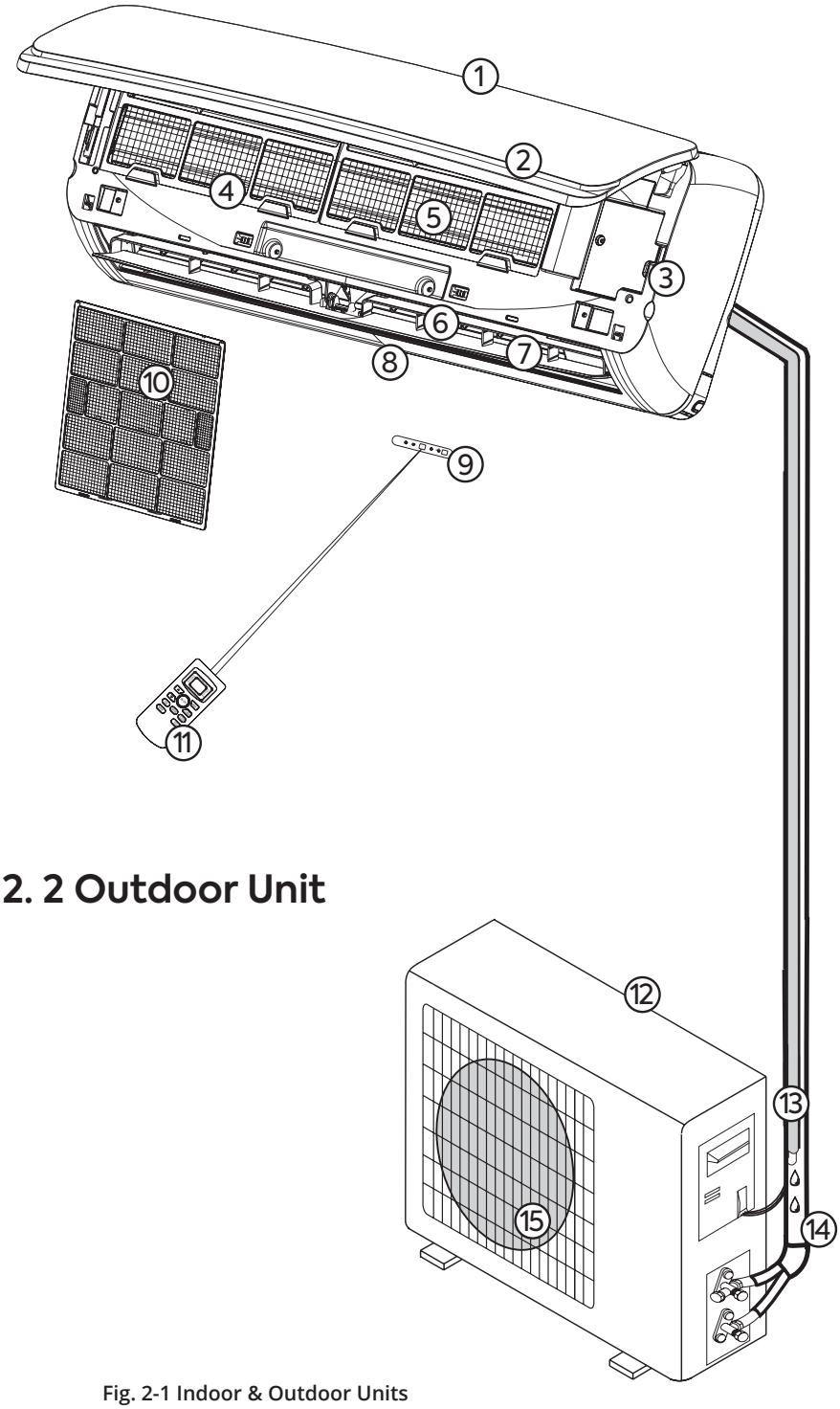
Children should be supervised to ensure that they do not play with the appliance.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a hazard.

The appliance shall be installed in accordance with national wiring regulations.

If connecting power to fixed wiring, an all-pole disconnection device which has at least .10in clearances in all poles, and have a leakage current that may exceed 10mA, the residual current devices (RCD) having a rated residual operating current not exceeding 30mA, and disconnection must be incorporated in the fixed wiring in according with the wiring rules.

2. 1 Indoor Unit



2. 2 Outdoor Unit

Fig. 2-1 Indoor & Outdoor Units

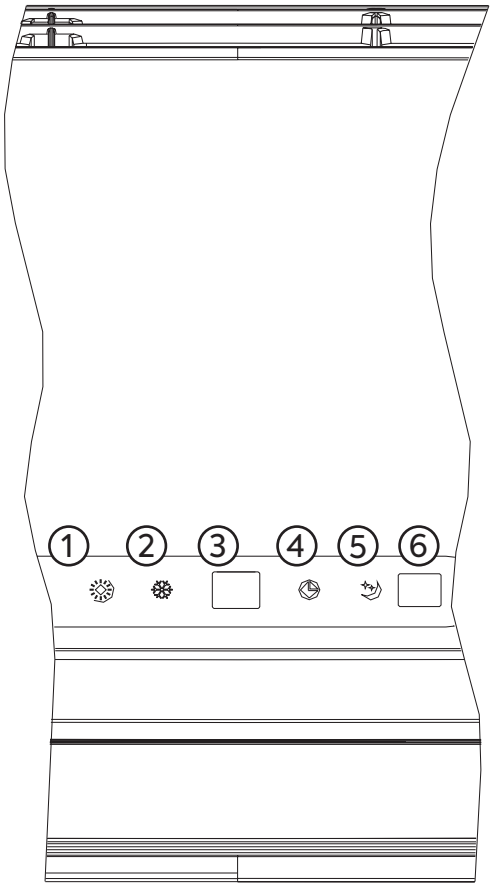
1. Air Intake
2. Front Panel
3. Emergency Panel
4. Electrostatic Filter (optional)
5. Charcoal Filter (optional)
6. Horizontal Adjustment Louver
7. Vertical Adjustment Louver
8. Air Outlet
9. Display Panel
10. Air Filter
11. Remote Controller
12. Air Intake
13. Drain Hose

    *Note: Condensate water drains during the **COOLING** or **DRY** operation.*
14. Line Set and Power Connection Cord
15. Air Outlet

NOTE
The figures in this manual are based on the external view of a standard model. The shape may differ from that of your mini split.

