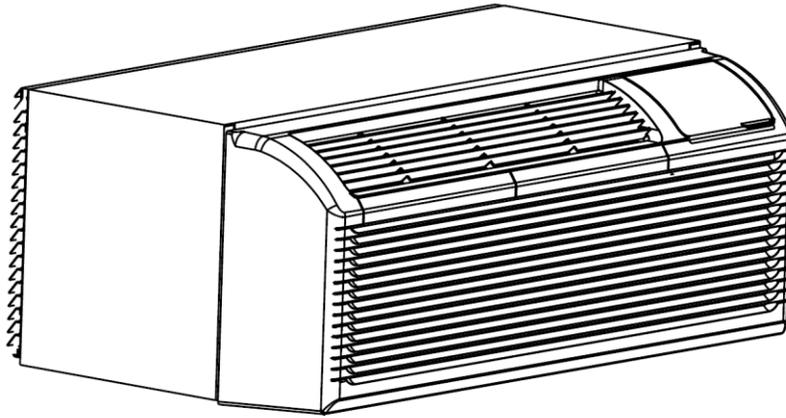


PACKAGED TERMINAL AIR CONDITIONER USER MANUAL



FOR MODELS	COOLING Btu/h	HEATING Btu/h	ELEC. HEATING Btu/h
PTACM309CH3ZX	8800/8700	N/A	10900/8900
PTACM309HP3ZX	9200/9100	7800/7500	10900/8900
PTACM312CH3ZX	12000/11800	N/A	10900/8900
PTACM312HP3ZX	12000/11800	10800/10500	10900/8900
PTACM312CH5ZX	12000/11800	N/A	15000/12200
PTACM312HP5ZX	12000/11800	10800/10500	15000/12200
PTACM315CH3ZX	14700/14500	N/A	10900/8900
PTACM315HP3ZX	14700/14500	13500/13200	10900/8900
PTACM315CH5ZX	14700/14500	N/A	15000/12200
PTACM315HP5ZX	14700/14500	13500/13200	15000/12200
PTACM309HP3VX	9000	8000	10900
PTACM312HP3VX	12000	10800	10900

CONTENTS

IMPORTANT SAFETY INSTRUCTIONS	3
UNIT FEATURES	9
CONTROL PANEL OPERATION	10
DIP SWITCHES CONFIGURATIONS	12
WALL THERMOSTAT TERMINAL	14
INSTALLATION	16
CARE AND CLEANING	22
TROUBLESHOOTING	23
SPECIFICATIONS	24
WARRANTY	27

FOREWORD

- Inspect the unit for shipping damage, mishandling, and accessories before installing.
- The appearance of the units that you purchase may be slightly different from the ones described in this manual but will not affect proper operations and usage.
- Please read carefully the sections corresponding to the specific model you have and keep the manual in a safe place for reference.

ATTENTION

- Do not modify, manipulate or reconfigure the plug.
- The appliance shall be installed and operated in accordance with National Electrical Code regulations.
- Operating Temperature Range (outdoor), the outdoor temperature at which the unit operates normally.
- If the outdoor temperature is out of this range the unit can still operate but error codes or protections may occur. If the supply cord is damaged, it must be replaced by a qualified technician to avoid a fire hazard.
- All electrical repairs and connections must be performed by a licensed electrician.

IMPORTANT SAFETY INSTRUCTIONS

Cautions

- Contact the authorized service technician for repair or maintenance of this unit.
- Contact a qualified technician or individual for the installation of this unit.
- The air conditioner is not intended for use by children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with the air conditioner.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or a similarly qualified persons in order to avoid a hazard.
- Installation work must be performed in accordance with the national wiring standards by authorized personnel only.
- This appliance is not intended for use by persons 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 they are away from the appliance.
- This appliance can be used by children aged from 8 years and 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 use of the appliance in a safe way and understand the hazards involved.
- Cleaning and user maintenance should not be completed without supervision.

Exception Clauses

- Before using the PTAC air conditioner, please read this manual carefully. IRP reserves the right to make any technical changes without prior notice.
- IRP will bear no responsibilities when personal injury or property loss is caused by the following reasons.
- Damage of the product due to improper use or misuse of the product.
- Alter, change, maintain, or use the product with other equipment without abiding by the instruction manual of the manufacturer.
- Defects caused by corrosive gas on location.
- Defects due to improper operation during transportation of the product.
- Operate, repair, the maintain the unit without abiding by instruction manual or related regulations.
- The problem or complaint is caused by the quality specifications or performance of parts and components that are produced by other manufacturers.
- The damage is caused by natural calamities, bad using the environment, or force majeure.
- If moving, maintaining, installation of the air conditioner is needed, please contact dealer or local service center to conduct it at first. The air conditioner must be installed, moved, or maintained by appointed unit. Otherwise, it may cause serious damage, personal injury, or death.
- When refrigerant leaks or required discharge during installation, maintenance, or disassembly, it should be handled by certified professionals or otherwise in compliance with local laws and regulations.

The Refrigerant

An air conditioner operates by circulating a refrigerant inside a closed system to remove heat and humidity from the indoor air. Before a refrigerant is inserted into the unit at the factory it is cleaned to ensure efficient operation. Inside this unit is R32, a flammable, odorless, fluoride-based refrigerant. Furthermore, it can lead to explosion under certain conditions. The flammability of R32 is very low and can only be ignited by flame. Compared with common refrigerants, R32 is a nonpolluting refrigerant with no harm to the ozoneosphere. The influence upon the greenhouse effect is also lower. R32 has very good thermodynamic features, leading to really high energy efficiency. The units, therefore, need less refrigerant contained within.

WARNING:

- Keep ventilation openings in the appliance enclosure or in the built-in structure, clear of obstruction.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer. Should a repair be needed, contact a local licensed service technician.
- Any repairs carried out by unqualified personnel may be dangerous.
- Piping and keeping open flames and hot items away from the unit.
- Appliance should be installed, operated, and stored in a room in a stable area.
- Appliance filled with flammable gas R32. For repairs, strictly follow the manufacturer's instructions only.
- The appliance should be stored in a room without continuously operating ignition sources. For example: open flames, an operating gas appliance, or an operating electric heater.
- Do not pierce or burn. Be aware that refrigerants may not contain an odor.
- Adopt R32 flammable refrigerant. When maintaining or deposing the unit, the refrigerant inside the system must be recovered. Refrigerant should be recovered, which can't be discharged freely.
- Keep ventilation openings clear of obstruction.
- The unit can only be maintained according to the method suggested by the manufacturer.
- Appliance should be stored in a room without continuously operating open flames (eg: an operating gas appliance) and ignition sources (eg: an operating electric heater) close to the appliance. No open fire (fired equipment such as electrical heater and gas stove etc.) or any equipment (eg: switch) that might generate arc around the appliance.
- The appliance should be stored to prevent mechanical damage from occurring.

NOTE:

- Any person who is involved with working on or breaking into a refrigerant circuit should hold a currently valid certificate from an industry-accredited assessment authority, which authorized their competence to handle refrigerants safely in accordance with an industry-recognized assessment specification.
- Servicing should only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel should be carried out under the supervision of a person competent in the use of flammable refrigerants.

Safety Precautions

 **DANGER**

Indicates a hazardous situation that, if not avoided, will result in death or serious injury.

 **WARNING**

Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

 **CAUTION**

Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.

NOTICE

Indicates important but not hazard-related information, used to indicate risk of property damage.



Indicates a hazard that would be assigned a signal word **WARNING** or **CAUTION**.

- Meaning of symbols used in this manual are as shown below.

	NEVER DO THIS.
	ALWAYS DO THIS.

WARNING

 Plug in power plug properly	 Do not operate or stop the unit by inserting or pulling out the power plug.	 Do not damage or use an unspecified power cord.
<ul style="list-style-type: none"> • Otherwise, it may cause electric shock or fire due to excess heat generation. 	<ul style="list-style-type: none"> • It may cause electric shock or fire due to heat generation. 	<ul style="list-style-type: none"> • If the power cord is damaged, it must be replaced by the manufacturer or an authorized service center in order to avoid hazard.
 Do not modify power cord length or share the outlet with other appliances.	 Do not operate with wet hands or in damp environment.	 Do not direct airflow at room occupants only.
<ul style="list-style-type: none"> • It may cause electric shock or fire due to heat generation. 	<ul style="list-style-type: none"> • It may cause electric shock. 	<ul style="list-style-type: none"> • This could damage your health.
 Always ensure effective grounding.	 Do not allow water to run into electric parts.	 Always install circuit breaker and a dedicated power circuit.
<ul style="list-style-type: none"> • Incorrect grounding may cause electric shock. 	<ul style="list-style-type: none"> • It may cause failure of machine or electric shock. 	<ul style="list-style-type: none"> • Incorrect installation may cause fire and electric shock.
 Unplug the unit if strange sounds, smell, or smoke comes from it.	 Do not use the socket if it is loose or damaged.	 Do not open the unit during operation.
<ul style="list-style-type: none"> • It may cause fire and electric shock. 	<ul style="list-style-type: none"> • It may cause fire and electric shock. 	<ul style="list-style-type: none"> • It may cause electric shock.
 Keep firearms away.	 Do not use the power cord close to heating appliances.	 Do not use the power cord near flammable gas or combustibles, such as gasoline, benzene, thinner, etc.
<ul style="list-style-type: none"> • It may cause fire. 	<ul style="list-style-type: none"> • It may cause fire and electric shock. 	<ul style="list-style-type: none"> • It may cause an explosion or fire.
 Ventilate room before operating air conditioner if there is a gas leakage from another appliance.	 Do not disassemble or modify unit.	
<ul style="list-style-type: none"> • It may cause explosion, fire and burns. 	<ul style="list-style-type: none"> • It may cause failure and electric shock. 	

