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YMGI, Engineered HVAC & R Products for Maximum Green World and Better Tomorrow

Literature Part No.: Lit-CC-0301-20090817

For Ceiling Cassette Styles-0 and 3Series, 18 to 60K Btu/h Cooling and Heat Pump

This Manual is Subject to Change to Reflect Our Continuous Effort for Engineering Improvement without Prior Notice.

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YMGI , A Comfort Maker, A Joy Companion, A Satisfaction Guarantor...

User's Manual and Installation Instruction Ceiling Cassette-Single and Multi Zone (18 to 60K)



⚠ WARNING

This product is designed and manufactured free from defects in material and workmanship under the normal use and maintenance. Installation, operation, maintenance and service shall follow or Local Codes and related manuals from us. Otherwise, damage to equipment or properly even injury to people may occur.

Installer: Read this instruction manual before installation. Remember to sign on warranty card.

User: Keep this instruction manual for future maintenance and service use.

Service: Use this instruction manual for service reference.



LITERATURE: Lit-CC-II-0301-20090817

CONTENTS

CONTENTS	1
INTRODUCTION.....	2
OPERATING TEMPERATURE RANGES	3
IMPORTANT NOTES	4
SAFETY PRECAUTIONS	7
SYSTEM MODEL TABLE.....	8
UNIT DIMENSIONS AND WEIGHT	9
IDENTIFICATION OF PARTS	10
OPERATION OF THE UNIT.....	13
FUNCTIONS-REMOTE OR LINE CONTROLLER	14
ERROR CODE & TROUBLE SHOOTING	15
OPERATION INSTRUCTIONS.....	16
MAINTENANCE.....	18
TROUBLE SHOOTING.....	20
INSTALLATION INSTRUCTIONS.....	21
LIMITED PRODUCT WARRANTY POLICIES.....	29
LIMITED PRODUCT WARRANTY REGISTRATION CARD.....	30
WARRANTY AND TECH. SUPPORT	31
USER NOTES AND SERVICE LOG.....	32

INTRODUCTION

Ceiling Mount Cassette Systems are designed for high performance, easy installation and service. Each system consists of one or several indoor units and one outdoor unit, which are connected by one set or several sets of interconnection refrigerant pipes and electric wires.

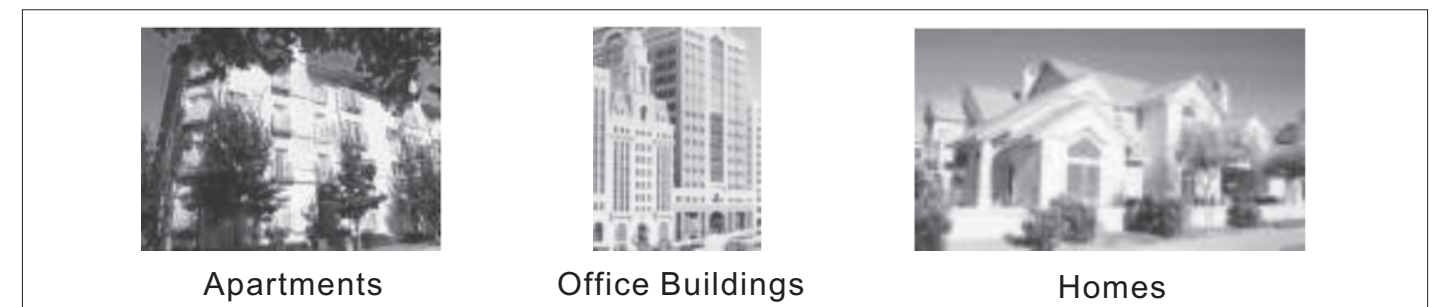
As shown in the following sample picture, air is drawn through the center grilles/filters and then discharged at 4 vents in 4/8 directions. In cooling mode, air passing through coil is cooled; in heating mode, air passing through coil is heated.



**Sample Split System-Indoor and Outdoor Units
(For Continuous Engineering Improvement and Various Marketing Needs and Actual Part Availability Reason, Unit Appearance Subject to Change or Update Continuously without Prior Notice)**

The electrical and thermal power for the whole system come from the outdoor unit. In YMGI SHCR or TTWC series of side discharge outdoor condensing unit(s), electrical and thermal components such as compressors and motors and heat exchange coils and others, are incorporated into the cabinet in an optimized order. These condensing units can be either hung on the wall or installed on the ground. Once stacking or bracket kit is used, some outdoor units can be stacked 2 or 3 units high, upon unit size and applications. Air is discharged horizontally, quietly and smoothly. These units are perfect fit in locations where installation and applications of general up-flow condensing units are limited, such as apartments, condos, lofts, multi-families and high-rise buildings and others named or unnamed.

Indoor unit(s) delivers the thermal and acoustical comfort to the rooms. In cooling mode, air passing through coil is cooled; in heating mode, air passing through coil is heated. Air is filtered or treated by the built-in mechanism (washable or enzyme equipped or electrostatic powered filter, varies from model to model), before being delivered into the room, with more than enough comfort and care, at a wide angle (swing or not, varies from model to model).



Application Samples-Ceiling Mount Cassette

NOTES:

Since ductless system is not designed to incorporate or use with ducted return or discharge tunnels, one single-zone unit SHALL NOT be used to take care of the cooling or heating load of more than one-story room. Several single-zone ductless systems or multiple-zone ductless systems shall be used in this regard.

These units are designed for applications at:

- * Residential
- * Commercial
- * Industrial
- * Light commercial
- * Institutional
- * Hospital

These units are designed for general T-1 weather conditions as outlined in the following table:

OPERATING TEMPERATURE RANGES

⚠ WARNING Operate the unit in the temperature ranges shown below. It is not recommended to operate the unit out of these ranges, otherwise warranty will be voided.

Temperature Ranges of Remote/Line Controller

Mode	Dry Bulb-Low	Wet Bulb-High
Cooling	64°F	86°F
Heating	64°F	86°F

Recommended Temperature Ranges-Indoor Side

Mode	Dry Bulb	Wet Bulb
Cooling	61 to 105°F (16 to 40.5°C)	NA
Heating	17 to 86°F (-8 to 30°C)	17-42°F (-8 to 5°F)

Recommended Temperature Ranges-Outdoor Side

Mode	Dry Bulb	Wet Bulb
Cooling	45°F to 115°F (7 to 46.1°C)	NA
Heating	17°F to 75°F (-8 to 23.8°C)	17-35°F (-8 to 2°C)

IMPORTANT NOTES:

- * If cooling is required in lower than 45°F(7.2°C) ambient temperature, low ambient control is needed at outdoor unit.
- * For our condensing units that comes with low ambient control, no add-on work is required; for those that don't come with it, need to install one at job site.
- * Need to refer to the low ambient control manufacturer for wiring (wiring in AC only model is different that for HP model).

NOTES:

Since ductless system is not designed to incorporate or use with ducted return or discharge tunnels, one single-zone unit SHALL NOT be used to take care of the cooling or heating load of more than one-story room. Several single-zone ductless systems or multiple-zone ductless systems shall be used in this regard.

Since outdoor units discharge air horizontally, they can be installed on the wall or balcony, where is close to indoor unit, at least the following benefits will be brought to contractors and customers:

- * Indoor unit operates much quieter than air diffuser of central air conditioning system.
- * Stylish design of indoor unit adds beauty to rooms.
- * Connection pipe, refrigerant usage is much saved compared to installing up-flow condensing units on the ground and long copper/wire lines needed between indoor and outdoor units.
- * Contractor work is eased and time is saved.
- * Efficiency and lifetime of system is increased.
- * Individually controlled/zoned system design allows high-rise apartment building owners can control their own equipment usage and utility bills.
- * Can hide the condensing unit under deck, in the recess, behind the ventilation grill or other vents, without scarifying building architectural looking or damaging historically reversed structure...

Ceiling Mount Systems come with three types:

- * Cooling only
- * Heat pump
- * Heat pump with electric heater



These units can be easily wired. Either indoor unit or outdoor unit can be used with any matched comparable outdoor unit or indoor unit as long as they have matched size and control. Must refer to the electric wiring diagrams that come with the units.



Each system is fully tested per rigorous standards at factory. Acoustically and thermally balanced design and systematically optimized system give each unit a healthy birth off the assembly line with proved quality and reliability.

IMPORTANT NOTES

SAFETY WARNINGS

READ THESE SAFETY WARNINGS COMPLETELY PRIOR TO ANY USE.

	Ground connection
	Disconnect the plug

	Forbidden
	Imperative

These precautions are essential and must be strictly observed.

DO NOT pull on the power cord or refrigeration lines. Install them in a secured position. A line set plastic cover is recommended.

DO NOT install the indoor unit close to cooking surfaces or ventilation systems. Poor placement could inhibit peak performance.

DO NOT install the unit in places where there is exposure to flammable materials or gas leakage.