2. 3 Operating and Display

Fig. 2-2 Display



1 Heating Indicator
Lights up when the heating function is set.

2 Cooling Indicator
Lights up when the cooling function is set.

3 Setting Temperature and Time Display
Displays the set temperature and time.

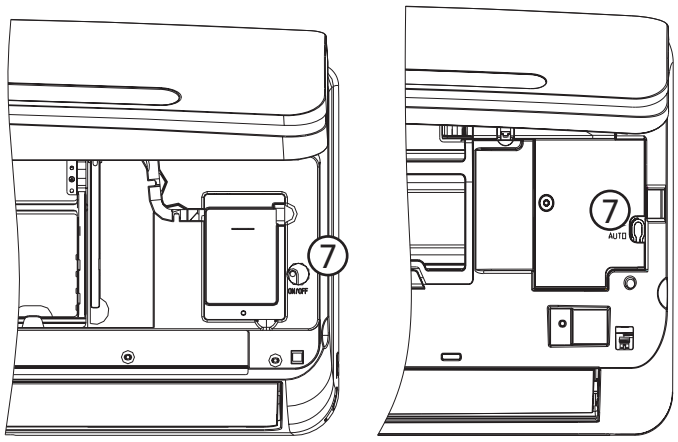
4 Timer Indicator
Indicates a timer has been set.

5 Sleep Indicator
Lights up when the sleep function is set.

6 Signal Receptor
Receives the signal from the remote controller.

7 Emergency Button
Controls the unit when the remote controller is unavailable

Fig. 2-3 Emergency Button



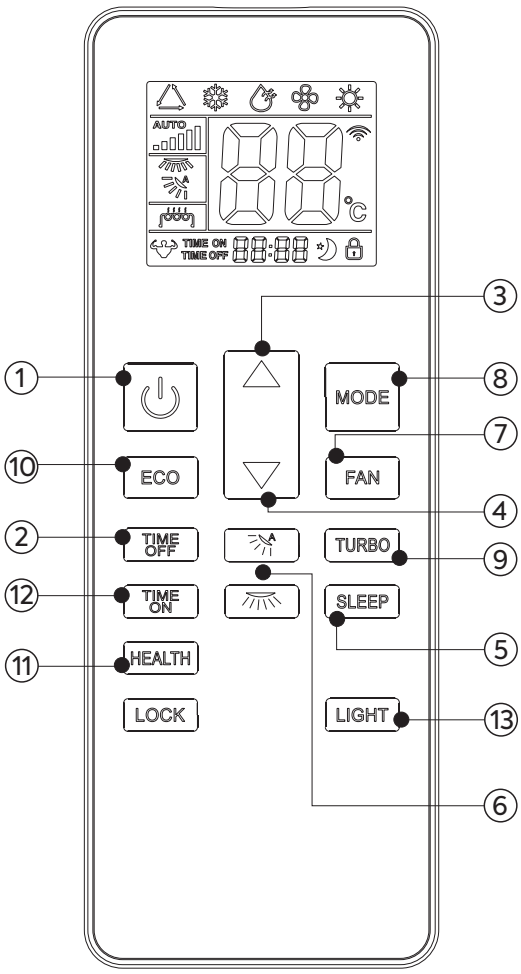
Only for 12K/18K

NOTE
The shape and position of the switches and indicators may vary between models, but their functions are similar.

3. Remote Controller

The remote controller transmits signals to the system. Keep the remote controller safe and dry when not in use.

Fig. 3-1 Remote Controller Functions



① ON/OFF Button
Turns the unit on and off

② Timer Button
*Selects the **TIMER** function*

③ Up Button
Increases the temperature and time.

④ Down Button
Decreases the temperature and time.

⑤ SLEEP Button
*Sets and cancels **SLEEP** mode.*

⑥ Louver Control Button
Featured in select models. Controls Louver swing.

⑦ FAN SPEED Control Button
*Selects the indoor fan motor speed: **AUTO, HIGH, MID**, and **LOW***

⑧ MODE Button
*Selects the operation mode: **FEEL, COOLING, DRY, FAN,** and **HEATING**.*

⑨ SUPER (TURBO) Button
Sets or cancels the super strong mode.

⑩ ECO (Health/Save) Button
Featured in select models. Sets or cancels the economic mode.

⑪ Heater Button
Controls the electric heating function.

⑫ TEMP Button
Featured in select models. Changes the display from Celsius to Fahrenheit.

⑬ LIGHT Button
Lamp light display

NOTE

Each mode and relevant function will be further specified in the following pages. Some remotes may feature buttons for functions incompatible with your mini split.

Some models need to enter the energy efficiency test state as follows:

- ***Cooling energy efficiency test entry method**: The remote control sets the cooling mode at 60°F. Press the light button 6 times within 10 seconds to enter this mode. You will hear 3 buzzer sounds.*
- ***Heater energy efficiency test entry methods**: The remote control sets the heating mode at 86°F. Press the light button 6 times within 10 seconds to enter this mode. You will hear 3 buzzer sounds.*

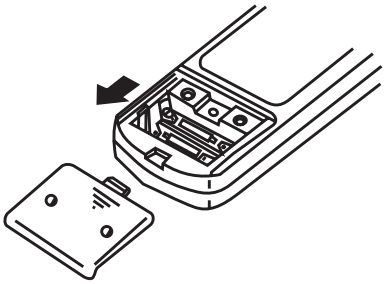
3. 1 How to Insert Batteries

1. Remove the battery cover according to the arrow direction.
2. Insert new batteries, making sure that the (+) and (-) of the batteries are matched correctly.
3. Reattach the cover by sliding it back into position.

NOTE
Use 2 LR03 AAA (1.5 volt) batteries. Do not use rechargeable batteries. Replace batteries with new ones of the same type when the display becomes dim.

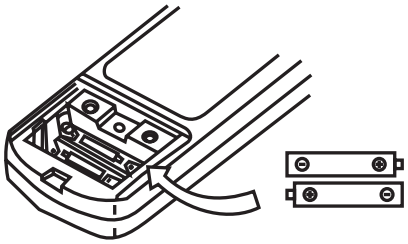
1 **Slide and remove the cover.**

Slide the cover in the direction of the arrow.