⚠ CAUTION

⊘ When the air filter is to be removed, do not touch the metal parts of the unit.

- It may cause an injury.

⊘ Do not clean the air conditioner with water.

- Water may enter the unit and degrade the insulation. It may cause an electric shock.

⊘ Ventilate the room well when used together with a stove, etc.

- An oxygen shortage may occur.

⊘ When the unit is to be cleaned, switch off, and turn off the circuit breaker.

- Do not clean unit when power is on as it may cause fire and electric shock, it may cause an injury.

⊘ Do not put a pet or house plant where it will be exposed to direct air flow.

- This could injure the pet or plant.

⊘ Do not use for special purposes.

- Do not use this air conditioner to preserve precision devices, food, pets, plants, and art objects. It may cause deterioration of quality, etc.

⊘ Stop operation and close the window in storm or hurricane.

- Operation with windows opened may cause wetting of indoor and soaking of household furniture.

⊘ Hold the plug by the head of the power plug when taking it out.

- It may cause electric shock and damage.

⊘ Turn off the main power switch when not using the unit for a long time.

- It may cause failure of product or fire.

⊘ Do not place obstacles around air-inlets or inside of air-outlet.

- It may cause failure of appliance or accident.

⊘ Ensure that the installation bracket of the outdoor appliance is not damaged due to prolonged exposure.

- If bracket is damaged, there is concern of damage due to falling of unit.

⊘ Always insert the filters securely. Clean the filter once every two weeks.

- Operation without filters may cause failure.

⊘ Do not use strong detergent such as wax or thinner but use a soft cloth.

- Appearance may be deteriorated due to change of product color or scratching of its surface.

⊘ Do not place heavy object on the power cord and ensure that the power cord is not compressed.

- There is danger of fire or electric shock.

⊘ Do not drink water drained from air conditioner.

- It contains contaminants and could make you sick.

⊘ Use caution when unpacking and installing. Sharp edges could cause injury.

⊘ If water enters the unit, turn the unit off at the power outlet and switch off the circuit breaker. Isolate supply by taking the power plug out and contact a qualified service technician.

Working Temperature Range

The air conditioner must be operated within the temperature range indicated below. In order to ensure the optimal performance of our products, the design specifications of the unit and remote control are subject to change without prior notice. The performance will be reduced when the temperature is out of range.

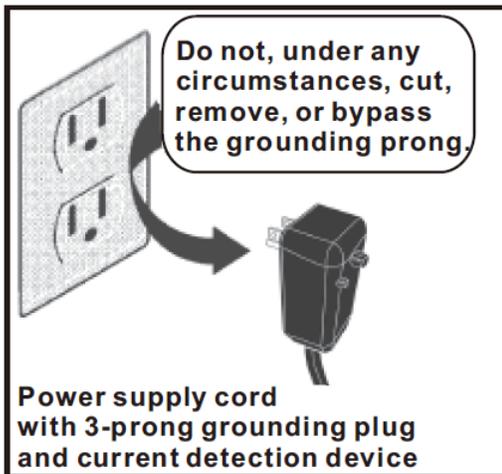
Cooling Operation	Outdoor Temp.	18-(43/26) °C/64-(109/79) °F
	Indoor Temp.	17-(32/23) °C/62-(90/73) °F
Heating Operation	Outdoor Temp.	-5-(24/18) °C/23-(76/64) °F
	Indoor Temp.	0-(27/19) °C/32-(80/66) °F

Note: (43/26) °C means the dry bulb temperature is 43°C and the wet bulb temperature is 26°C.

Electrical Precautions

OPERATION OF CURRENT DEVICE

- The power supply cord contains a current device that senses damage to the power cord. To test your power supply cord, do the following:
- Plug in the PTAC air conditioner.
- The power supply will have TWO buttons on the plug head. Press the TEST button, you will notice a click as the RESET button pops out.
- Press the RESET button again, you will notice that a click as the button engages.
- The power supply cord is not supplying electricity to the unit. (On some models this is also indicated by a light on the plug head).



NOTE:

- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons to avoid a hazard.
- The power supply cord must be replaced if it fails to reset when either the TEST button is pushed or if it cannot be reset. A new one can be purchased from the retailer.
- Do not use the device to turn the unit on or off.
- Always make sure the RESET button is pushed in for correct operation.
- When 265V unit are to be installed, the power supply must be permanent wiring. Permanent wiring may be done through the accessory subbase. An exposed cord connection on 265V units are not permitted.

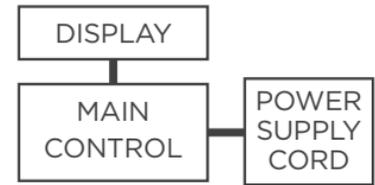
LCDI PLUG Type

Power Card						
Power Supply	230V,15A	230V,20A	230V,30A	265V,15A	265V,20A	265V,30A

NOTE: The shape may be different from your PTAC air conditioner.

**WARNING:**

BEFORE PERFORMING ANY ELECTRICAL OR WIRING WORK, TURN OFF THE MAIN POWER TO THE SYSTEM.

**WARNING:**

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Avoid fire hazards or electric shocks. Do not use an extension cord or an adaptor plug. Do not remove any prong from the power cord.
- Be sure the air conditioner is properly grounded. To minimize shock and fire hazards, proper grounding is important. The power cord is equipped with a 3-prong grounding plug for protection against shock hazards. Do not remove the power supply cord grounding prong.
- The air conditioner must be used in a properly grounded wall receptacle. If the wall receptacle you intend to use is not adequately grounded or protected by a time delay fuse or circuit breaker, have a qualified electrician install the proper receptacle.
- Incorrect installation of circuit breaker may cause fire and electric shock.
- Do not extend fingers or objects into the air inlet or air outlet.
- Do not pull the power cord strongly.
- Do not have a fuse in the neutral or grounding circuit. It could result in an electrical shock.
- Do not use an extension cord or an adapter plug.
- Do not repair the air conditioner by yourself. This may result in electric shock or damage.
- Disconnect power supply when cleaning air conditioner.
- Ensure the receptacle is accessible within the installed unit.
- Do not run the air conditioner without a side protective cover in place. This could result in mechanical damage within the air conditioner.
- Receptacle wiring should be a minimum of 14 gauge. Use copper wire only. It is your responsibility to provide proper and adequate receptacle wiring, installed by a qualified electrician.
- The air conditioner should be installed in accordance with national wiring regulation.
- A time delay fuse or time delay circuit breaker is also required.
- A separate circuit serving only this appliance must be provided.

UNIT FEATURES

Before you begin, thoroughly familiarize yourself with the control panel and remote as shown below and all its functions then follow the symbol for the functions you desire. The air conditioner can be controlled by the remote or the control panel.

COMPRESSOR RESTART DELAY

This feature extends the overall life of the compressor by preventing the short-cycling of the air conditioner. When the compressor restarts, the unit is designed to give a minimum of three minutes to have a time of equalizing the refrigerant pressures for optimizing cycling.

MEMORY

This unit also has memory, so if power is lost all of the control settings (set point, Memory mode, fan speed, on/off, and configuration) are retained. When power is restored, the unit will start back up in the mode and configuration it was in when power was lost.

AUTOMATIC EVAPORATOR FREEZE PROTECTION

Keeps the temperature in a room above freezing where pipes might Automatic Room Freeze Protection freeze. If the unit is configured for the freeze protection feature to be active, which is the default condition), when power is applied to the unit and the unit senses the temperature is too low the fan motor and electric heater are turned on and will warm the room to 50 °F. If Freeze Protection is not required change the configuration switch to turn the feature off (see the section on unit configuration).

AUTOMATIC QUICK WARM-UP (FOR HEAT PUMP MODELS ONLY)

If the room temperature falls to 4.5°C/8°F below the set point temperature, the reverse cycle heat is shut off and the electric strip heat is turned on for one cycle until heating is satisfied.

LED INDICATORS AND BUTTONS

The touchpad has buttons for MODE, FAN, POWER, SETPOINT UP, and SETPOINT DOWN. It also has LEDs that correspond to the MODE, FAN SPEED, and SET POINT operation, to indicate the unit's status. The LEDs below the MODE, FAN, POWER, and HEAT, indicate what operating mode is active. The LEDs below the FAN button, LOW, MED, and HI, indicate the fan speed that is selected. The LEDs for FAN, COOL, and HEAT indicate the activated operating mode. LED for POWER is the unit ON/OFF status LED. If the unit is ON, the LED will be green. If the unit is OFF, the LED will be off.

NOTE: HEAT mode is for cooling and heating models only.

HIGH-TEMPERATURE PROTECTION IN HEATING OPERATION

The compressor and/or electric heater will be switched off to prevent damage to high indoor blow air temperature or indoor temperature sensor error.

°F or °C switchover

The unit can display at either °F or °C. When the unit is ON, press and hold "+" and "-" buttons together for 3 seconds will alternate the temperature display between °C and °F.