DO NOT blow cold air directly towards people for extended periods. It may get you a bad cold.

DO NOT use wire or circuit breakers that do not meet electrical safety standards. Several circuits cannot be connected to one breaker.

DO NOT use chemical solvents, flammable insecticides, or abrasive materials. Clean the unit only with a soft dry cloth or rag.

DO NOT wire or open the unit while it is running. Make sure to shut off all circuits prior to inspecting or servicing the unit.

DO NOT continue to operate the unit if there is any abnormal odor, burning, scorching, or smoke. Stop and disconnect the unit immediately.

DO NOT install unit in a damp laundry room or near flammable gas. All units must be protected by certified electrical circuit breakers and in accordance with all safety codes.

DO NOT use the system for anything other than what it was designed for or any non-HVAC purposes. Do not store near food, paint, or other chemicals.

DO NOT use the unit in cool or dry mode for prolonged periods where humidity is higher than 80%.

DO NOT operate the unit for prolonged periods without refreshing ambient air. Opening a door or window periodically will suffice.

SAFETY CAUTIONS AND ALERTS

Installation, Operation, Maintenance, and Service shall follow professional standards and practices for conventional cooling and heating equipment, under International, National, State, City or Local Codes, and follow guidelines listed in all related manuals and associated product information provided directly from YMGI. Failure to adhere to proper Installation, Operation, Maintenance, and Service could result in damage to equipment, personal property, or physical injury, or even death.

Installation must be performed following the YMGI Maintenance Manuals.

Installation must be performed by a certified technical installer only. DO NOT attempt to install the unit by yourself trying to save money. Improper or Incomplete Installation will void YMGI provided warranty and could result in injury or death or property damage due to fire, electrical shock, leaking, collapsing. Shall consult the authorized YMGI Distributor or Dealer for recommended Contractors/Installers.

Install the unit onto a strong load bearing structure. The location must be capable of handling the weight load of the unit to prevent the unit from falling or causing injury. Attach both the indoor and outdoor units to the brackets that are fixed to the right position securely.

Shut off the main power prior to and during installation to avoid electrical shock. Make sure that the electrical power is disconnected from the unit by making a notice or put a sign at the power switch panel, to keep other people from setting the power back during installation.

Connect all wiring securely. Any loose wire or other bad contact may cause an electrical arc, overheating, or fire hazard. Make sure that the unit is grounded following YMGI Instructions and all NEC, International, State, City, and Local Codes. Electrical cover shall be securely attached to the indoor and outdoor unit service panels, otherwise, could result in fire or electric shock due to accumulation of dust, sediments, water, moisture, etc.

IMPORTANT NOTES

SAFETY CAUTIONS AND ALERTS

Only use manufacturer specified and codes allowed wires and conduits to connect to the units so the stress is not applied to the sections. Incomplete connecting and insecure fixing could cause fire or damage.

Wiring must conform to national regulations. Failure to adhere to these standards could result in personal injury or death or property damage due to fire, electrical shock, falling units, or leaking.

Connect the power cord directly to a designated and exclusive AC Power Circuit Breaker and or Disconnect Switch. The circuit must exceed permissible currents and is free of insulation and contact defects. Shall refrain from intermediate or multiple connections to avoid fire or electric shock.

DO NOT supply power until all wiring and tubing is checked completely.

Double check for gas leaks during or after installation. The refrigerant gas may cause harmful substances when subjected to heat or fire. Refrigerant leakage will cause unit not to generate enough cooling or heating and even damage compressors and other parts.

YMGI LIABILITY DISCLAIMER

YMGI is NOT and shall NOT be responsible for any problems due to unprofessional, incorrect, incomplete installation, abuse to the unit, or abnormal usage which would be considered outside normal constraints, and natural disasters such as fire, flood, earthquake, lighting, or others similar.

YMGI IS NOT AND SHALL NOT RESPONSIBLE FOR:

Damage to the units or property or person due to careless, or incautious, or Rough Handling at job site, such as pulling wires or pipes or plastic parts too hard, dropping units, robbing unit surfaces, and etc.

Damage to the units or property or person due to Unprofessional or Incorrect or Incomplete Mechanical installation of units. Examples, not limited to, are: sharp bending, not finding kinks, cracking or deterioration of connecting pipes, unevenly sitting units, not securing the units, not cleaning or leaving dirty inside of or not tightening interconnecting pipes, not finding refrigerant or water leakage, not vacuuming, not opening

Only use authorized YMGI parts in the installation, maintenance, service, and repair of YMGI units. The use of non-authorized or defective parts will void the warranty and could cause injury or death or property damage due to water leakage, falling units, fire, electric shock, etc.

Pay extreme caution to interconnecting refrigerant copper tubing, when installing or relocating the unit. Make sure that no other substance than the specified refrigerant enters the refrigeration circuit. Any presence of foreign substances such as air or water or moisture can cause an abnormal pressure rise or overheat, which will result in an inefficient unit performance or unit malfunctions, and will shorten unit lifetime.

Pay extreme caution to interconnecting refrigerant copper tubing, when installing or relocating the unit. Tape two ends of the copper tubing, tape the wires for the corresponding indoor unit to the copper tubing, and mark well with either A, B, C or D to identify each copper tubing/wiring bundle. **Not to cross wiring or tubing among indoor units of the multiple zone systems.** The electrical wiring and copper tubing from each zone of indoor unit shall be connected to the corresponding wiring and copper tubing connections of the corresponding outdoor section (at outdoor condensing unit). Failure to do so will cause unit malfunctions, or damages to the compressors and other parts in the unit and even property or personal injuries.

refrigerant stopping valves at condensing units, not checking pressures, not covering bared refrigerant pipes and connections, not taping wire connections, not sealing drain pipe connections, incorrect piping such as crossing piping among multiple zones, and etc.

Damage to the units or property or person due to Unprofessional or Incorrect or Incomplete Electrical installation. Examples, not limited to, are: loose connection, improper sized wire sizes, not using circuit breaker, using undersized or oversized circuit breaker, using bad electrical parts, incorrect connection such as crossing wiring among multiple zones, and etc.

IMPORTANT NOTES

YMGI LIABILITY DISCLAIMER

YMGI IS NOT AND SHALL NOT RESPONSIBLE FOR:

Damage to the units or property or person due to Unprofessional or Incorrect or Incomplete Mechanical or Electrical Installation not mentioned above.

Damage to the units or property or person due to any other Poor Installation not conforming to YMGI user regulations, installation manuals and recommendations.

Damage to the units or property or person due to any other Improper Usage not conforming to YMGI user regulations, user operation manuals and factory recommendations.

Under performance or damage due to Operating the Air Conditioning System under Poor Physical Conditions such as anywhere there is airflow blockage, too much sunshine, too much corrosive gas or the sort.

AGAIN, YMGI IS NOT AND SHALL NOT BE RESPONSIBLE FOR:

Under performance or damage to the unit, property or person, at low vacuum level due to unprofessional or incautious or bad installation, or damage to the unit or interconnecting pipes after installation and during usage.

Under performance or damage due to exceeding the recommended distances or elevation levels between indoor and outdoor units.

Under performance or damage due to the presence of any foreign substances left inside refrigeration pipes.

Under performance or damage due to the materials left in the air-conditioner during installation.

Under performance due to poor installation or abnormal usage in other formats.

Water leakage problems due to incorrect or poor installation or unsealed drain hoses.

Damage due to refrigerant or oil leakage as a result of unsuccessful pipe installation or damage to the unit and or pipes during or after installation.

Damage due to supplying power before all wiring and tubing is completely finished and checked.

Damage due to not keeping units in the right positions during handling, installation or operation.

Under performance or damage due to the Usage Outside the YMGI Recommended Operation Ambient Conditions including proper temperature and humidity ranges.

Under performance or damage due to the Undersized or Oversized Unit Selection, Improper Design, Incorrect Unit Anticipation, and the sort.

Accumulated costs, services, or disasters due to unprofessional or incorrect or incomplete installation, or abnormal usage of the units.

Damage due to not grounding or poorly grounding unit, incorrectly wiring units, loose or unsecured wiring, or other bad contact which may cause an electrical arc, overheating, or fire hazard.

Damage or repairs required as a consequence of faulty installation or application.

Damage due to failure to start as a consequence of exceeding recommended voltage ranges (too low or too high), blown fuses, open circuit breakers.

Damage due to the inadequacy or interruption of electrical service.

Damage or repairs needed as a consequence of any misapplication, abuse, improper servicing, unauthorized alteration, or improper operation.

Damage due to the usage of parts not supplied or designated by YMGI.







Damage to the unit, property, and/or person of whatever kind, direct or indirect, special or consequential, resulting from the improper installation or usage of such products.