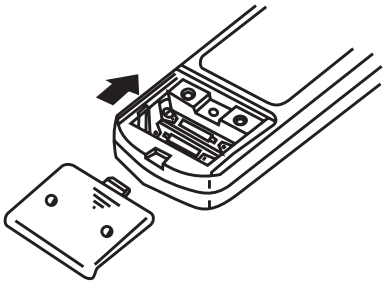
2 **Exchange the batteries.**

Pay attention to the (-) and (+) marks.



3 **Install the cover**

Slide the cover in the direction of the arrow.

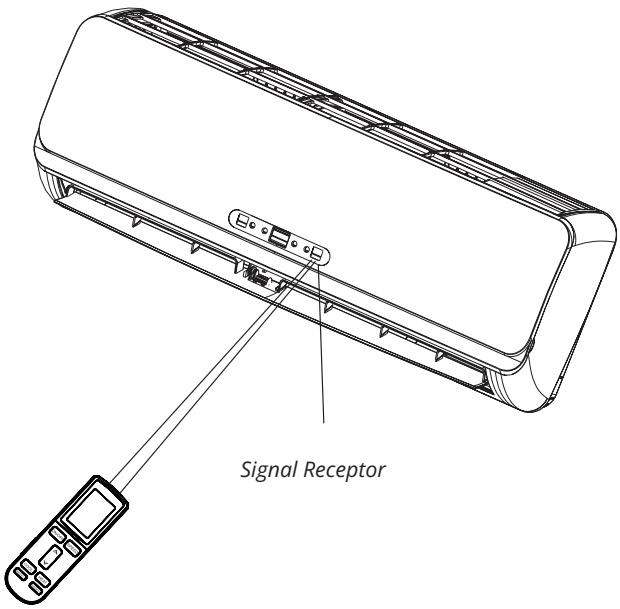


3. 2 How to Use the Remote Controller

To operate the mini split, air the remote controller at the signal receptor.

The remote controller will operate the mini split at a distance of up to approximately 23ft when pointed at the signal receptor.

Fig. 3-2 Using the Remote Controller



4. 1 FEEL Mode

The **FEEL** mode operates by automatically selecting the operation mode from **HEATING, DRY, FAN**, and **COOLING**, depending on the room temperature.

4. 1. 1 Turning On the Mode

Press (ON/OFF) . When the mini split receives the signal, the **RUN** indicator of the indoor unit will light up.

4. 1. 2 Selecting the FEEL Mode

- Press the **MODE** button.
- Select the **FEEL** mode.

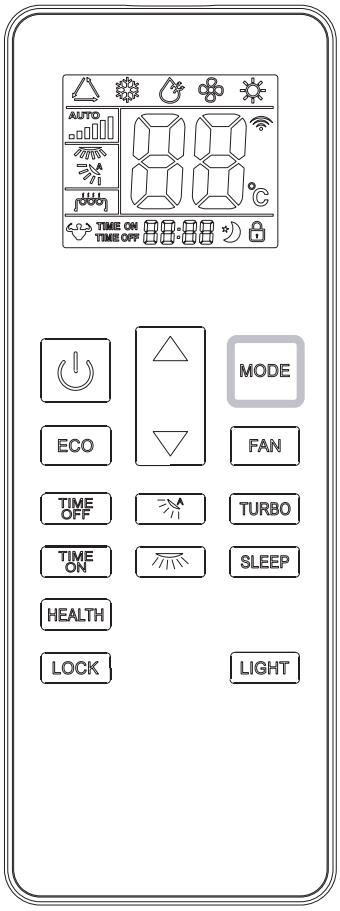
Table 4-1 Operation Mode & Temperature

Indoor Temperature	Operation Mode	Target Temperature
Less than 68°F	**HEATING** (Heat Pump Type) **COOLING** (Cooling Only Type)	73°F
68°F ~79°F	**DRY**	73°F
Over 79°F	**COOLING**	73°F

The Operation Mode and Temperature Are Determined by the Indoor Temperature

You can adjust the temperature while running the **FEEL** mode. There are 6 levels of adjustment possible using the (▲) or (▼) buttons.

Fig. 4-1 FEEL Mode



*You only need to press the **ON/OFF** button once to initiate the **FEEL** mode.*

4. 1. 3 Setting the Temperature

- Press (▲) or (▼)
- When you push (▲), the temperature will increase by 1°F for a maximum of 2°F.
- When you push (▼), the temperature will decrease by 1°F for a maximum of 2°F.

NOTE

Air will not blow out during **FEEL** mode operation. If the **FEEL** mode does not provide adequate heating or cooling, change to a different mode. If you change the mode, it may take some time to begin operation.

4. 2 TIMER Mode

Use the timer on function with the **TIMER** button before you go out in the morning so that you can come home to a comfortable room temperature. You can also use the timer off feature at night to enjoy a comfortable sleeping temperature.

Setting a Timer

Press the **TIMER** button when the remote controller is off to set a switch-on timer. Press it again to cancel.

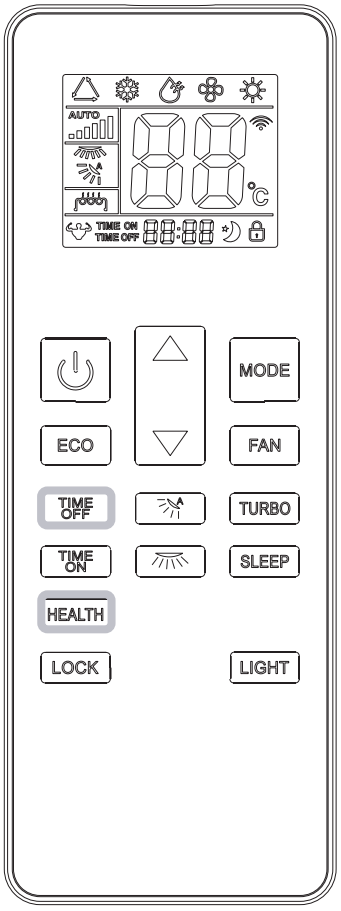


Press the **TIMER** button when the remote controller is on to set a switch-off timer. Press it again to cancel.

Press (▲) and (▼) to set the time. Time can be set in 30 minute increments.

Note: After setting the timer, check that the timer indicator is lit.

Fig. 4-2 TIMER Mode



4. 3 Wi-Fi Function: Smart Life App

1 Connecting to the Network

1. Scan the QR code to download and install the “Smart Life” app. Follow the app instructions to register your account, and then log in.
2. Plug in the mini split and turn it on.
3. Open the “Smart Life” app and click **Add Device**.
4. Follow the app instructions to complete network configuration. If the Wi-Fi indicator light on the display is steady, you have successfully paired your device.