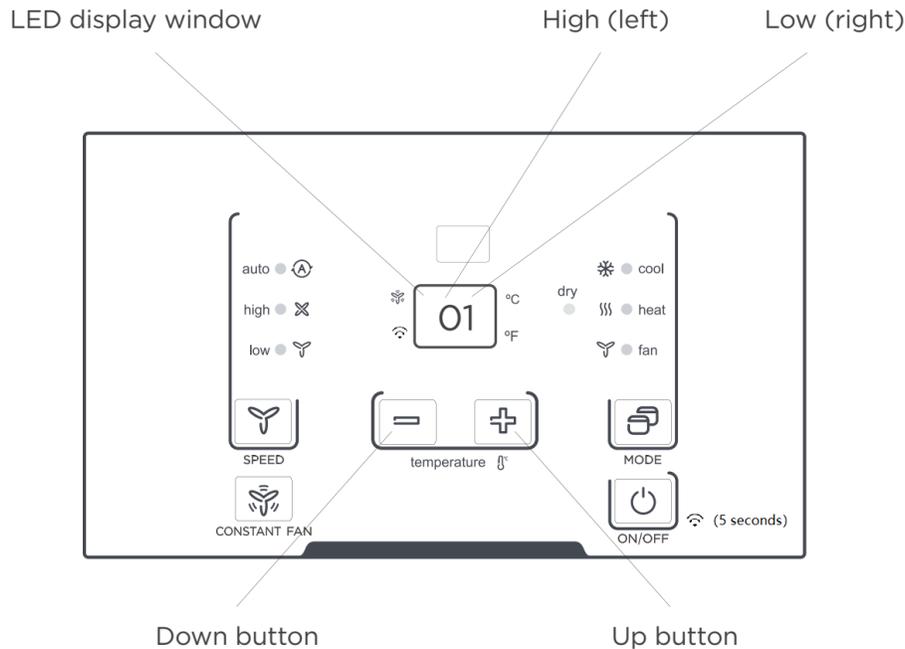
WIFI function

When connecting to Wifi for the first time, press the ON/OFF button for 5 seconds to initiate the Wifi connection mode. The LED display shows  to indicate you can set Wifi connection. For more details, see SEA BREEZE PLUS Wireless Instruction.

CONTROL PANEL OPERATION

Before you begin, thoroughly familiarize yourself with the control panel as shown below and all its functions then follow the symbol for the functions you desire.

The control panel may look different from your PTAC air conditioner.



POWER ON/OFF

Press the OFF/OFF button to turn the unit on or off.

MODE

Push the button to cycle through the modes from COOL-DRY-HEAT (for cool/heat model only)-FAN-COOL. The indicator light beside the MODE option will illuminate to identify the selected mode.

COOL-Cooling begins automatically when the room temperature is above the set point and stops when the room temperature is 4 °F less than the set point. But the compressor will run for 5 minutes at least in COOL mode before stopping.

HEAT-The maximum temperature can be set up to 84 °F (29 °C). For heat pump models, the unit can alternate to run between reverse cycle heat mode and electric heater mode according to the difference between the set temperature and the room temperature.

The fan motor cycles with the compressor stop.

NOTE: The reverse cycle and electric heater cannot be run at the same time. In the following cases, it is normal that the reverse cycle does not operate.

1. When the outdoor temperature is lower than 40°F (4°C) or the room temperature falls to 8 °F (4.5°C) less than the set point temperature.
2. There is a 3-minute minimum compressor run time at any setting to prevent short cycling. The indoor fan motors start before the compressor and stop after the compressor cycles off.
3. Push the S1 on the DIP SWITCHES to the UP(ON) position.
4. When the frost builds up to the evaporator coils, the unit will defrost automatically, and the compressor will cycle off.
5. When you set AUTO mode, the FAN speed will be automatically adjusted at the setting temperature and room temperature.

DRY – The unit will generally operate in the form of a dehumidifier. Since the conditioned space is closed or sealed area, some degree of cooling will continue.

FAN - Fan only without heating and cooling

NOTE: If the unit has a DIP SWITCHES feature, the temperature range can be set.
SEE "DIP SWITCHES CONFIGURATIONS" on page 12 for details.

UP/DOWN BUTTONS (+/-)

Push the UP (DOWN) button to increase (decrease) the set temperature in cooling/heating mode.
The temperature can be set by increments of 1°F(1°C). The display will show the set temperature.

NOTE: Press and hold "+" and "-" buttons together for 3 seconds will alternate the temperature display between °C and °F.

FAN SPEED

Press the FAN button to adjust the fan speed in the cycle of AUTO-HIGH-LOW-AUTO.

NOTE: When you select AUTO mode, the FAN speed will be automatically adjusted at the setting temperature and room temperature. In DRY mode, the fan speed is controlled at a low speed automatically.

CONSTANT FAN

In cooling mode, press the button to turn on or turn off the constant fan function. When the function is turned on, the constant fan light will illuminate. When the function is turned off, the constant fan light will go out.

NOTE: Every time the unit is turned on, the function will work as the DIP SWITCHES CONFIGURATIONS.

PANEL LOCKING

Press the POWER ON/OFF and continuous FAN buttons for 5 seconds at the same time to turn on or off the panel locking function. NOTE: The remote control can be operated after the panel is locked.

DISPLAYS:

The display shows the set temperature in °C or °F. It shows the room temperature in FAN ONLY mode.

CONTROL CODES (on some models)

LC-Pads on the control panel are not available. The unit can be set by using a wired controller only.

FC-Pads on the control panel and wire controller are not available. The unit can be set up by using FRONT DESK CONTROL only.

ERROR CODES

E0-Failure of EEPROM parameter

E3-The fan stall error.

E4-Main control and Display communication error.

AS-Room temperatures sensor error

ES-Evaporator temperature sensor error

CS-Condenser temperature sensor error

OS-Outside temperature sensor error

HS-Exhaust temperature sensor error

LE-Wire controller error

NOTE: When there is an error code, unplug the unit and plug it back in. If error codes repeat, call for technical help.

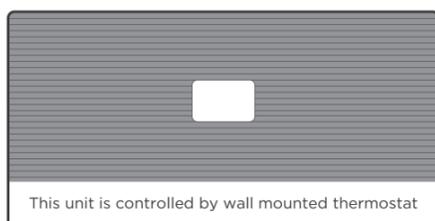
OTHER CODES

LO- Room temperature is lower than 32 °F

HI-Room temperature is higher than 99 °F

FP-Low temperature protection.

NOTE: All the illustrations in this manual are for explanation purposes only. Your air conditioner may be slightly different.



Control panel sticker

The actual shape shall prevail.

ACCESSORY

When the unit display LC, you can install accessories on the control panel.

NOTES:

1. The LC function can only be set by the wired controller.

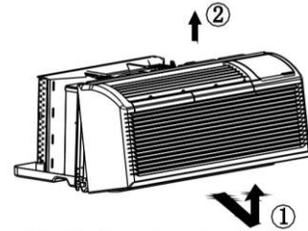
2. For some models, this corresponding operation happened after 3 seconds after pressing any buttons.

DIP SWITCHES CONFIGURATIONS

REMOVING THE FRONT PANEL

Dip switches controls are located behind the front panel, through an opening below the control panel. To access, remove front panel. See step 1 and step 2.

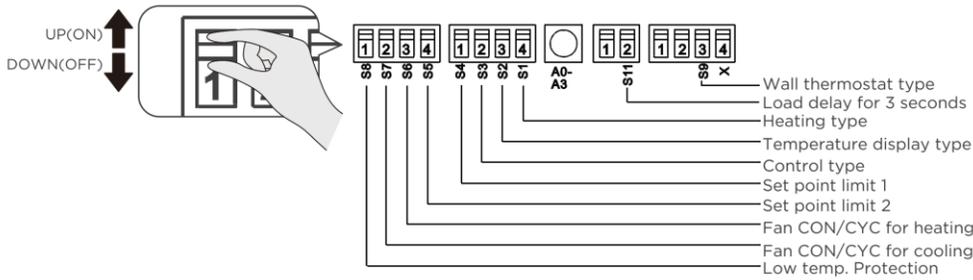
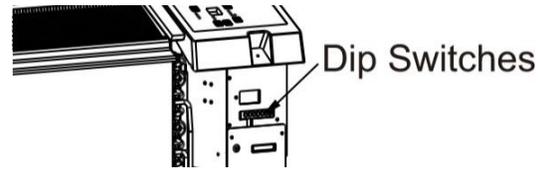
Dip switches are accessible without opening the control box.
The unit must be powered OFF to effectively change its status.



- Pull out at the bottom to release it from the tabs ① .
- Then lift up ② .

DIP SWITCHES CONFIGURATIONS

See below table and figure for Dip Switches configurations and functions of each dip switch position.



No.	UP(ON)	DOWN(OFF)	Remarks
S1	Electric Heat Only	Electric Heat and Pump Heat	For Heat Pump unit only
S3	Wall Thermostat Enable	Control Panel Enable	
S4*S5	UP*UP:60°F-86°F(16°C-30°C); UP*DOWN:65°F-78°F(18°C-26°C); DOWN*UP:63°F-80°F(17°C-27°C); DOWN*DOWN:68°F-75°F(20°C-24°C);		Two configurations (S4*S5) combine to select set point range.
S6	Fan Continuous Run for Heating	Fan Cycle for Heating	
S7	Fan Continuous Run for Cooling	Fan Cycle for Cooling	
S8	Low temp. Protection enable	Low temp. Protection disable	Optional
S9 (S3UP)	Use other types of wall Thermostat	Use other types of wall Thermostat	you can consult with the sales agency or manufacturer for details
S9 (S3DOWN)	Use Control Panel only	Use Control Panel or other types of wall Thermostat	Use control Panel or some types of wall Thermostat, the other one must be turned off
Sw11	Load delay for 3 seconds	Normal	Optional

WALL THERMOSTAT ENABLE

A wired wall thermostat can be connected to the unit. If it is, this dip switch must be moved to the Wall Thermostat Enable Position, before the wall thermostat will begin control.