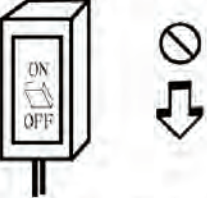
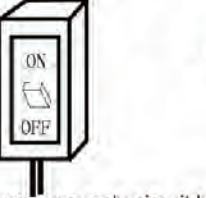




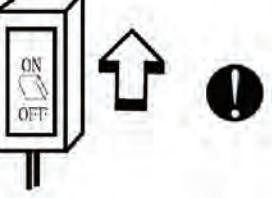




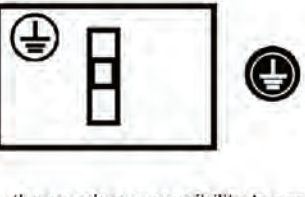
Damage from the units installed and operated outside USA or Canada or Mexico. Damage as a result of floods, winds, fires, lightening, accidents, corrosive atmosphere, or other conditions beyond the control of YMGI.



SAFETY PRECAUTIONS

Symbols in this User's Manual are interpreted as shown below:

-  Be sure not to do.
-  The feature of the appliance, instead of a fault.
-  Pay attention to such a situation.
-  Be sure to follow the instruction.
-  Grounding is necessary.
-  Warning: Incorrect handling could cause a serious hazard, such as death, serious injury, etc.

 <p>Do not use the power supply circuit breaker or pull off the plug to turn it off during operation. This may cause a fire due to spark, etc.</p>	 <p>Keep the power supply circuit breaker or plug from dirt. Connect the power supply cord to it firmly and correctly, lest an electric shock or a fire break out due to insufficient contact.</p>	 <p>Make sure to use correct power source Single phase model Use 220V~/50Hz power supply only 3-phase model Use 380V~/50Hz power supply only Otherwise, serious faults maybe occur or a fire maybe break out.</p>
 <p>Do not knot, pull or press the power supply cord, lest the power supply cord be broken. An electric shock or fire is probably caused by a broken power supply cord.</p>	 <p>Do not share the power source with other equipment, in case of fire.</p>	 <p>It is harmful to your health if the cool air reaches you for a long time. It is advisable to let the air flow be deflected to all the room.</p>
 <p>Turn off the appliance first before cutting off power supply when malfunction occurs.</p>	 <p>Do not repair the appliance by yourself. If this is done incorrectly, it may cause an electric shock, etc.</p>	 <p>Prevent the air flow from reaching the gas burners and stove.</p>
 <p>Do not touch the operation buttons when your hands are wet.</p>	 <p>Do not hanging clothing on the wire.</p>	 <p>It is the user's responsibility to make the appliance be grounded according to local codes or ordinances by a licenced person.</p>

SYSTEM MODEL TABLE

Table-1: Indoor/Outdoor Unit Matching Chart: R410A Units, 208-230/1 or 3/60

Indoor Ceiling Cassette	Outdoor Option 1: SHCR	Outdoor Option 2: TTWC
SFCU(C)-18K-3xB(4)	SHCR-18K-3xB(4)	TTWC-18C-3xB(4)
SFCU(C)-24K-3xB(4)	SHCR-24K-3xB(4)	TTWC-24C-3xB(4)
SFCU(C)-30K-3xB(4)	SHCR-30K-3xB(4)	TTWC-30C-3xB(4)
SFCU(C)-36K-3xB or 3xC(4)	SHCR-36K-3xB or 3xC(4)	TTWC-36C-3xB or 3xC(4)
SFCU(C)-48K-3xB or 3xC(4)	SHCR-48K-3xB or 3xC(4)	TTWC-48C-3xB or 3xC(4)
SFCU(C)-60K-3xB or 3xC(4)	SHCR-60K-3xB or 3xC(4)	TTWC-60C-3xB or 3xC(4)

Table-2: Indoor/Outdoor Matching Chart: R407C(R22) Units, 208-230/1 or 3/60

Indoor Ceiling Cassette	Outdoor Option 1: SHCR	Outdoor Option 2: TTWC
SFCU(C)-18K-3xB(7)(2)	SHCR-18K-3xB(7)(2)	TTWC-18K-3xB(7)(2)
SFCU(C)-24K-3xB(7)(2)	SHCR-24K-3xB(7)(2)	TTWC-24K-3xB(7)(2)
SFCU(C)-30K-3xB(7)(2)	SHCR-30K-3xB(7)(2)	TTWC-30K-3xB(7)(2)
SFCU(C)-36K-3xB or 3xC(7)(2)	SHCR-36K-3xB or 3xC(7)(2)	TTWC-36K-3xB or 3xC(7)(2)
SFCU(C)-48K-3xB or 3xC(7)(2)	SHCR-48K-3xB or 3xC(7)(2)	TTWC-48K-3xB or 3xC(7)(2)
SFCU(C)-60K-3xB or 3xC(7)(2)	SHCR-60K-3xB or 3xC(7)(2)	TTWC-60K-3xB or 3xC(7)(2)

Remarks:

- Indoor ceiling cassette units are standard 24VAC control, can also be used with any matched standard outdoor units made by other manufacturers.
- Would suggest to order whole system with the same manufacturer.

Table-3: Indoor/Outdoor System Matching Chart: R410A Units, 208-230/1 or 3/60

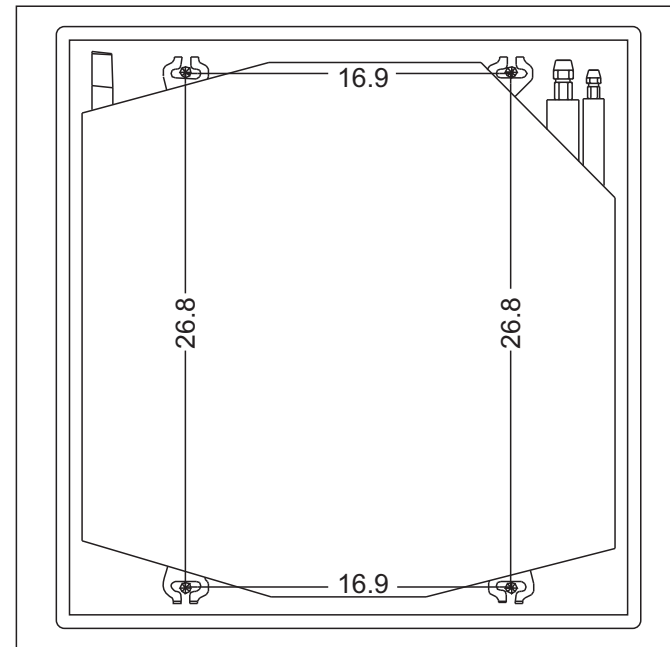
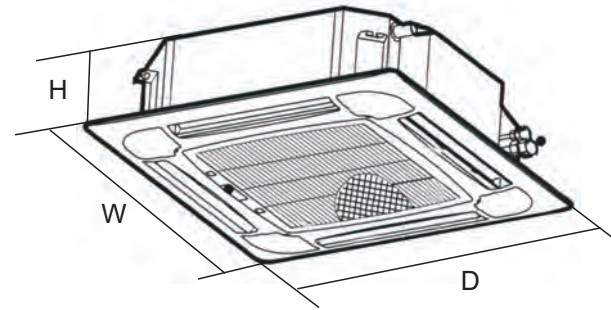
Indoor Ceiling Cassette	Outdoor Option 1: SHCR	System Model: Indoor & Outdoor
SFCU(C)-18K-3xB(4)	SHCR-18K-3xB(4)	CMSC-18K-3xB(4)
SFCU(C)-24K-3xB(4)	SHCR-24K-3xB(4)	CMSC-24K-3xB(4)
SFCU(C)-30K-3xB(4)	SHCR-30K-3xB(4)	CMSC-30K-3xB(4)
SFCU(C)-36K-3xB or 3xC(4)	SHCR-36K-3xB or 3xC(4)	CMSC-36K-3xB or 3xC(4)
SFCU(C)-48K-3xB or 3xC(4)	SHCR-48K-3xB or 3xC(4)	CMSC-48K-3xB or 3xC(4)
SFCU(C)-60K-3xB or 3xC(4)	SHCR-60K-3xB or 3xC(4)	CMSC-60K-3xB or 3xC(4)

Table-4: Indoor/Outdoor System Matching Chart: R407C(R22) Units, 208-230/1 or 3/60