Note: If the device cannot be found, follow these steps to get the Wi-Fi module back into the distribution network state. Point the remote at the mini split and press the sleep button 4 times in 5 seconds. A buzzer will sound 2 times, indicating the Wi-Fi module has re-entered the distribution network state. The originally bound device will be unbound.

2 Configuring the Device

After successfully connecting the device, you can change the device name on the device details page for easy identification and control.

Fig. 4-3 Smart Life QR Code

3 Controlling the Device

Open the “Smart Life” app to control the Wi-Fi connected mini split. You can turn it on or off and change the mode.

4 Disconnecting the Device

If you need to remove the mini split from the list, click “Remove Device” on the device details page.

5. 1 Front Panel Maintenance

1. Cut off the power supply. Turn off the mini split before disconnecting power supply.
2. Grasp position “a” and pull out to remove the front panel
3. Wipe with a soft, dry cloth. Use lukewarm water (below 104°F) to clean if the mini split is dirty.
4. Never use volatile substances, like gasoline or polishing powder, to clean this mini split
5. Never sprinkle water onto the indoor unit
6. Reinstall and close the front panel. Reinstall and close the front panel by pressing position “b” down.

Fig. 5-1Remove Panel

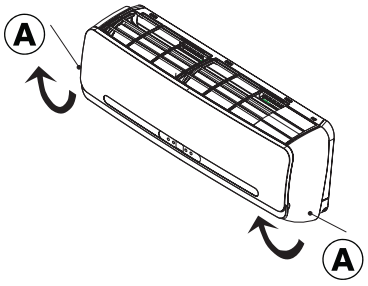
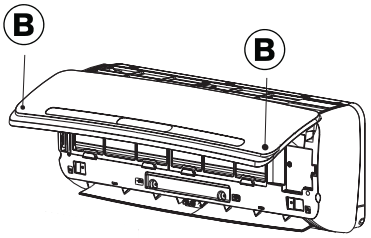


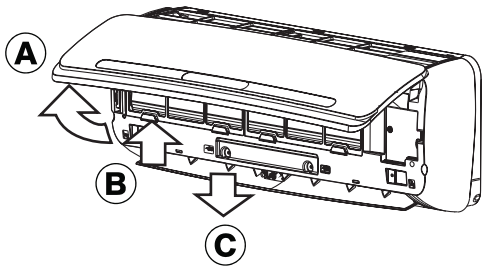
Fig. 5-2 Reinstall Panel



5. 2 Air Filter Maintenance

1. Clean the air filter after approximately 100 hours of use
2. Turn off the mini split and remove the air filter

Fig. 5-3 Remove Air Filter



- (A) Open the front panel
- (B) Press the handle of the filter gently from the front.
- (C) Grasp the handle and slide out the filter.

3. Clean and reinstall the air filter: If there is visible buildup, wash it with a solution of detergent in lukewarm water. After cleaning the air filter, dry it well in the shade.
4. Close the front panel again: Clean the air filter every two weeks if the air conditioner operates in an extremely dusty environment.

6. 1 Operation Condition

The disconnect may trip and stop the mini split in the following cases:

Table 6-1 Disconnect Conditions

HEATING	Outdoor air temperature is over 75°F
	Outdoor air temperature is below 19°F
	Room temperature is over 80°F
COOLING	Outdoor air temperature is over *109°F
	Room temperature is below 70°F
DRY	Room temperature is below 64°F

*If the mini split runs in **COOLING** or **DRY** mode with the door or window open for a long time when the relative humidity is above 80%, condensate may drip from the outlet.*

**For tropical (T3) climate condition models, the temperature point is 126°F instead of 109°F.*

6. 2 Disconnect Features

The disconnect will activate in the following cases:

- If you restart the mini split immediately after operation stops or change the mode while it's operating, you will need to wait 3 minutes.
- When you connect it to a power supply and turn on the unit immediately, it may take 20 seconds to start.
- If all operation has stopped, press again to restart.
- The timer should be set again if it has been canceled.

6. 3 Inspection

Inspect the mini split after prolonged use. Complete a detailed inspection every 5 years, even if no malfunction occurs. If any of the below occurs, shut off the mini split.

- Overheating of the power supply cord and plug
- A burning smell
- Abnormal operating sounds or vibrations
- Water leakage from the indoor unit
- Metal cabinet electrified.

6. 4 Noise Pollution

- Install the mini split in a place that can bear its weight in order to reduce operation noise.
- Install the outdoor unit in a place where discharged air and operation noise will not disturb your neighbors.
- Do not place any obstacles in front of the air outlet of the outdoor unit. It will increase the noise level.