LOW TEMP. PROTECTION (OPTIONAL)

If the unit senses a room temperature below 32 °F (0 °C), the fan motor and electric strip heat will turn on and warm the room to 40 °F (4.4°C). The fan stops a short time after the temperature is satisfied.

ELECTRIC HEAT ONLY (FOR HEAT PUMP ONLY)

This setting is typically used for emergency heating.

HEAT AND COOL FAN CON/CYC DIP-SWITCHES

Allows the fan to operate in continuous or cycle models while the unit is in heating and cooling mode.

CON (CONTINUOUS)

Allows fan to run continuously, circulating air even when the temperature setting has been satisfied. This switch helps to maintain the room temperature closer to the thermostat setting.

CYC (CYCLE)

This setting allows the fan to cycle on and off with the compressor or electric heater. The fan stops a short time after the temperature setting is satisfied.

SETPPOINT TEMPERATURE LIMITS

Provides a restricted range of temperature control.

DIP SWITCHES CONFIGURATIONS BY PANEL CONTROL

Turn the unit off.

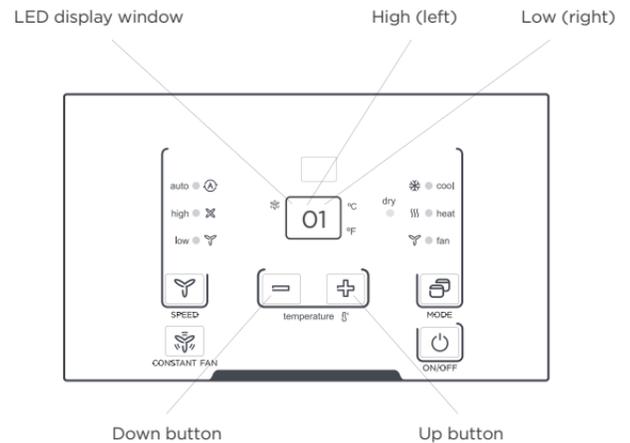
Press and hold the up (+) and down (-) buttons together for 3 seconds to activate the dip switches configurations by panel control. **NOTE:** Make sure the unit is OFF when you set the Dip Switches.

See the below table for dip switches configurations and functions by panel control.

Press and hold the up (+) and down (-) buttons together for 3 seconds again or no operation within 30 seconds to exit the dip switches configurations by panel control and the unit will save the last settings.

Display function setting with 2 digits in the LED display window, high (left) for dip switches, and low (right) for functions.

Press up (+) button to set the dip switches and press the down (-) button to set the functions.



No.	High(left)	Low(right)		Remarks
/	0	1-by panel control	0-by dip switches	
S1	1	1-electric heat only	0-electric heat and pump heat	For Heat Pump unit only
S3*S9	3	3-use control panel or some types of wall thermostat; 2-use other types of wall thermostat; 1-use other types of wall thermostat; 0-control panel enable.		You can consult with the sales agency or manufacturer for details
S4*S5	4	4-62°F-86°F(17°C-30°C); 3-60°F-86°F(16°C-30°C); 2-65°F-78°F(18°C-26°C); 1-63°F-80°F(17°C-27°C); 0-68°F-75°F(20°C-24°C);		
S6	6	1-fan continuous run for heating	0-fan cycle for heating	Not available for "1-use other types of wall thermostat"
S7	7	1-fan continuous run for cooling	0-fan cycle for cooling	
S8	8	1-low temp. protection enable	0-low temp. protection disable	Optional
SW7	A	1-front desk control disable	0-front desk control enable	Optional
Sw11	B	1-Load delay for 3 seconds	0-normal	Optional

NOTE:

1. The LED display will show "00" when you enter the setting mode for the first time. When you set "01" you can start the next settings.
2. To activate the front desk control function, you need to pull the dip switch "SW7" to "DOWN(OFF)", and then set the panel control to "A0".
3. After all is set, press up (+) and down (-) buttons together for 3 seconds to exit the operation interface and cut off the power. When the unit is powered on again, the settings will be activated.

WALL THERMOSTAT TERMINAL

IMPORTANT: Only qualified personnel should access the electrical panel on the unit and install electrical accessories. Please contact your local distributor for assistance.

THERMOSTAT WIRE ROUTING

The thermostat wire is field supplied. Recommended wire gauge is 18 to 20-gauge solid thermostat wire.

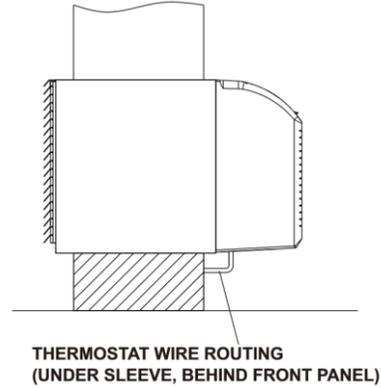
NOTE: It is recommended that extra wires are run to the unit in cases of any damages during installation.

The thermostat wire should always be routed around or under the wall sleeve.

NEVER go through the wall sleeve directly. The wire should then be routed behind the front panel to the easily accessible terminal connector.

NOTE:

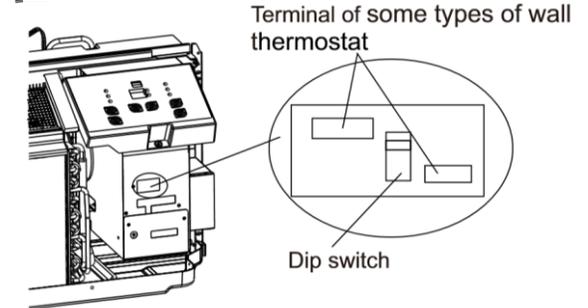
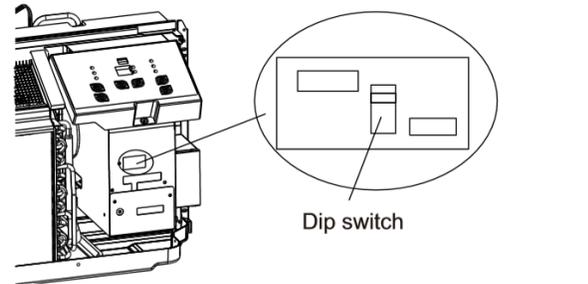
Refer to thermostat installation instructions for details on installing a wall thermostat.



INSTALLATION INSTRUCTIONS FOR SOME WALL THERMOSTATS

Pull the dip switch to the DOWN (OFF) position.

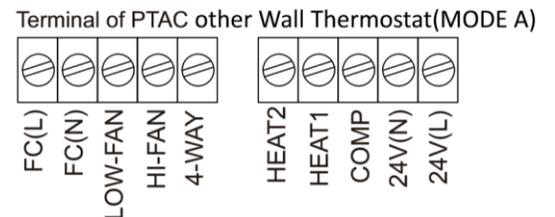
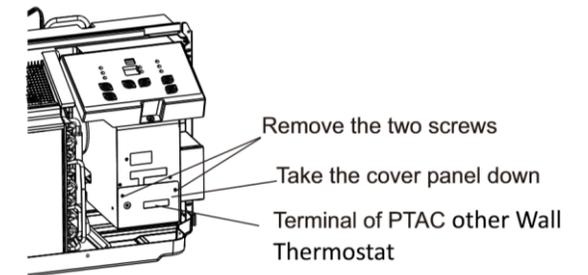
Insert the wire connector of the wall thermostat into the relevant terminal according to different shapes.



INSTALLATION INSTRUCTIONS FOR OTHER WALL THERMOSTATS

NOTE:

Sea Breeze thermostats are recommended. Remove the two screws and take the cover panel down.



TERMINAL	DESIGNATION
FC(L)	Front desk control terminal L
FC(N)	Front desk control terminal N
LOW-FAN	Low fan speed
HI-FAN	High fan speed
4-WAY	4-way valve; Reverse cycle (Energized in Heat) For heat pump models
HEAT2	Electrical heater 2
HEAT1	Electrical heater 1
COMP	Compressor
24V(N)	24VAC terminal N(Neutral),Common
24V(L)	24VAC terminal L

⚠ CAUTION

UNIT DAMAGE HAZARD

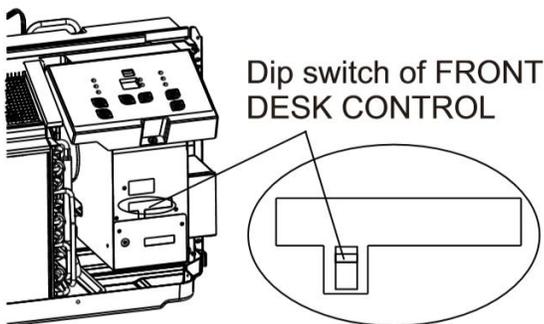
- Failure to follow this caution may result in equipment damage or improper operation.
- Improper wiring may damage unit electronics. Common busing is not permitted. Damage or erratic operation may result.