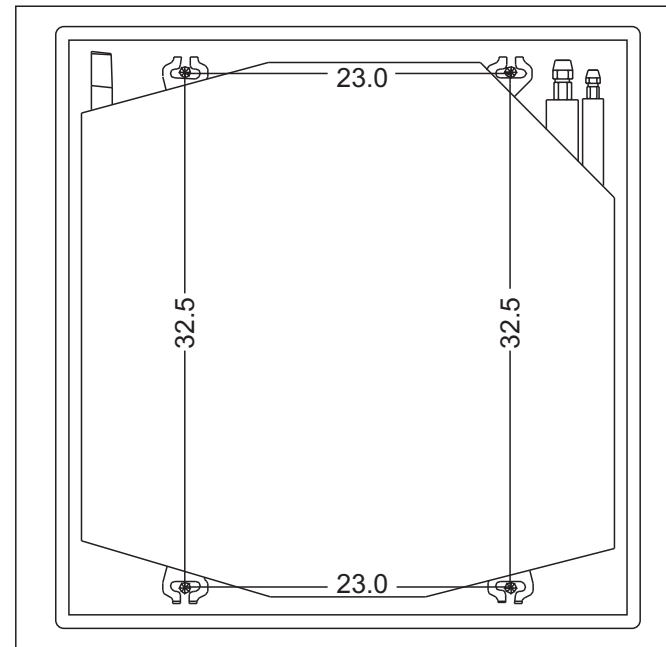
Indoor Ceiling Cassette	Outdoor Option 1: SHCR	System Model: Indoor & Outdoor
SFCU(C)-18K-3xB(7)(2)	SHCR-18K-3xB(7)(2)	CMSC-18K-3xB(7)(2)
SFCU(C)-24K-3xB(7)(2)	SHCR-24K-3xB(7)(2)	CMSC-24K-3xB(7)(2)
SFCU(C)-30K-3xB(7)(2)	SHCR-30K-3xB(7)(2)	CMSC-30K-3xB(7)(2)
SFCU(C)-36K-3xB or 3xC(7)(2)	SHCR-36K-3xB or 3xC(7)(2)	CMSC-36K-3xB or 3xC(7)(2)
SFCU(C)-48K-3xB or 3xC(7)(2)	SHCR-48K-3xB or 3xC(7)(2)	CMSC-48K-3xB or 3xC(7)(2)
SFCU(C)-60K-3xB or 3xC(7)(2)	SHCR-60K-3xB or 3xC(7)(2)	CMSC-60K-3xB or 3xC(7)(2)

UNIT DIMENSIONS AND WEIGHT

1,000 Btu/h	Dimension W×H×D (inch)	Weight (LBs)	
		Net	Gross
18	31.5×8.3×31.5	53	62
24	37.4×9.1×37.4	70	80
30	37.4×9.1×37.4	70	80
36	37.4×11.2×37.4	75	87
42	37.4×11.2×37.4	75	87
48	37.4×11.2×37.4	75	87
60	37.4×11.2×37.4	80	92



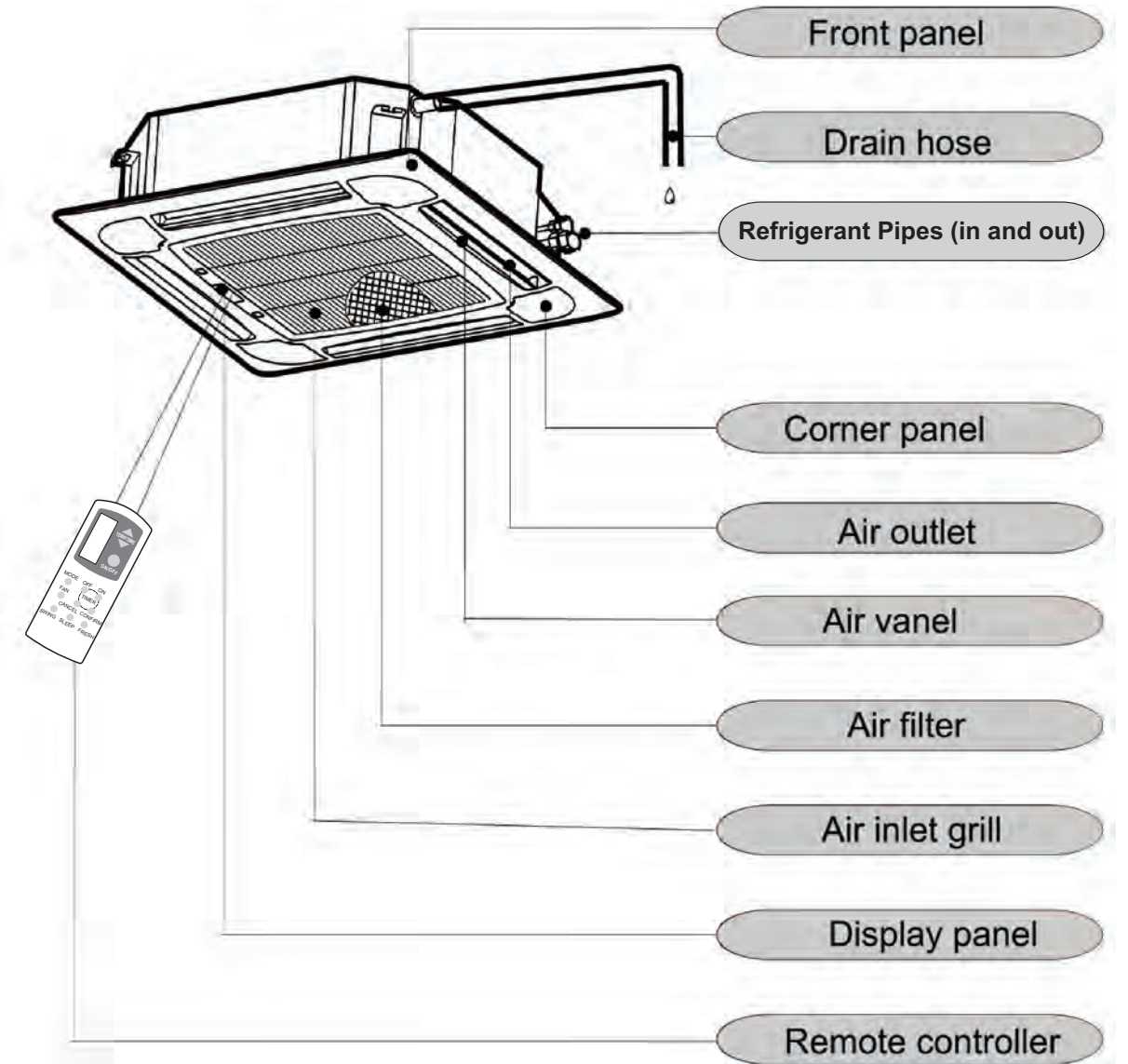
18K



24~60K

IDENTIFICATION OF PARTS

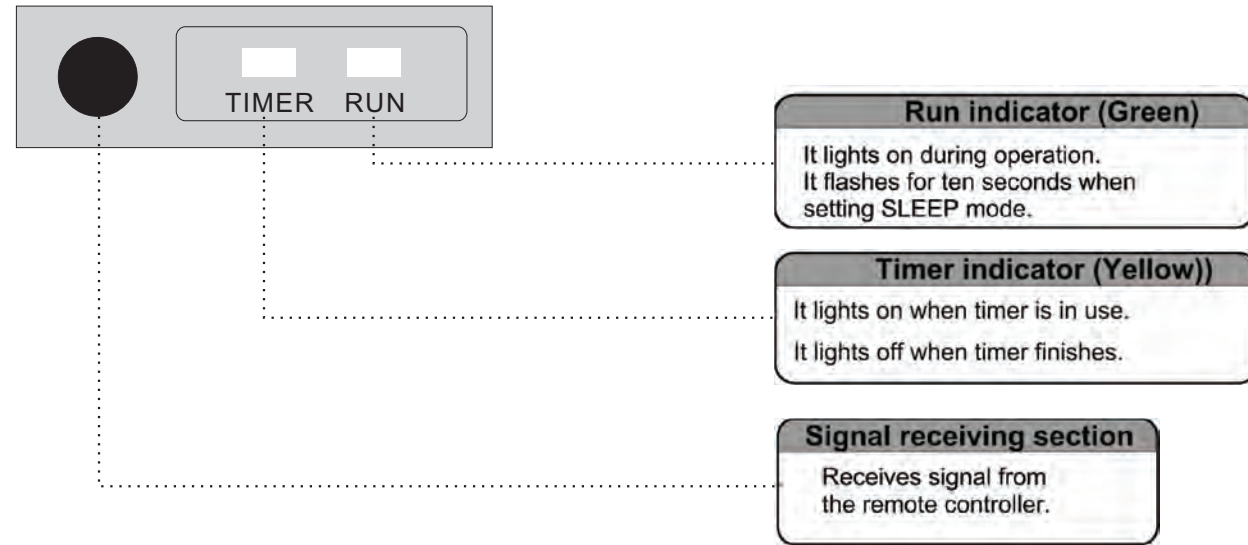
FAN COIL UNIT



The figures in this manual are based on the external view of a standard model.
Engineering and appearance subject to change without prior notice.