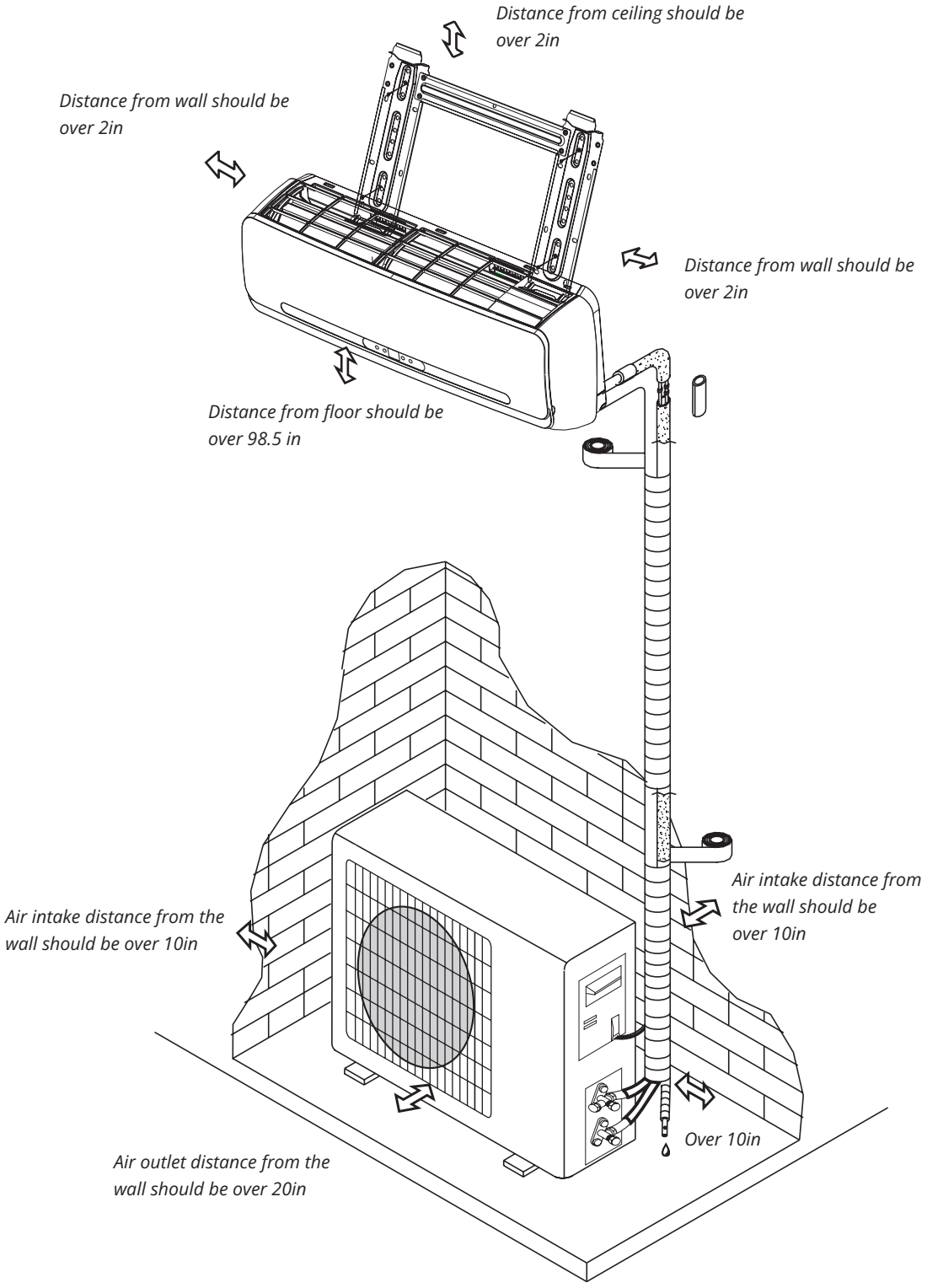
6. 5 Features of the HEATING Mode

Table 6-2 HEATING Mode

PREHEAT	The airflow from the indoor unit will discharge for 2-5 minutes after turning on HEATING mode.
AFTERHEAT	The airflow from the indoor unit will discharge for 2-5 minutes after HEATING mode finishes.
DEFROST	In HEATING operation, the mini split will defrost automatically to improve efficiency. This procedure usually lasts for 2-10 minutes. During the defrost cycle, the fan stops operating. After the defrost cycle completes, it returns to the HEATING mode automatically.

7. 1 Installation Diagram

Fig. 7-1 Installation Diagram



NOTE

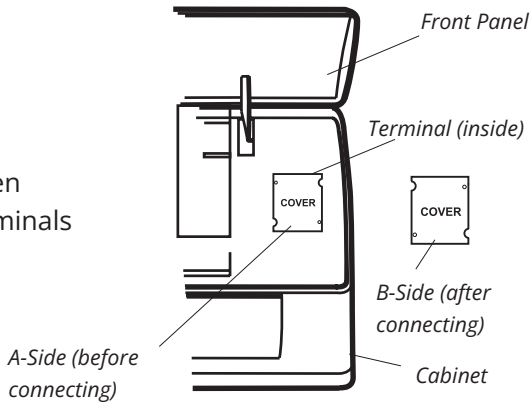
The figure above is a general representation of the mini split. It may not match the appearance of the unit you purchased. Installation must be performed in accordance with the national wiring standard by authorized personnel only.

7. 2 Connecting the Communication Cable

Wiring Between the Indoor and Outdoor Units:

1. Remove the PCB cover from the indoor unit
2. Refer to the wiring diagram attached to the indoor unit when connecting the communication cable to the indoor unit terminals
3. Reinstall the PCB cover. Be sure that side B faces outside

Fig. 7-2 Communication Wire Connection



7. 3 Select the Best Location

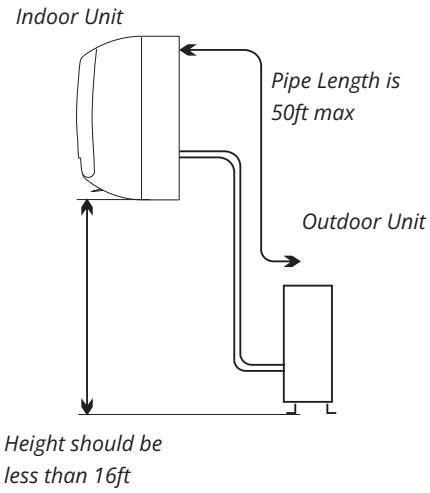
1 Location for Installing the Indoor Unit:

- Where there are no obstacles near the air outlet and air can easily flow
- Where the line set and wall hole can be easily aligned
- Where the air filter can be easily removed
- Where you can maintain the required spacing according to the wiring diagram
- Where you can keep the unit and the remote controller 3 or more feet from your television, radio, etc.

Note: Be careful of the following situations:

- *Keep as far away from fluorescent lights as possible to prevent negative side effects*
- *Do no put anything near the air inlet that would obstruct air intake*
- *Make sure the installation location is sturdy enough to bear the weight of the unit and will not increase operation noise and vibrations*

Fig. 7-3 Indoor Installation

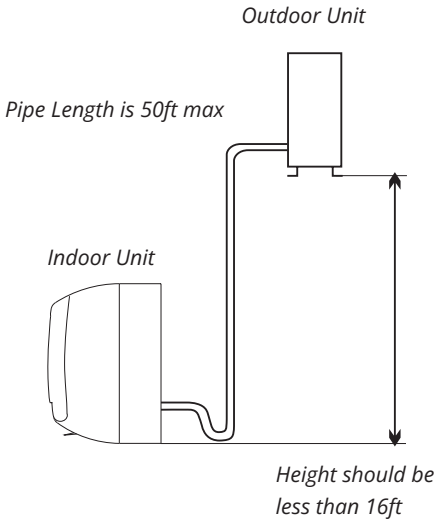


2 Location for Installing the Outdoor Unit

- Where it is convenient to install and well ventilated. Avoid installing it where flammable gas could leak
- Where you can keep the required distance from the wall
- Where you can keep the unit away from grease, debris, vulcanization gas exhaust, and high-salt sea regions
- Where there is not blockage of the air outlet
- Where there is a fixed, sturdy base that will not increase operation noise

Note: Avoid installing it near the roadside where the risk of being splashed by muddy water is higher.