NOTE:

1. Use terminal 4-way for heat pump connection only.
2. Suggest setting the compressor protection time to more than 3 minutes in the wall thermostat. If less than 3 minutes, the compressor will still have 3 minutes delay.
3. Wall thermostat must be heating changeover 4-way valve.
4. For thermostats that have only fan speed output, the fan speed is determined by how the terminal connector is wired. If a low fan is desired, wire the G output from the thermostat to (LOW-FAN) on the unit terminal block. If a high fan is desired, wire the G output from the thermostat to (HI-FAN) on the unit terminal block.
5. The range of set temperature of the wall thermostat must align with the range of the DIP switch setting.
6. The wall thermostat must be set the type properly in consonance with the unit type: heat pump or not.
7. If the wall thermostat has only one electrical heater output, connect the two terminals of HEAT 1 and HEAT 2, and the unit can operate two electrical heaters (for models has two electrical heaters only). Otherwise, operate one electrical heater.
8. Do not remove the control panel.

FRONT DESK CONTROL

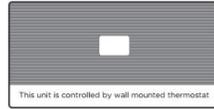
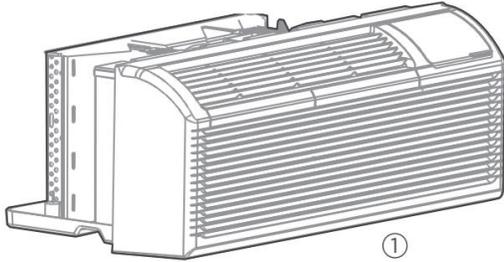
The controller can handle a switch signal from FC(L) and FC(N) input, called front desk control. Input must be 24VAC. If the system doesn't receive a 24 VAC signal, it will turn the unit off. Otherwise, the unit runs under normal control. The DIP switch can control the FRONT DESK CONTROL feature. If the DIP switch is in the DOWN position, the unit will be turned off. Otherwise, the unit runs under normal control.



INSTALLATION

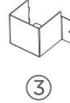
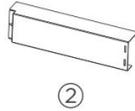
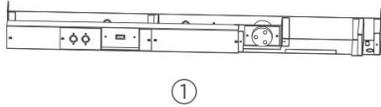
UNIT AND ACCESSORIES

What is in the Package



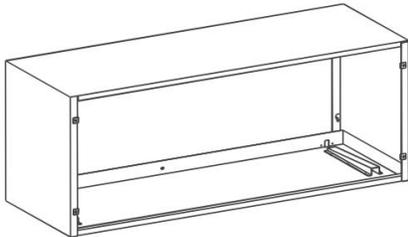
- ① Unit
- ② Control panel sticker
- ③ Owner's manual

Subbase kit (for 265V model only, optional)



- ① Subbase
- ② Cover panel I
- ③ Cover panel II
- ④ Screws x8

What you need to purchase



Wall sleeve

Prepare the following tools



Gloves



Screwdriver



Pencil



Drill



Ruler or tape measure



Level

NOTE:

Illustrations in the manual are for explanatory purposes. The actual shape of your unit may be slightly different. The actual shape shall prevail.

The sub-base kit is for PTAC with 265V only. It is not provided with units which should be purchased individually.

⚠ CAUTION

- There are sharp edges that can cause serious cuts.
- When lifting the air conditioner, it is HEAVY. Use 2 people to lift.

⚠ CAUTION

- Do not put obstacles around air-inlet or inside of air-outlet of the unit, such as window curtain etc.
- Always insert the filter securely, clean filter once every two weeks as required.

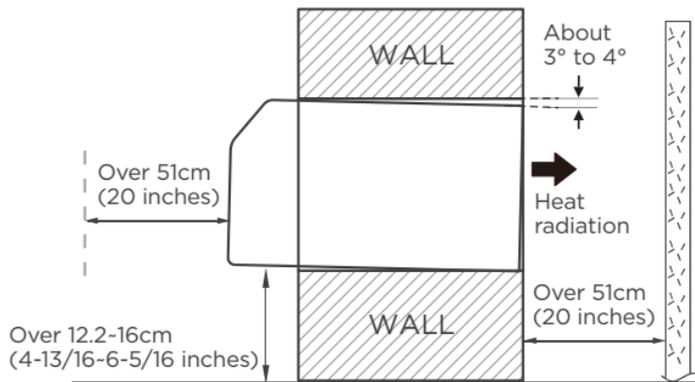
USING THE EXISTING SLEEVE

For the existing sleeve, you should measure the wall sleeve dimensions.

Install the new PTAC according to the installation instructions to achieve the best performance. All wall sleeves used to mount the new PTAC must be in good structural condition and have a rear grille that securely attaches to the sleeve or the flange of the sleeve to secure the new PTAC.

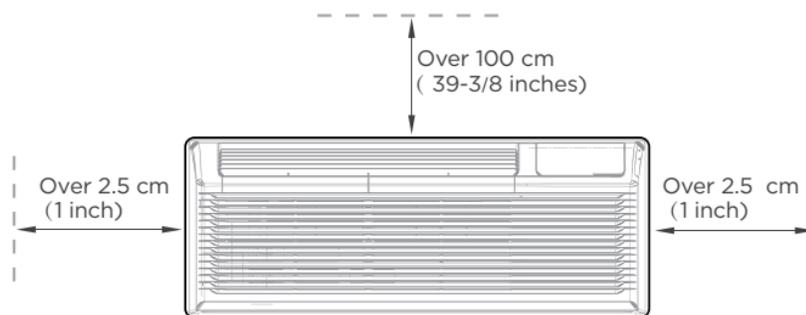
To avoid vibration and noise, make sure the unit is installed securely and firmly.

When installing the sleeve, make certain there is nothing within 20" of the back that would interfere with heat radiation and exhaust airflow.



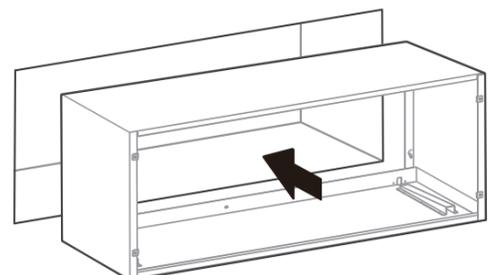
💡 NOTE

To make the appliance work better, please do not place a barrier in the air outlet.



IN PREPARATION OF SLEEVE & REAR GRILLE ASSEMBLY

1. The suggested PTAC sleeve part number is 425-0120.
2. The suggested PTAC rear grille part number is 425-0121. There is a decorative style of sleeve option which is in grey. Part number is 425-0123
3. If there is an existing sleeve/grille, please ignore this step.
4. Refer to PTAC sleeve/grille installation instructions 950-0304 & 950-0305 for details.



UNIT INSTALLATION

For 208/230V Models

Carefully remove shipping tapes from the front panel.

Remove the front panel.

Remove the shipping screw from the vent door.

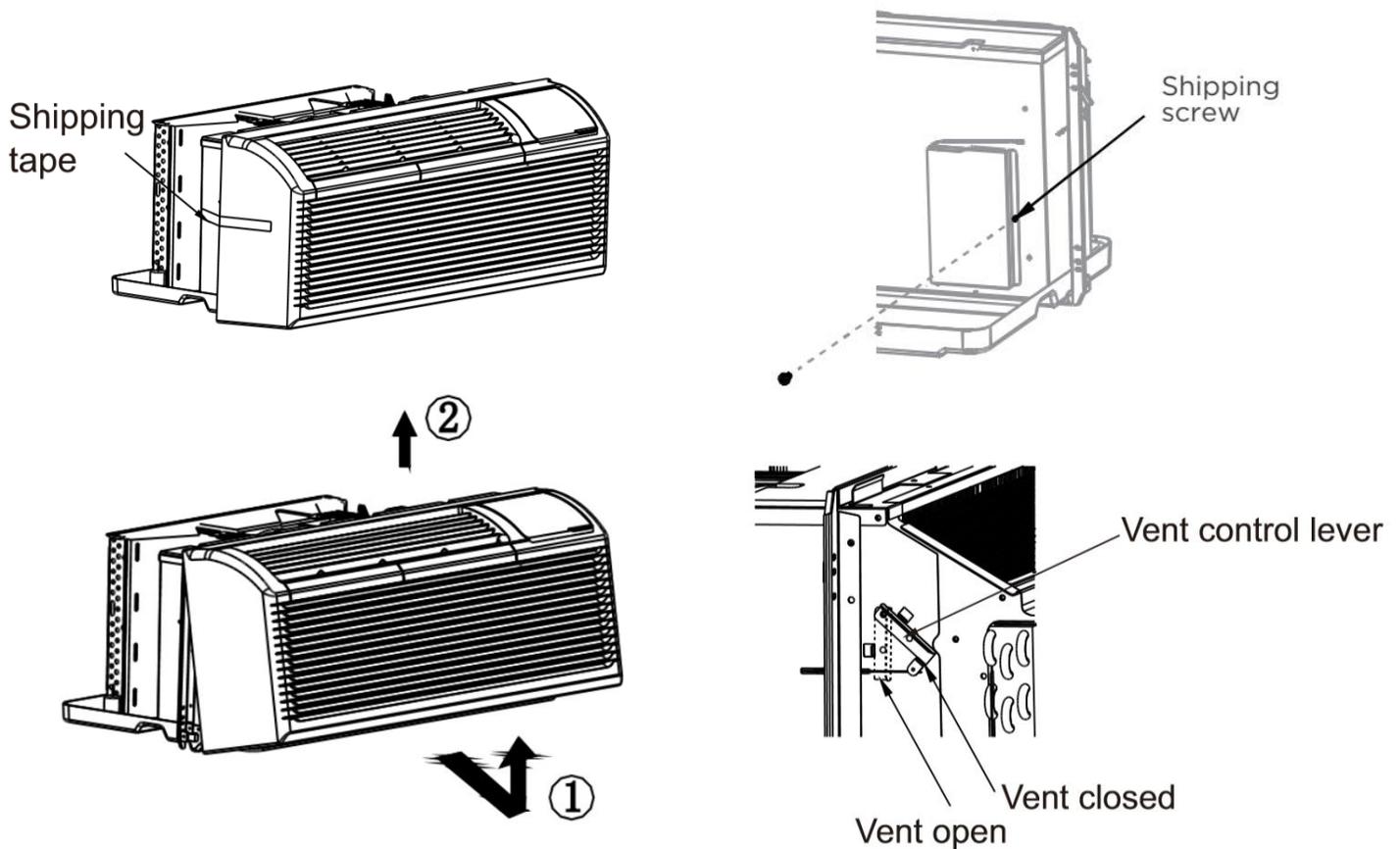
Pull out at the bottom to release it from the tabs ① and then lift ②.