IDENTIFICATION OF PARTS

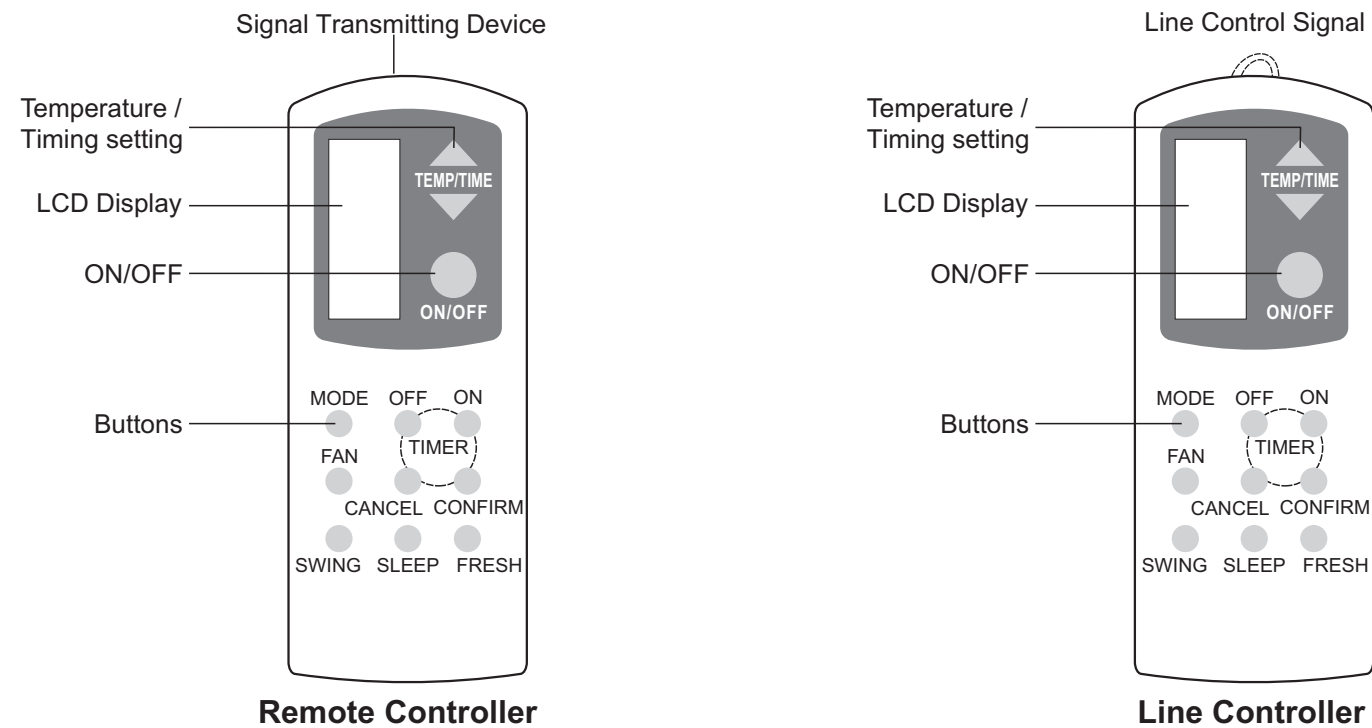
OPERATING AND DISPLAY



This figure is based on the external view of a standard model. Consequently, the shape or content may differ from that of the air conditioner you have selected.

* Electric heater function is not available for cooling only models.

REMOTE OR LINE CONTROLLER



Notes: Default controller is remote There is no heat mode in cool only air-conditioner

IDENTIFICATION OF PARTS

REMOTE CONTROLLER

How to load batteries

Open the lid at back, place the 2 AAA 1.5V-LR03 batteries in right polarities.

Short-circuit RESET button as indicated (after the change of the batteries).

Remove the batteries if you don't use the remote/line controller for a long period.

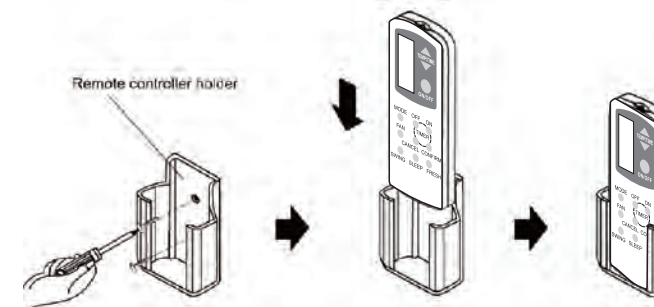
If the remote controller does not operate correctly, press RESET button to resolve it.

The signal can be transmitted as far as 275 inches (7 meters) away from the indoor unit if the controller is pointed towards the front of the indoor unit.

Take care of the remote/line controller. To avoid any problem, do not drop it on the floor or throw it or expose it at the humidity.

When press a button, the indoor unit beeps once or twice, indicating the indoor unit has received control signal.

Storage and Tips for Using the Remote Controller
The remote controller may be stored mounted on a wall with a holder.
Note: The remote controller holder is an optional part.

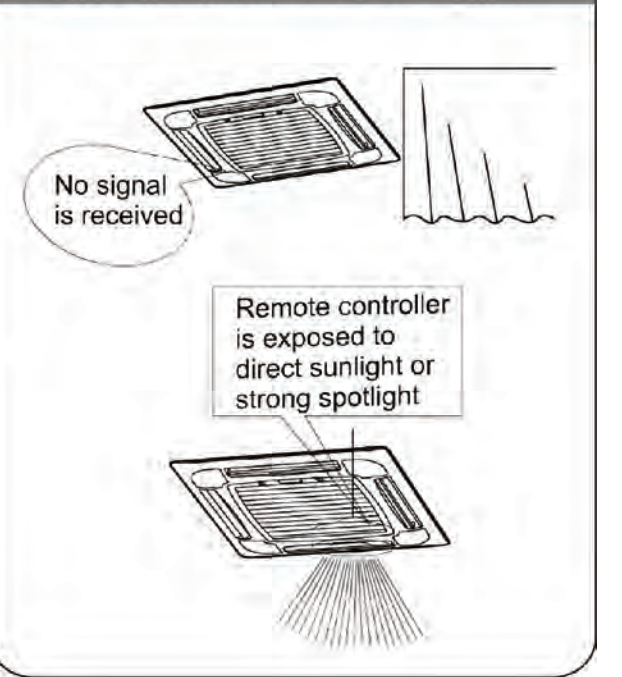


How to use remote controller

A Signal-sent symbol will flash for a short time when signal is sent.

B The range that the signal can reach is about 7m when pointing at the front of indoor unit.

The appliance may not work in the following cases:



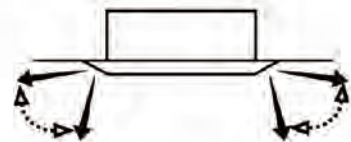
OPERATION INSTRUCTIONS

Airflow direction control

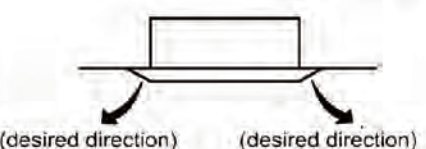
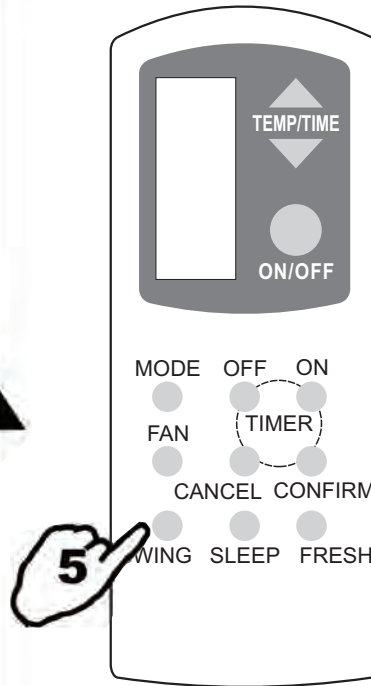
Vertical airflow control


Press the **SWING** button of the remote controller to control the swinging and stopping of air vanes.

Swinging airflow:
Press the SWING button once, the fan motor starts to operate, and the air vanes swing vertically.



Fixed airflow:
Press the SWING button when the airflow reach your desired direction, the fan motor stops operating, and the air vanes stop swinging too.

- ☑  Do not turn the air vanes manually, or malfunction may occur. If that happens, turn off the unit first and cut off the power supply, then restore power supply again.
- ⓘ It is better not to allow the air vanes tilt downward for a long time at COOLING or DRY operation mode to prevent dew from forming and dripping down.
- ☑ Dew may be form and drip from air inlet when the unit operates at COOLING or DRY mode in a high-humidity condition (higher than 85%).
- ☑ After the unit has been used for a long time, the air inlet may be covered with dust, just wipe it off with a soft cloth.

FUNCTIONS-REMOTE OR LINE CONTROLLER

A. Power

BATTERY ON/OFF

- Once two AAA batteries are loaded into the remote controller battery compartment in the right polarity, LCD screen shows all signs available for 3 seconds before they all go off the screen totally.
- Once one or two batteries are unloaded from the remote controller battery compartment, if no button is touched, the LCD screen display will go off in 15 seconds, if any button is pressed within 15 seconds, the LCD screen display will go off right away.