Fig. 7-4 Outdoor Installation

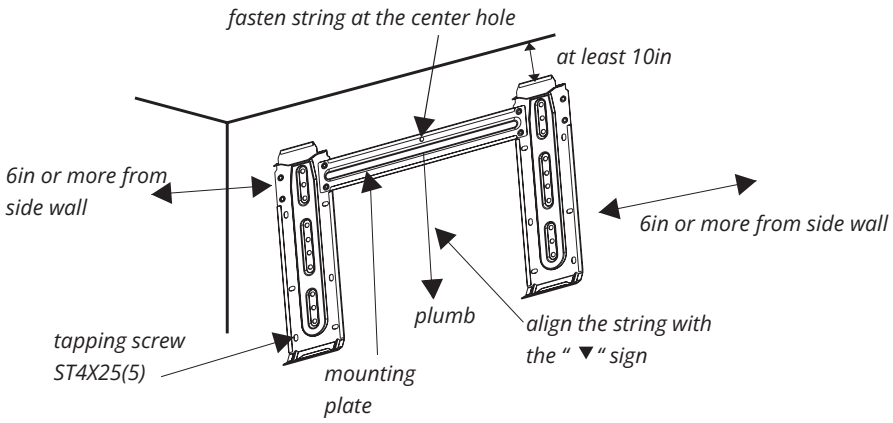


7. 4 Indoor Unit Installation

1 Installing the Mounting Plate

- Decide on an installing location for the mounting plate according to the indoor unit location and piping direction
- Use a level to mount the bracket
- Drill 1.25in. deep holes in the wall for the plate
- Insert the plastic plugs into the holes and fix the mounting plate with tapping screws
- Inspect whether the mounting plate is sturdy, then drill a hole for the line set
- The distance from the floor should be over 100in

Fig. 7-5 1500-3500W Model (7000-18000W BTU/h Model)



Note: The shape of your mounting plate may differ, but the installation will be similar.

2 Drill a Hole for Piping

- Decide the position of the hold for the piping according to the location of the mounting plate
- Drill a hole in the wall. The hole should tilt slightly downward toward the outside
- Install the wall sleeve through the hole for proper sealing

Indoor Unit Line Set Installation

- Put the line set (liquid and suction line) and the communication cable through the wall hold from the outside, or put them through from the inside after connecting the indoor line set
- After connecting the line set as required, install the drain hose. Then, connect the power cords. After connecting, wrap the line set, communication cable, cords, and drain hose together with thermal insulation materials.

3 Piping Thermal Insulation

Wrap the piping joints with thermal insulation materials and then wrap with vinyl tape.

Fig. 7-6 Thermal Insulation

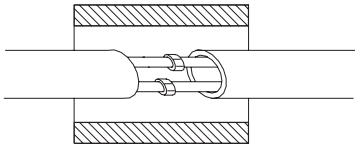
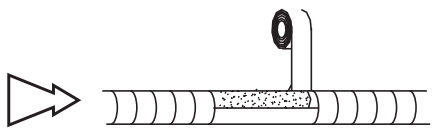


Fig. 7-7 Wrapped with Vinyl Tape



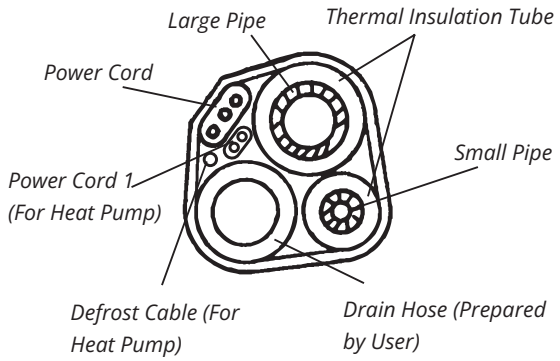
Line Set Insulation

1. Place the drain hose under the line set
2. Insulation uses polythene foam over .25in thick
   Note: The drain hose is prepared by the user

The drain pipe should point downward for easy drain flow. Do not arrange the drain pipe so that it is twisted, sticking out, or waving around. Do not immerse the end of it in water.

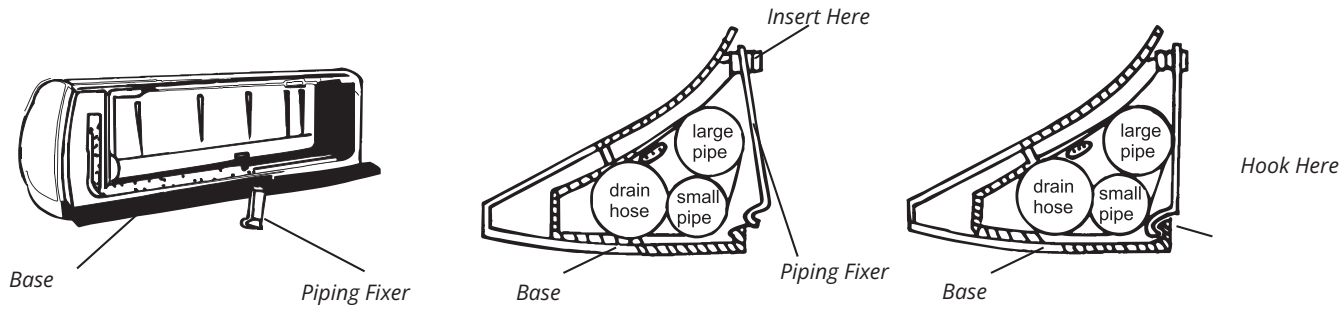
If an extension drain hose is connected to the drain pipe, make sure it also includes thermal insulation when passing along the indoor unit.

Fig. 7-8 Line Set Diagram



When the piping is directed to the right, the line set, power cord, and drain pipe should include thermal insulation and be fixed onto the back of the unit with a piping fixer.

Fig. 7-9 Pipe Fixer



Ⓐ Insert the piper fixer to the slot.