Rotate the vent control lever to either open or close the vent door.

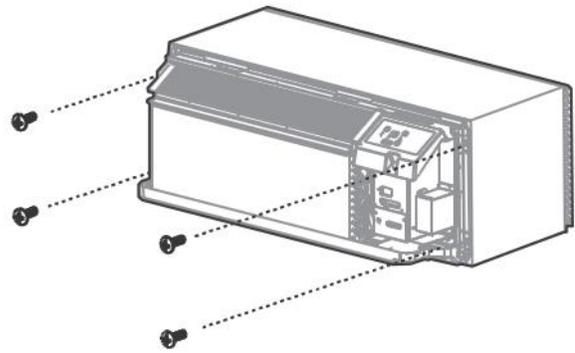
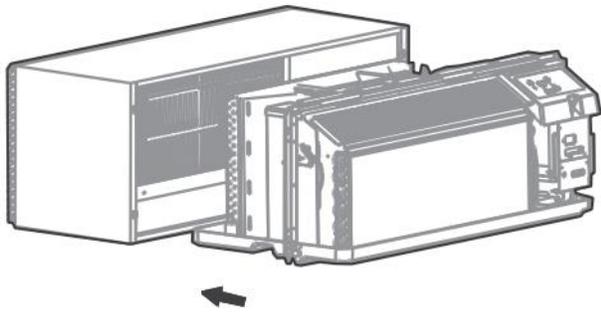
NOTE:

When the vent control lever is set at CLOSE, only the air inside the room is circulated and filtered.

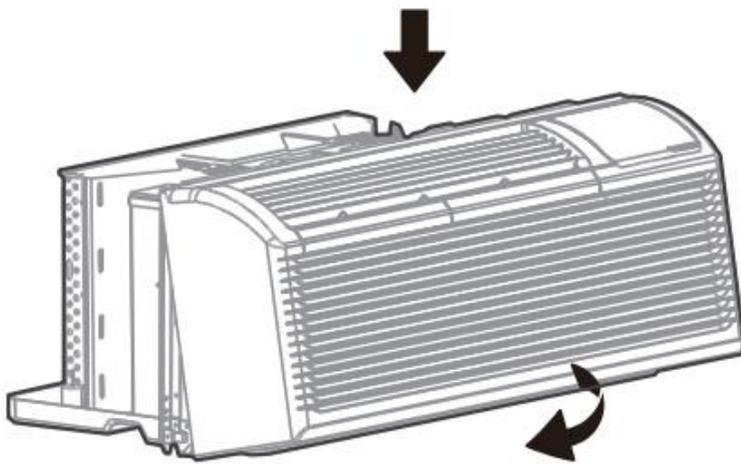
When set at OPEN, some outdoor air will be drawn into the room. This will reduce heating or cooling efficiency.



Lift the unit level and slide the unit into wall sleeve until firmly against the front of wall sleeve and secure with 4 screws and washers (supplied with the SLEEVE ASSEMBLY) through the unit flange holes.



Reinstall the front panel.
Place tabs over the top rail. Push inward at the bottom until the panel snaps into place.



For 265 V Models (Model: PTACM309HP3VX & PTACM312HP3VX)

Complete Sub-base Kit Installation

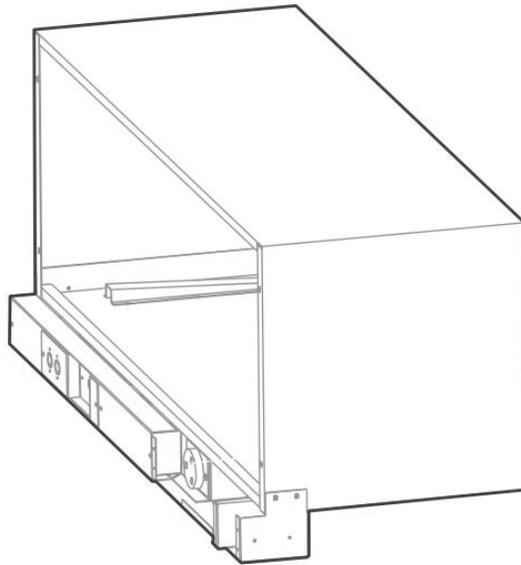
⚠ CAUTION

- When the model you purchase is 265V model, install it with Subbase kit and connect power wiring on site.
- The product plug must be inserted into the power jack of the Subbase kit for use.
- All wiring operations and power requirements must be operated and used in accordance with local regulations and policies.

⚠ WARNING:

- To avoid the risk of property damage, personal injury or death due to electrical shock, disconnect the electrical power before working on this product.
- The instructions provided with the selected subbase kit must be carefully followed. It is the responsibility of the installer to ensure the connection of components is done in accordance with these instructions and national wiring regulations.
- Before performing any electrical or wiring work, turn off the main power to the system.

Sub-base Outline

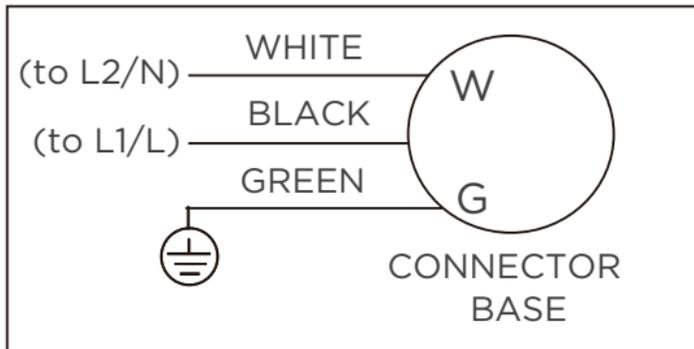


What you need.



NOTE: The sub-base is not provided with your unit.

Electronic Work



NOTE:

The wiring illustration is for purpose only. Your unit may be slightly different. The actual shape shall prevail. An all-pole disconnection device should be installed to connect the sub-base and main power supply.

Prepare the sub-base

1. Drill four 1/8" holes.

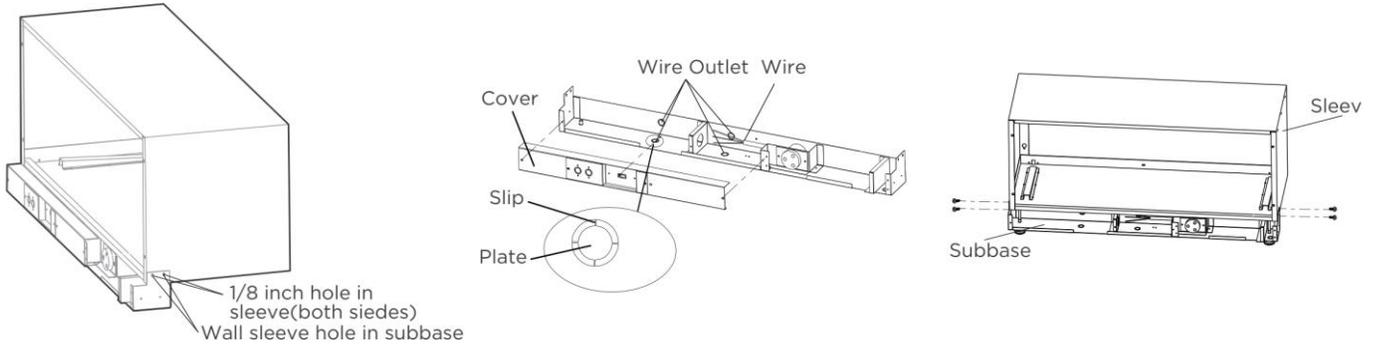
Drill four 1/8" holes in the sleeve to line up with the wall sleeve holes in sub-base as shown.

2. Prepare for the wiring.

Remove the COVER by loosening 3 screws, select one from the four wire outlets according to your need, and remove the plate by clipping four slips as shown. Burnish the wire outlet and spray anti-corrosive paint on it to avoid cutting and rusting the wires. Insert conduit into the wire outlet and connect the wires of the conduit with the sub-base in accordance with the electrical codes. NOTE: Make sure the unit is properly grounded.

3. Install the sub-base to the sleeve.

Install the sub-base to the sleeve with found screws as shown and tighten them.