B. Run / Stop "ON/OFF"

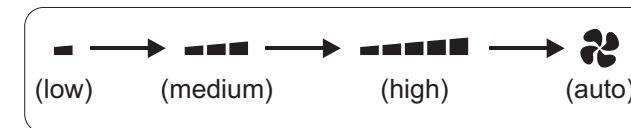
- If ON/OFF button is pressed the first time, LCD displays AUTO, temperature meter sign, AUTO FAN and SWING from the top to bottom of the LCD screen;
- If ON/OFF button is pressed after power off, LCD displays what is left prior to POWER OFF (including MODE, TEMPERATURE, FAN SPEED, LOUVER, but excluding SLEEP, TIMER and FRESH).

C. Temperature/Time Adjustment

- Normally, these buttons are for temperature up and down adjustment at 1F/press, to decrease 1F, press "▼" button once; to increase 1F, press "▲" button once; If held down for continuous adjustment, number changes at 1F/0.5Sec.
- These buttons are for time adjustment too. If pressed intermittently within 5 seconds after pressing TIMER ON or TIMER OFF, time (hour) changes at 1hour/press; if held down continuously, time changes at 1hour/0.5Sec. Time cycle is between 1-12hrs.
- Temperature/Time change will show up on the Controller's LCD display.
- Temperature range is 64 to 86F, Time range is 0 to 24Hr or 0 to 12Hr.

D. Fan Speed Adjustment

FAN MODE includes: AUTO, LOW, MED and HIGH. Every time "FAN" button is pressed once, fan sign changes once from one to the next one in a sequence: LOW (1-section/fan blade spins slowly), MED. (3-section/ fan blade spins a little quicker), HIGH (5-section/fan blade spins quicker), AUTO (4-blade fan).



E. "FRESH" FRESH

Otherwise claimed, this button is not actuated for:
 * Fresh air, or,
 * Manual turn on or off supplemental heating

F. "SLEEP" SLEEP

Press "SLEEP" button to turn the unit into or out of SLEEP mode. When SLEEP button is pressed, star/moon sign either shows up or goes off. If star/moon sign is ON, MODE turns into SLEEP mode (see related function change separately); if pressed again, star/moon sign goes off, MODE turns into the regular.

FUNCTIONS-REMOTE OR LINE CONTROLLER

G. "SWING"



SWING

When power turned on, louver will fully open, then shut off; when power turned off, all shut off. Whenever "SWING" button is pressed once, up-down louver(s) will oscillate between up and down, or stop oscillating and stay still, or be turned off.

⚠ WARNING Control with the remote controller to adjust up/down air flow direction, NOT to adjust louvers during swinging.

H. "MODE"



MODE

- MODE includes: AUTO, COOL, DRY, FAN and HEAT. Mode changes from one to the next one in a sequence once MODE button is pressed.
- In AUTO mode, temperature number goes off, all other buttons work.
- In all other modes, temperature number shows up, all other buttons work.

Cool only type has not HEAT mode. Each time MODE button is pressed, the operation mode is changed in a sequence: Cool, Dry, Fan only and Heat.

ERROR CODE & TROUBLE SHOOTING

Number	Led (Green)	Status	Trouble Shooting
1	On	Components ongoing	N/A
2	Blinks, Once/2Sec.	Compressor has stopped running	N/A
3	Blinks, Twice/2Sec.	Indoor air temperature sensor failure	Check connectivity or resistance of this sensor (4K or so), or replace with a good sensor.
4	Blinks, Thrice /2Sec	Indoor coil temperature sensor failure	Check connectivity or resistance of this sensor (4K or so), or replace with a good sensor.
5	Blinks, Quartic/2Sec	Condensate water full	Check pump motor or water level switch or drain pipe blockage.

OPERATION OF THE UNIT

A. AUTO MODE

When started, operation mode will turn into COOL or DRY or HEAT mode upon room temperature as shown in the following table. Once AUTO operation mode is set, unit will change operation mode as the room temperature changes. If unit restarts after last operation stops for two hours, it will start in the same mode as set before operation was stopped. Press SWING button to change air flow direction up/down.

Room temperatures(RT)	Cool Only Unit		Heat Pump Unit	
	Mode	Pre-Set Temperature	Mode	Pre-Set Temperature
Above 78°F	Cool	77°F	Cool	77°F
From 68-78°F	Dry	(RT-35)°F each 3 minutes	Dry	(RT-35)°F each 3 minutes
Below 68°F	Heat	NA	Heat	73°F

B. COOL MODE

Pointing remote/line controller to the unit, press MODE button until COOL is shown. Press TEMPERATURE ADJUSTMENT button to change the setting temperature. In this mode, you can press SWING button or MANUAL SWING button, if available, to change up/down air flow direction. Press FAN SPEED button to change the fan speed of indoor unit. Once the temperature settled is reached, both indoor and outdoor unit will stop to run. Outdoor unit will work again as soon as the indoor air temperature sensor feels the room temperature is 1 or 2°F higher than set temperature.

Once set temperature is reached, outdoor unit compressor and fan motor will stop working right away, outdoor reversing valve stays un-energized.

- 1) If "circulation" function is built in (2008.06 or earlier production), then the indoor fan will keep on rotating to circulate the air in the room, so that air temperature stratification will not be caused, and then compressor will not come on and go off often.
- 2) If "circulation" function is NOT built in (2008.06 or later production), then the indoor fan will keep on rotating for 60 to 90 seconds to blow out the residual cooling capacity left on cold coil, then shut off.

Once the sensed indoor temperature is 1 or 2 F above set temperature and the 3-minute compressor restarting protection time is passed, indoor unit fan motor and outdoor unit compressor and fan motor will resume to work right away.

C. DRY MODE

Pointing remote/line controller to the unit, press MODE button until DRY is shown. In this mode, you can press SWING button or MANUAL SWING button, if available, to change up/down air flow direction. Press FAN SPEED button to change the fan speed of indoor unit.

D. FAN MODE

Pointing remote/line controller to the unit, press FAN button until DRY is shown. In this mode, you can press SWING button to change up/down air flow direction. Press FAN SPEED button to change the fan speed of indoor unit.

OPERATION OF THE UNIT

E. HEAT MODE

Pointing remote/line controller to the unit, press MODE button until HEAT is shown. In this mode, you can press FAN SPEED button to change the fan speed of indoor unit. Press TEMPERATURE ADJUSTMENT button to change the setting temperature. Once the set temperature is reached, outdoor unit will shut off right away, while indoor unit will keep on blowing residual heat for a little while before it fully stops. Outdoor unit will work again as soon as the indoor air temperature sensor feels the room temperature is 1 or 2°F below than set temperature. Indoor unit will start to blow once the sensed indoor coil copper tube temperature is warm enough.

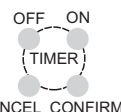
Once set temperature is reached, outdoor unit compressor and fan motor will stop working right away, outdoor reversing valve stays energized for 2 minutes.

- 1) If "circulation" function is built in (2008.06 or earlier production), then the indoor fan will keep on rotating to circulate the air in the room, so that air temperature stratification will not be caused, and then compressor will not come on and go off often.
- 2) If "circulation" function is NOT built in (2008.06 or later production), then the indoor fan will keep on rotating for 60 to 90 seconds to blow out the residual heating capacity left on warm/hot coil, then shut off.

Once the sensed indoor temperature is 1 or 2 F below set temperature and the 3-minute compressor restarting protection time is passed, outdoor reversing valve will be energized first, then outdoor unit compressor and fan motor will resume to work. Indoor blower will start to blow warm air once the indoor coil is warm enough (sensed temperature).

NOTES:

- Heater will click on as supplemental heat to heat pump, once the outdoor temperature is low and the difference between sensed indoor temperature and sensed indoor coil temperature is lower than the designated value.
- Suggest set indoor temperature between 68°F and 75°F. Heating efficiency becomes inferior when room temperature is below 35°F.



F. TIMER

"TIMER ON" AND "TIMER OFF"

Once pressed, TIMER related signs show up and hour sign blinks. If pressing TIMER "ON" or "OFF" button, time changes at 1 hr/press (being held down intermittently) or 1 hr/0.5 second (being held down continuously); if no action 5 seconds after pressing TIMER "ON" or "OFF", or "CONFIRM" button is not pressed 5 seconds after time adjustment is made, TIMER related signs will go off in another 10 seconds.

"CANCEL"

*Once TIMER "CANCEL" button is pressed, previous TIMER set-up shall be cleared and all TIMER related signs go off.

NOTICE: To cancel timer, press CANCEL button of the timer. If power is set off, timer must be reset, otherwise timer operation will not be right.