Ⓑ Press to hook the pipe fixer onto the base

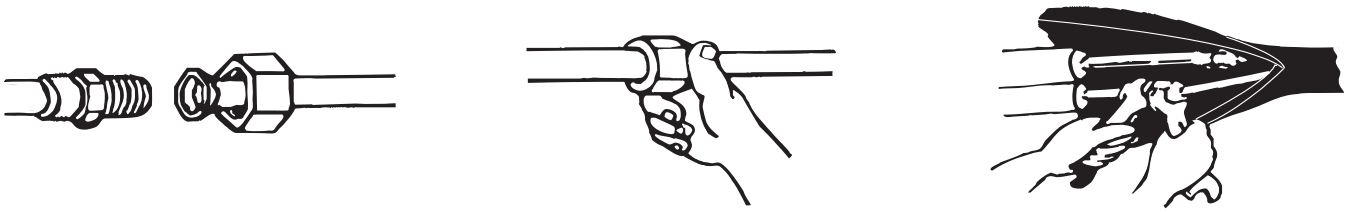
Piping Connection

1. Connect the indoor unit line set with two wrenches. Pay special attention to the allowed torque as shown below to prevent the pipes, connectors, and flare nuts from being deformed and damaged.
2. Pre-tighten them with your fingers first, then use the wrenches.

Table 7-1 Line Set Size

Model	Line Set Size	Torque	Nut Width
7K, 9K, 12K, 18K, 22K, 24K	Liquid Side Θ 6 or 1/4 in	1.8kg.m	.67in (17mm)
30K, 36K	Liquid Side Θ 9 or 3/8 in	3.5kg.m	.87in (22mm)
7K, 9K, 12K	Suction Side Θ 9 or 3/8 in	3.5kg.m	.87in (22mm)
12K, 18K	Suction Side Θ 12 or 1/2 in	5.5kg.m	.94in (24mm)
22K, 24K, 30K, 36K	Suction Side Θ 15.88 or 5/8 in	7.5kg.m	1.06in (27mm)

Fig. 7-10 Piping Connection



4 Connecting the Communication Cable

Indoor Unit

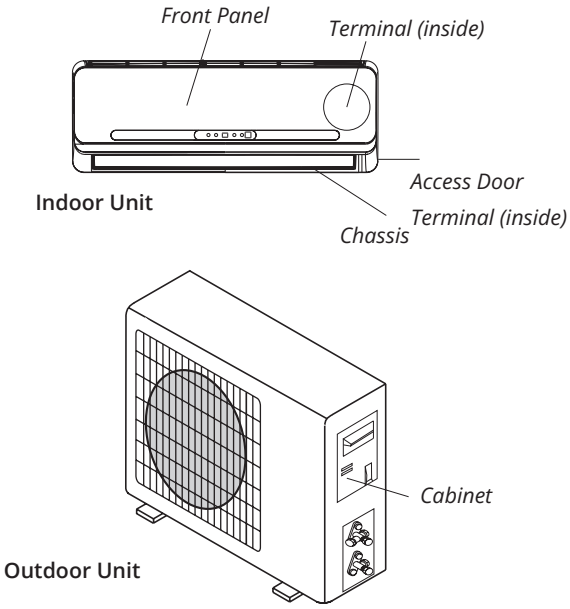
Connect the communication cable to the indoor unit by connecting the wires to the terminals on the control board individually, in accordance with the outdoor unit connection.

Note: For some models, it is necessary to remove the cabinet to connect the indoor unit terminal.

Outdoor Unit

1. Remove the access door from the unit by loosening the screw. Connect the wires to the terminals on the control board individually.
2. Secure the communication cable onto the control board with a cable clamp.
3. Reinstall the access door to the original position with the screw.
4. Use a recognized circuit breaker for the 24K model between the power source and the unit. A disconnect needs to be installed.

Fig. 7-11 Indoor & Outdoor Unit Diagram

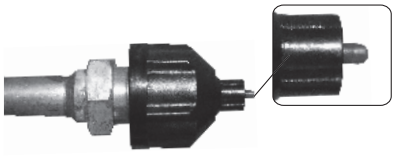


The figures in this manual are based on the external view of a standard model. The shape may differ from your mini split.

CAUTION

1. You must have an individual power circuit specifically for the mini split. Refer to the circuit diagram on the inside of the access door for the wiring method.
2. Confirm that the cable thickness matches the power source specification. (See table below)
3. Check the wires and make sure that they are all tightly fastened after cable connection.
4. Be sure to install a disconnect box.

Fig. 7-12 Cable Connection Caution



Stop installing when the red point does not bulge

Select the Correct Cable

Table 7-2 Cable Size

Model	IDU		ODU AWG		Power Cable AWG	
	MCA	MOP	MCA	MOP	Min.	Pref.
12K 115V	1.5 A	10 A	16 A	25 A	14	12
12K 220V	1A	10A	10A	15 A	16	14
18K	1A	10A	13 A	20 A	16	14
24K	1A	10A	17 A	25 A	14	12
30K	1A	10A	20 A	30 A	12	10
36K	1A	10A	25 A	40 A	10	8

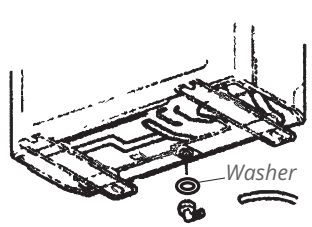
Note: The above cables must be approved by HAR or SAA. The table is a standard chart. The AWG ratings and wiring needs will change based on wire length and temperature.

7. 5 Outdoor Unit Installation

1 Install Drain Port and Drain Hose (Heat Pump Model)

Condensate drains from the outdoor unit when the unit operates in heating mode. In order to not disturb your neighbors and protect the environment, install a drain port and drain hose to direct the condensate. Install the drain port and rubber washer to the chassis of the outdoor unit, then connect a drain hose to the port as shown in the figure to the right.

Fig. 7-13 Drain Hose & Drain Port



The figures in this manual are based on the external view of a standard model. Your mini split may be different.

2 Install and Fix the Outdoor Unit

Fix the outdoor unit with bolts and nuts tightly on a flat, strong foundation. If installed on a wall or roof, make sure to fix the supporter well to prevent damage and strong vibrations from shaking.

3 Outdoor Unit Line Set Connection

- Remove the valve caps from the 2-way and 3-way valve
- Connect the line set to the 2-way and 3-way valves separately, according to the require torque specs.

4 Outdoor Unit Cable Connection

See previous page.