4. Install the unit to the sleeve.

Install the unit into the sleeve and plug the power cord of the unit into the plug receptacle of the subbase as shown. The power line can be wound and placed in the slot of the sub-base.

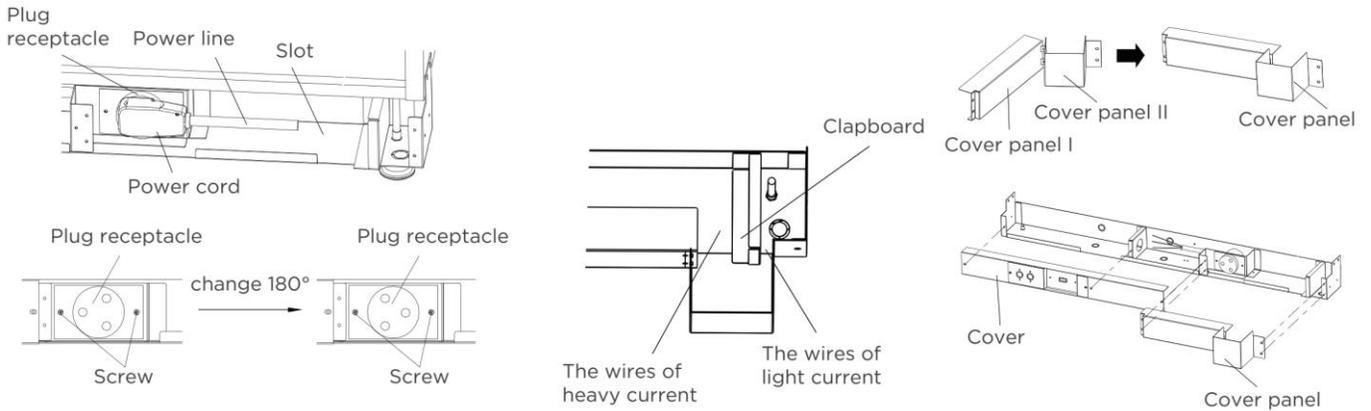
NOTES:

The direction of the plug receptacle can be changed to 180° by loosening two screws and reinstalling it as shown so that it is suitable for different power cord.

The wires of heavy current shall be placed on the left of the clapboard, and the wires of light current shall be placed on the right as shown. The unit shall be installed in accordance with national wiring regulations.

5. Assemble the SUB-BASE.

Insert the COVER PANEL II into the cover panel I and rotate a certain angle as shown. And install the COVER and COVER PANEL to the SUB-BASE with 7 screws securely as shown.



CARE AND CLEANING

⚠ CAUTION

UNIT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation. Airflow restriction may cause damage to the unit.

⚠ CAUTION

UNIT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

- **Do not** operate unit without filters in place. If a filter becomes torn or damaged, it should be replaced immediately.
- Operating without filters in place or with damaged filter will allow dirt and dust to reach indoor coil and reduce cooling, heating, airflow and efficiency of unit. Airflow restriction may cause damage to unit.

CLEAN THE FRONT PANEL AND CASE

Turn the unit off and disconnect the power supply. To clean, use water and a mild detergent. **DO NOT** use bleach as an abrasive. Some commercial cleaners may damage the plastic parts.

OUTDOOR COIL

The coil on the outdoor side of the unit should be checked regularly. The unit will need to be removed to inspect the dirt build-up that will occur on the inside of the coil. If clogged with dirt and soot, the coil should be professionally cleaned. Clean inside and outside of outdoor coils regularly.

NOTE: Never use a high-pressure spray on the coil.

CLEAN THE AIR FILTER

IMPORTANT: TURN THE UNIT OFF BEFORE CLEANING.

The most important thing you can do to maintain unit efficiency is to clean the filter once every two weeks as required.

Clogged filters reduce cooling, heating, and airflow.

Keet Filters clean will:

Decrease cost of operation.

Save energy.

Prevent clogged indoor coil.

Reduce the risk of premature component failure.

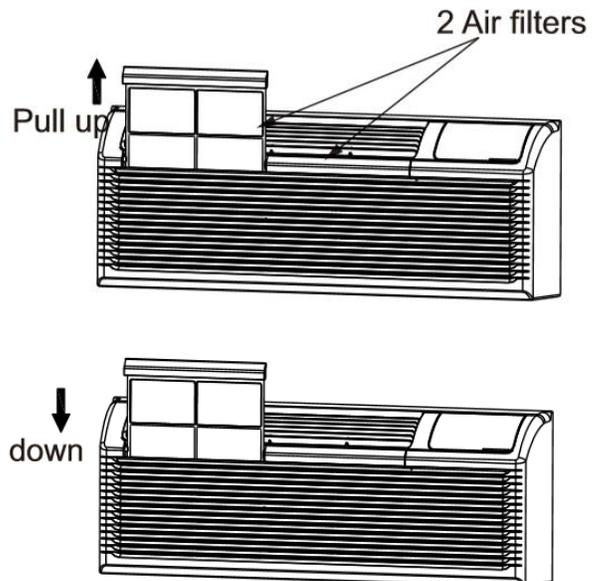
To clean air filters:

Vacuum off heavy soil.

Run water through the filter.

Dry thoroughly before replacing.

Replacing Air Filter



CLEAN THE VENT DOOR FILTER

IMPORTANT: TURN THE UNIT OFF BEFORE CLEANING.

If the vent door is open, access requires the removal of the unit from the wall sleeve. Clean the vent filter twice a year or as required.

Make sure to remove the shipping screws from the vent door.

Rotate the vent control lever to open the vent door.

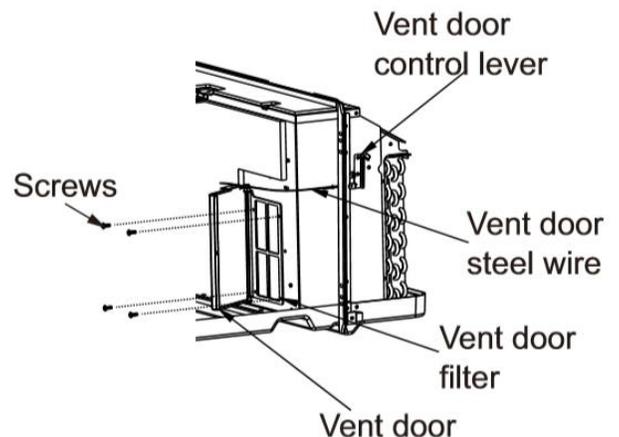
Remove four screws from the vent door filter.

First, pull out the vent door steel wire from the hole of the vent door, then take off the vent door and filter.

Clean the filter. Dry thoroughly before replacing.

Replace the vent door and filter and reinstall the four screws.

Reinsert the vent door steel wire into the hole of the vent door.



TROUBLESHOOTING

Before calling for service, try the suggestions below to see whether you can solve your problem without outside help.

Possible Causes	Solutions
Unit doesn't start. Unit may be unplugged. Fuse may be blown. Circuit breaker may have been tripped. Unit may be off. Unit may be in a protection mode.	Check that plug is plugged securely in wall receptacle. Note: Plug has a test/reset button. Make sure tat the plug has not tripped. Replace the fuse. Reset circuit breaker. Turn unit on (bottom right button on keypad).
Unit not cooling/heating room. Unit air discharge section is blocked. Temperature setting is not high or low enough. Note: Setpoint limits may not allow the unit to heat or cool the room to the temperature desired. Check section on dipswitch settings. Unit air filter are dirty. Room is excessively hot or cold when unit is started. Vent door left open. Unit may be in a protection mode. Compressor is in time delay.	Make sure that curtains, blinds or furniture are not restricting or blocking unit airflow. Reset to a lower or higher temperature setting. Remove and clean filters. Allow sufficient amount of time for unit to heat or cool the room. Start heating or cooling early before outdoor temperature, cooking heat or gatherings of people make room uncomfortable. Close event door. Check dipswitch and wall thermostat settings for desired comfort. Wait approximately 3 minutes for compressor to start.
Display has strange numbers/characters on it.	The unit may be in a protection mode. The unit may be set for °C (instead of °F).
Unit making noises.	Clicking, gurgling and whooshing noises are normal during operation of unit.
Water Dripping Outside	If a drain kit has not been installed, condensation runoff during very hot and humid weather is normal. If a drain kit has been installed and is connected to a drain system, checking gaskets and fittings around drain for leaks and plugs.
Water Dripping inside. Wall sleeve is not installed level.	Wall sleeve must be installed level for proper drainage of condensation. Check that installation is level and make any necessary adjustments.
Ice or frost forms on indoor coil Low outdoor temperature Dirty filters	When outdoor temperature is approximately 55°F or below, frost may form on the indoor coil when unit is in cooling mode. Switch unit to FAN operation until ice or frost melts. Remove and clean filters.
Compressor Protection Power may have cycled, so compressor is in a restart protection.	Random Compressor Restart - Whenever the unit is plugged in, or power has been restarted, a random compressor restart will occur. After a power outage, the compressor will restart after approximately 3 minutes. Compressor Protection – To prevent short cycling of the compressor or there is a random startup delay of 3 minutes and a minimum compressor run time of 3 minutes.
Electric Heating Failure	Clean the evaporator once every three months by professional people.

NOTES:

1. If the circuit breaker is tripped or the fuse is blown more than once, please contact a qualified electrician.
2. If the unit is installed where condensation drainage could drip in an undesirable location, an accessory drain kit should be installed and connected to the drain system.