"CONFIRM"

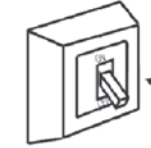
Once TIMER "CONFIRM" button is pressed, set-up of TIMER "ON" or TIMER "OFF" is actuated.

MAINTENANCE

Indoor unit maintenance

- 1 Shut off the power supply

Turn off the unit before disconnecting from the power supply.



- 2 Wipe with a soft and dry cloth.

Soak soft cloth in lukewarm water. Twist to get water out before wiping dirty unit surface. Be careful, not to drip or splash onto electrical parts!

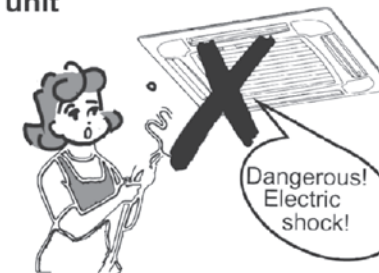


Use a dry and soft cloth to clean the unit surface.

- 3 Never use volatile substance such as gasoline or polishing powder to clean the unit.



- 4 Never sprinkle water onto the indoor unit

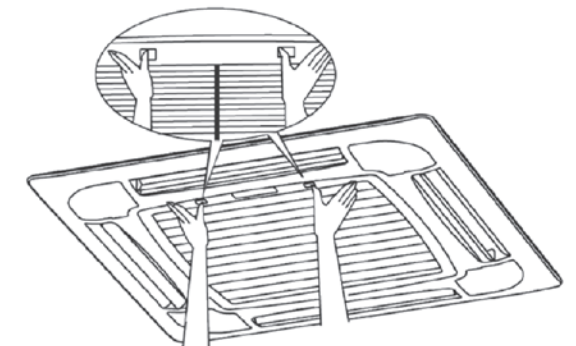


- 5 Dry the inside of the unit. Operate the unit at FAN ONLY mode for half a day to dry the inside of it on a sunny day.

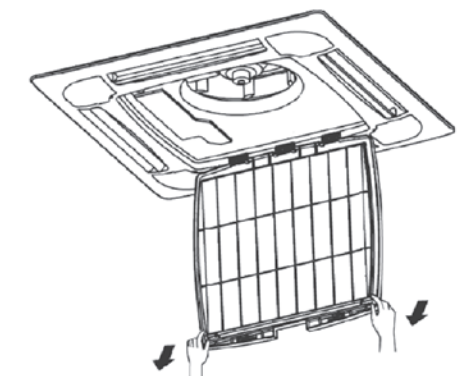


Air filter maintenance

- 1
 - Shut off power supply, then approach the indoor unit with a ladder or other safe way.
 - Press the button on the air inlet grille with both hands.
 - Remove the air inlet grille.



- 2
 - Open the air inlet grille.
 - Grasp the bottom corners of the air filter and pull downward.
 - Remove the air filter.



MAINTENANCE

Air filter cleaning

3 Cleaning

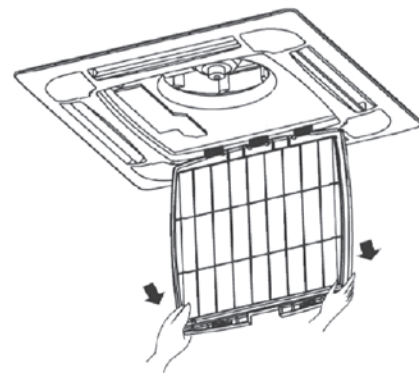
- Remove the dusts from the air filter with a vacuum cleaner.
- Clean it with water and neutral detergent.
- Dry it thoroughly in a cool and shaded place.



❑ Do not put it beside high heat or fire, it may cause aging, deformation or even burning of the plastic parts.

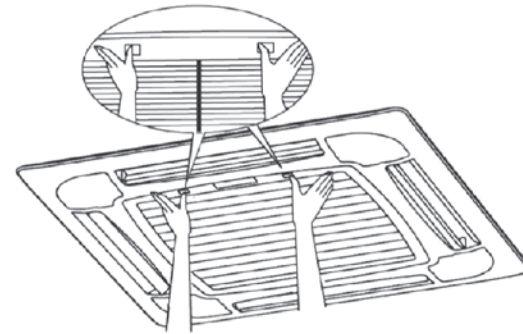
4

- Put the air filter back to the air inlet grille.
- Lock the four corners of the air filter.
- Reinstall the air inlet grill to the indoor unit.

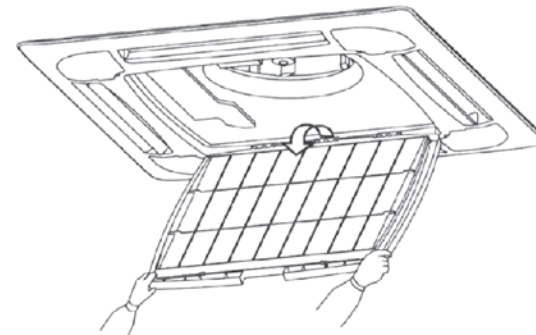


Air inlet grill cleaning

- Shut off power supply, then approach the indoor unit with a ladder or other safe way.
 - Press the button on the air inlet grill with both hands.
 - Remove the air inlet grille.



- Open the air inlet grille.
 - Grasp both sides of it and remove it as shown below.




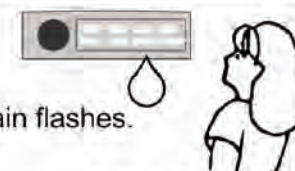






- Wash it with water and neutral detergent.
 - Dry it thoroughly in a cool and shaded place.

- Reverse step 2 to reinstall the air inlet grille..

❑ Make sure to be safe enough before climbing up to clean the unit.

TROUBLE SHOOTING

The following cases may not always be a malfunction, please check it before asking for service.

What you see, hear, smell or feel:	Possible Reasons but Not Unit Malfunction or Defect:
Does not run 	<ul style="list-style-type: none"> • If the protector trip or fuse is blown. • If the protective device works to protect the equipment. • If batteries in the remote controller are exhausted. • If the plug is not properly plugged.
The light of drain flashes. 	<ul style="list-style-type: none"> • If it is full of water and then the drain light will flash.
No cooling or heating air 	<ul style="list-style-type: none"> • Is the air filter dirty? • Are the intakes and outlets of the air conditioner blocked? • Is the temperature set properly?
Ineffective control 	<ul style="list-style-type: none"> • If strong interference (from excessive static electricity discharge, power supply voltage abnormality) presents, operation will be abnormal. At this time, disconnect from the power supply and connect back 2-3 seconds later.
Peculiar odor 	<ul style="list-style-type: none"> • This odor may come from another source such as furniture, cigarette etc, which is sucked in the unit and gives off in to the air.
A sound of flowing water 	<ul style="list-style-type: none"> • Caused by the flow of refrigerant in the air conditioner, not a trouble. • Defrosting sound in heating mode.
Cracking sound is heard 	<ul style="list-style-type: none"> • The sound may be generated by the expansion or contraction of the front panel due to change of temperature.
Spray mist from the outlet 	<ul style="list-style-type: none"> • Mist appears when the room air becomes very cold because of cool air discharged from indoor unit during "COOLING" or "DRY" operation mode.

INSTALLATION INSTRUCTIONS

Item	Indoor unit	User's Manual	Installation instructions	Remote controller	Batteries	Mount board	Drain hose	Suspending brackets	Strap
Num	1	1	1	1	2	1	1	4	8

Item	Expend bolts	Nuts	Washers	Pipe Hoop				Front Panel
Num	12	12	8	1				1

☑ Check to make sure all items are complete. Actual part looking may differ from what are shown, due to continuous engineering improvement.

SELECT THE INSTALLATION LOCATIONS

Location for installing indoor unit:

Where there is no obstacle near the air outlet and air can be easily blown to every corner.

Where drain pipe can extend to the outside of the wall from the ceiling board. It is preferable to have a special draining facility.

Where the roof is strong enough to bear the weight of indoor unit, and not tend to increasing operation sound and vibration.

Keep the required clearance room from the unit to the ceiling, ground and wall as the right figure shown.

Do not put anything near the air intake grille to keep from obstruction.

Keep the unit and remote controller 3 1/2 feet or more apart from television radio etc.