7. 6 Air Purging

Air that contains moisture remaining in the refrigeration cycle may cause a malfunction in the compressor. After connecting the indoor and outdoor units, evacuate air and moisture from the refrigerant cycle using a vacuum pump. **This must be done by a licensed HVAC technician.**

8. 1 Malfunctions & Potential Causes

The following cases may not indicate a malfunction. Please check before asking for professional help.

Trouble	Potential Cause
Does not run	• The plug is not properly attached • The remote controller batteries are dead • The disconnect tripped
Unit is not cooling or heating air	• There is a blockage in the intake or outlet • The set temperature is incorrect • The air filter is dirty
Ineffective control	• Strong interference from excessive static electricity discharge, power supply voltage abnormality, etc. • To resolve, disconnect the mini split from the power supply and then reconnect 2-3 seconds later
Does not operate immediately	• There is a 3 minute delay when changing modes while the unit is operating
Peculiar odor	• This odor may come from an outdoor source, such as furniture, cigarettes, etc. • The unit is dirty and needs to be serviced and cleaned
Flowing water sound	• The flow of refrigerant in the mini split (not an issue) • Defrosting while in **HEATING** mode • The drain is dirty or clogged
Cracking sound	• The expansion or contraction of the front panel due to temperature changes
Mist spraying from the outlet	• The room air has become very cold during the **COOLING** or **DRY** modes
The compressor indicator (red) flashes constantly and the indoor fan stops.	• The unit is shifting from **HEATING** mode to defrost. The indicator will turn off within ten minutes and return to **HEATING** mode.

8. 2 Error Codes

E1	Indoor fan failure
E3	Failure of the temperature sensor of the indoor coil
E4	Failure of the indoor ambient temperature sensor
E0	Outdoor EE failure
E6	Indoor and outdoor communication failures
F1	The compressor starts abnormally
F2	IPFC fault
F5	Exhaust gas temperature sensor malfunction
F7	Outdoor coil temperature sensor malfunction
F8	Outdoor environment temperature sensor malfunction
F9	Outdoor DC fan failure
P1	Outdoor AC current protection
P2	The press phase current is overcurrent
P3	AC voltage is overvoltage and undervoltage
P4	DC bus overvoltage and undervoltage
P5	IPM Overtemperature
P6	The exhaust temperature is too high.
P7	The refrigeration inner coil is too low
P8	The refrigeration outer coil is too high
P9	The inner coil of heating is too high
PA	The outdoor ambient temperature is above the normal range
PC	Abnormal failure of refrigerant circulation

9. Specifications

HEAT PUMP			12K(115V)	12K(220V)	18K(220V)	24K(220V)	30K(220V)	36K(220V)
Indoor Unit			AEPL**AWM17E 1232S1A	AEPL**AWM17E 1231S1A	AEPL**AWM17E 1831S1A	AEPL**AWM17E 2431S1A	AEPL**AWM17E 3031S1A	AEPL**AWM18E 3631S1A
Outdoor Unit			**AEMHV17S 1232S1A	**AEMHV17S 1231S1A	**AEMHV17S 1831S1A	**AEMHV17S 2431S1A	**AEMHV17S 3031S1A	**AEMHV18S 3631S1A
Power Supply			1Ph/115V/60Hz	1Ph/220-240V/60Hz	1Ph/220-240V/60Hz	1Ph/220-240V/60Hz	1Ph/220-240V/60Hz	1Ph/220-240V/60Hz
Cooling	Capacity	BTU/h	12000 (2700~13000)	12000 (2700~13000)	18000 (2700~19000)	24000 (2700~25000)	30000 (2700~31000)	36000 (2700~36000)
		SEER2	17	17	17	17	17	18
Heating	Capacity	BTU/h	12000 (2700~13000)	12000 (2700~13000)	18000 (2700~19000)	24000 (2700~25000)	30000 (2700~31000)	36000 (2700~36000)
		HSPF2	8	8	8	8	8	8
Max. Current		A	13.9	7.7	11.6	14.35	19.14	19.14
Indoor Noise Level	High/ Med./ Low	dB(A)	42/40/38	42/40/38	49/47/45	51/48/46	50/47/45	50/47/45
Outdoor Noise Level		dB(A)	52	52	55	57	57	59
Connecting Pipe	Gas	inches	Φ9	Φ9	Φ12	Φ12	Φ15.88	Φ15.88
	Liquid	inches	Φ6	Φ6	Φ6	Φ6	Φ6	Φ6
Refrigerant		Type	R32	R32	R32	R32	R32	R32
		g	585	545	985	1160	1155	1505
Net Dimensions (W x D x H)	Indoor	inch	30.12×7.87×12.01	30.12×7.87×12.01	38.19×9.05×12.21	40.55×9.13×13.15	40.55×9.13×13.15	44.5×9.92×14.21
	Outdoor	inch	27.56×20.08×11.89	27.56×20.08×11.89	31.5×21.65×11.89	33.86×23.5×14.88	33.86×23.5×14.88	37.13×14.92×25.91
Net weight	Indoor	kg/lbs	8.21/18.1	8.52/18.8	11.61/25.61	13.72/30.25	12.65/27.89	21/46.31
	Outdoor	kg/lbs	22.69/50	22.49/49.58	28.43/62.81	33.61/74.1	35.6/78.5	42/92.6
Packing Dimensions (W x D x H)	Indoor	inch	32.3×10.63×14.17	32.3×10.63×14.17	40.75×12.21×14.96	43.5×12.6×16.14	43.5×12.6×16.14	47.63×13.19×17.32
	Outdoor	inch	30.12×21.65×13.58	30.12×21.65×13.58	34.25×23.43×14	37.21×26.38×16.93	37.21×26.38×16.93	40.4×29.53×16.73
Gross Weight	Indoor	lbs	21.2	21.91	30.23	35.78	34.39	52.91
	Outdoor	lbs	53.68	62.6	66.71	79.56	84.11	99.21
Maximum Line Length		m/ft	10 / 30	10 / 30	10 / 30	15 / 50	15 / 50	15 / 50
Compressor		Model	KSK103D32UEZ31	C-4RZ100H3AFF	C-4RZ120H3AAF	C-4RZ140H3AAF	C-6RZ210H3CHF	C-6RZ210H3CHF
		Brand	GMCC	SANYO	SANYO	SANYO	SANYO	SANYO
	Capacity	W	2020	3385	4020	4705	6980	6980

S SERIES MINI SPLIT HEAT PUMP

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The design and specifications of this product and/or manual are subject to change without prior notice. Consult with the manufacturer for details.