SPECIFICATIONS

IRP Model No.	PTACM309CH3ZX	PTACM309HP3ZX	PTACM312CH3ZX	PTACM312HP3ZX
Product Code	425-0200	425-0201	425-0202	425-0203
Rated Voltage	208-230V	208-230V	208-230V	208-230V
Frequency/Cycle	1 Ph/60Hz	1 Ph/60Hz	1 Ph/60Hz	1 Ph/60Hz
EER Btu/hr/W	12.8	12.8	11.6	11.6
COP W/W	N/A	3.8	N/A	3.4
Cooling Capacity Btu/hr	8800/8700	9200/9100	12000/11800	12000/11800
Cooling Watts	690/680	720/710	1030/1010	1030/1010
Cooling Amps	3.7/4.0	3.7/4.0	5.3/5.8	5.2/5.6
Heating Capacity Btu/hr	N/A	7800/7500	N/A	10800/10500
Heating Watts	N/A	600/580	N/A	880/840
Heating Amps	N/A	3.4/3.6	N/A	4.8/5.1
Electrical Heating Capacity Btu/hr	10900/8900	10900/8900	10900/8900	10900/8900
Electrical Heating Watts	3500/2897	3500/2897	3500/2897	3500/2897
Electrical Heating Amps	15.3/13.7	15.3/13.7	15.3/13.7	15.3/13.7
Refrigerant (R32) Charge (oz)	17.64	22.58	21.87	26.81
Max dB(A) Level (Indoor/Outdoor)	51/63	52.5/67.5	52.5/66	51/67.5
Compressor Capacitor μ F	20	20	35	35
Outdoor Fan Motor Capacitor μ F	3	3	3	3
Unit Dimensions - W x H x D	42"x16"x21"	42"x16"x21"	42"x16"x21"	42"x16"x21"
Sleeve Dimensions - W x H x D	42"x16"x14.8"	42"x16"x14.8"	42"x16"x14.8"	42"x16"x14.8"
Operating Temperature Indoor	Cooling 63-89° F- Heating 32-81° F-			
Operating Temperature Outdoor	Cooling 64-109° F Heating 23-75° F			
Design Pressure Low/High Psig	300/580	300/580	300/580	300/580
N.W. (Lbs.)	101.4	104.7	108	110.2
G.W. (Lbs.)	110.5	113.8	117.1	119.3
Plug Type	LCDI 6-20P	LCDI 6-20P	LCDI 6-20P	LCDI 6-20P
Certification	cUL/AHRI	cUL/AHRI	cUL/AHRI	cUL/AHRI

IRP Model No.	PTACM312CH5ZX	PTACM312HP5ZX	PTACM315CH3ZX	PTACM315HP3ZX
Product Code	425-0204	425-0205	425-0206	425-0207
Rated Voltage	208-230V	208-230V	208-230V	208-230V
Frequency/Cycle	1 Ph/60Hz	1 Ph/60Hz	1 Ph/60Hz	1 Ph/60Hz
EER Btu/hr/W	11.6	11.6	10.6	10.6
COP W/W	N/A	3.4	N/A	3.2
Cooling Capacity Btu/hr	12000/11800	12000/11800	14700/14500	14700/14500
Cooling Watts	1030/1010	1030/1010	1390/1370	1390/1370
Cooling Amps	5.3/5.8	5.2/5.6	7.5/8.9	6.5/7.4
Heating Capacity Btu/hr	N/A	10800/10500	N/A	13500/13200
Heating Watts	N/A	880/840	N/A	1170/1120
Heating Amps	N/A	4.8/5.1	N/A	6.0/6.4
Electrical Heating Capacity Btu/hr	15000/12200	15000/12200	10900/8900	10900/8900
Electrical Heating Watts	5000/4100	5000/4100	3500/2897	3500/2897
Electrical Heating Amps	22.3/20.1	22.3/20.1	15.3/13.7	15.3/13.7
Refrigerant (R32) Charge (oz)	21.87	26.81	21.52	31.75
Max dB(A) Level (Indoor/Outdoor)	52.5/66	51/67.5	51/65	53/67
Compressor Capacitor µF	35	35	60	60
Outdoor Fan Motor Capacitor uF	3	3	3	3
Unit Dimensions - W x H x D	42"x16"x21"	42"x16"x21"	42"x16"x21"	42"x16"x21"
Sleeve Dimensions - W x H x D	42"x16"x14.8"	42"x16"x14.8"	42"x16"x14.8"	42"x16"x14.8"
Operating Temperature Indoor	Cooling 63-89° F- Heating 32-81° F-			
Operating Temperature Outdoor	Cooling 64-109° F Heating 23-75° F			
Design Pressure Low/High Psig	300/580	300/580	300/580	300/580
N.W. (Lbs.)	108	110.2	105.8	113.5
G.W. (Lbs.)	117	119.3	113.3	122.6
Plug Type	LCDI 6-30P	LCDI 6-30P	LCDI 6-20P	LCDI 6-20P
Certification	cUL/AHRI	cUL/AHRI	cUL/AHRI	cUL/AHRI

IRP Model No.	PTACM315CH5ZX	PTACM315HP5ZX	PTACM309HP3VX	PTACM312HP3VX
Product Code	425-0208	425-0209	425-0210	425-0211
Rated Voltage	208-230 V	208-230 V	265 V	265 V
Frequency/Cycle	1 Ph/60Hz	1 Ph/60Hz	1 Ph/60Hz	1 Ph/60Hz
EER Btu/hr/W	10.6	10.6	11.3	10.5
COP W/W	N/A	3.2	3.3	3.2
Cooling Capacity Btu/hr	14700/14500	14700/14500	9000	12000
Cooling Watts	1390/1370	1390/1370	770	1130
Cooling Amps	7.5/8.9	6.5/7.4	3.9	5.3
Heating Capacity Btu/hr	N/A	13500/13200	8000	10800
Heating Watts	N/A	1170/1120	620	970
Heating Amps	N/A	6.0/6.4	2.9	5.1
Electrical Heating Capacity Btu/hr	15000/12200	15000/12200	10900	10900
Electrical Heating Watts	5000/4100	5000/4100	3500	3500
Electrical Heating Amps	22.3/20.1	22.3/20.1	13.2	13.2
Refrigerant (R32) Charge (oz)	21.52	31.75	19.4	27.51
Max dB(A) Level (Indoor/Outdoor)	51/65	53/67	63/48.8	65.9/50.7
Compressor Capacitor μ F	60	60	15	25
Outdoor Fan Motor Capacitor μ F	3	3	2	2
Unit Dimensions - W x H x D	42"x16"x21"	42"x16"x21"	42"x16"x21"	42"x16"x21"
Sleeve Dimensions - W x H x D	42"x16"x14.8"	42"x16"x14.8"	42"x16"x14.8"	42"x16"x14.8"
Operating Temperature Indoor	Cooling 63-89° F- Heating 32-81° F-			
Operating Temperature Outdoor	Cooling 64-109° F Heating 23-75° F			
Design Pressure Low/High Psig	300/580	300/580	300/580	300/580
N.W. (Lbs.)	105.8	113.5	99.2	105.8
G.W. (Lbs.)	114.9	122.6	108.3	114.9
Plug Type	LCIDI 6-30P	LCIDI 6-30P	7-20P	7-20P
Certification	cUL/AHRI	cUL/AHRI	cUL/AHRI	cUL/AHRI

NOTES:

Product specifications are subject to change without notice.

Operating Temperature Range (outdoor), the outdoor temperature at which the unit operates normally.

If the outdoor temperature is out of this range the unit can still operate but error codes or protections may occur.

WARRANTY

International Refrigeration Products, Inc. warrants the accompanying PTAC unit to be free of defects in material and workmanship for the applications specified in the operation manual and installation manual for (1) year on parts and five (5) years on the compressor, valid from date of original retail purchase in the United States or Canada. If the unit exhibits a defect in normal use and it is determined to LABOR and SHIPPING are not covered under warranty. be within the warranty period International Refrigeration Products, Inc. will, at its option, either provide parts for repair or replace the unit free of charge within a reasonable time after the unit is returned.

This warranty DOES NOT cover:

- Damage, accidental or otherwise, to the unit while in possession of the consumer that is not a result of a defect in material or workmanship.
- Damaged caused by consumer misuse, tampering, or failure to follow all care and maintenance instructions in the manual.
- Damage to the finish of the case or other parts caused by water.
- Damage caused by repairs or alterations to the unit by anyone other than a qualified technician.
- Damaged caused by natural calamities, bad using environment or face unforeseeable circumstances.
- Air Filters
- Normal wear and tear.
- Freight and insurance cost for the warranty service.
- Out of carton issues must be reported within one day.

A warranty activation card must be completed and sent in to activate the warranty for the accompanying unit.

EXTENDED WARRANTY OPERATIONS AVAILABLE THROUGH JB WARRANTIES

For more information go to <https://partners.jbwarranties.com/irp>
Or scan the QR Code with your Smart Phone



TECHNICAL ASSISTANCE

If you still need service:

Please contact the installation contractor, or call International Refrigeration Products, Inc. at (215) 750-9876 between the hours of 8:00 a.m. and 4:30 p.m. E. T., Monday through Friday.

For faster service, please have the model and serial numbers of the unit available when you call.

International Refrigeration Products, Inc.
1035 Wheeler Way
Langhorne, PA 19047
www.irpsales.com