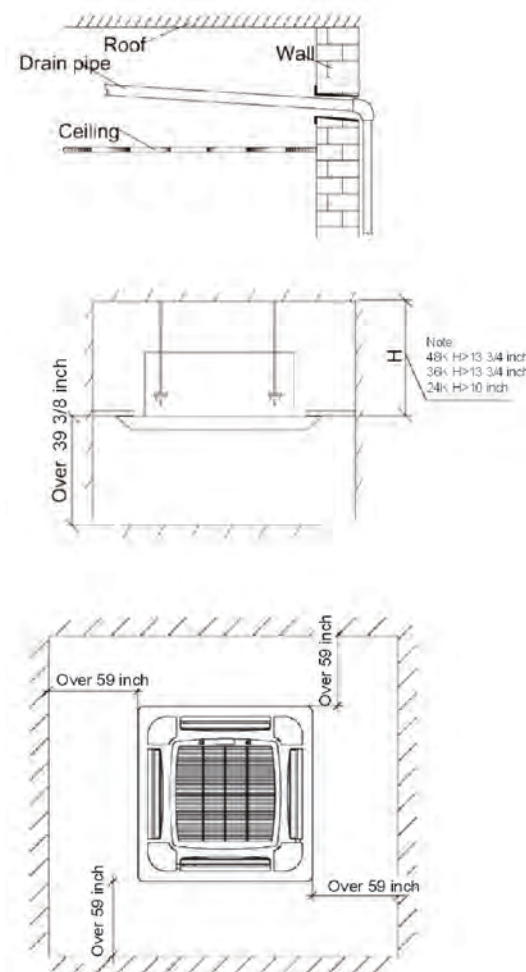
To prevent the effects of a fluorescent lamps, keep the main unit from it at least 5 feet..

The maximum connecting piping length between indoor and outdoor units is 66 feet, and the maximum elevation between the units is 26 feet.

Avoid installing at a place of greasy dirt or steam.

Height of ceiling board

Normally, keep the unit ceiling board.

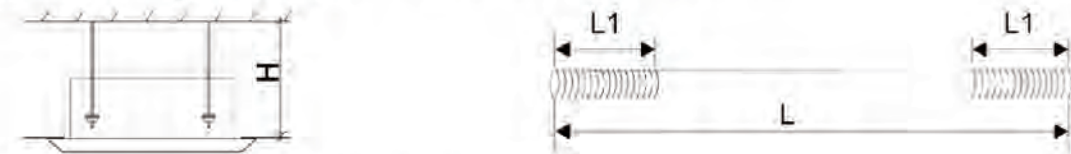


INSTALLATION INSTRUCTIONS

UNIT INSTALLATION

(Note: Reference below is only applicable to unit installation to concrete frame structure or the like)

- Measure the distance H between the roof surface and the ceiling board ;
- Make four suspending poles with M3/8 screw thread on both ends as the below figure shown.



Value of L and L1 are calculated as below :

For 30K or blow models $L1=1 \frac{15}{16}$ inch (when $H<10$ inch, $L1=1 \frac{9}{16}$ inch) $L=1.5L1+H-8 \frac{5}{8}$ inch

For 36K or above models $L1=1 \frac{15}{16}$ inch (when $H<13 \frac{9}{16}$ inch, $L1=1 \frac{9}{16}$ inch) $L=1.5L1+H-12 \frac{5}{8}$ inch

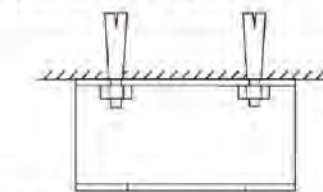
- Turn 4 attached nuts onto the thread ends on the suspending poles as shown below:



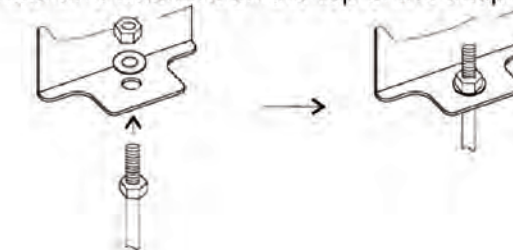
- Take out the moulding board from the packing carton of indoor unit, do not fold it, just use it to decide an installation location and direction of the unit on the roof and ceiling. Press the moulding board tightly onto the surface of the roof, draw out the hole position for expand bolt with a pencil, then take off the moulding board, drill 8 holes for the expand bolts. It is preferable if the depth of holes just reveal the thread of the poles.
- Cut an opening (AxA) on the ceiling board with assistance of the moulding board, make sure to follow the same direction of the holes for roof bolts. Fix the edges of the opening with the [-shaped aluminum bars.

Model	A
≥30K	24 3/16
≤36K	34 5/8

- Mount the attached suspending brackets with anchor bolts M5/16*3 1/8 on the roof surface. Make sure to tighten the expand bolts and nuts well. The opening of suspending brackets should face outward as shown below.

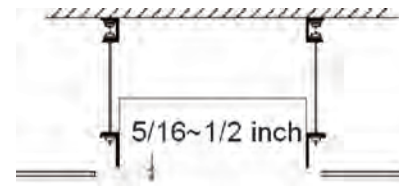


- Take out the suspending poles with nut on one end, mount them on the fixed suspending bracket, then tighten the nuts and washers on the top of the suspending brackets.

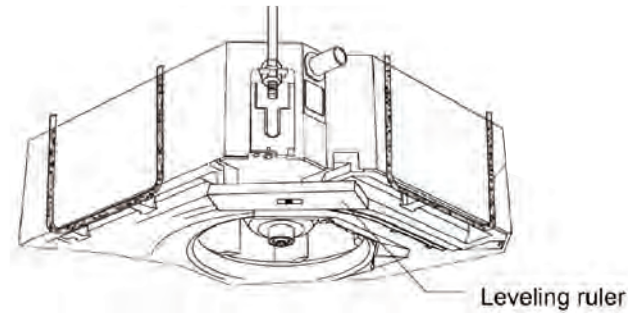


INSTALLATION INSTRUCTIONS

Fix the main unit onto the suspending poles with attached nuts and washer. The nuts on the bottom should turn to about half of the thread length.
(Note: This procedure needs at least 2 persons to work together.)



Adjust the nuts on the bottom of the suspending poles, allow the bottom of the unit 5/16~1/2 inch higher than that of the ceiling board. (as shown in the figure above) Then adjust each corner of the bottom horizontally with a leveling ruler (as shown in the figure at right). Levelness should be within the scope of 1/100.

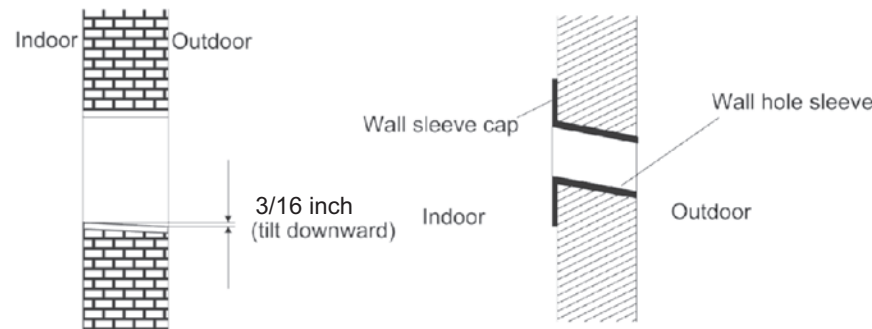


WALL HOLE

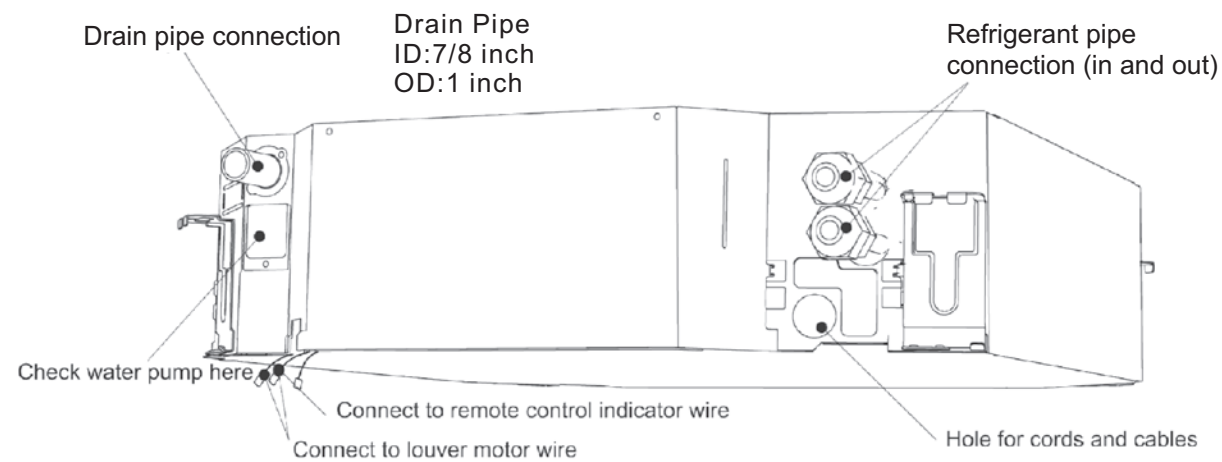
Drill a wall hole for the pipes and cables to pass through the wall.

The hole should tilt a little downward as shown below for easy drainage.

For cleanness of the wall and tidiness of the piping, install a wall hole sleeve and sleeve cap.



PIPING CONNECTION



Important Notes:

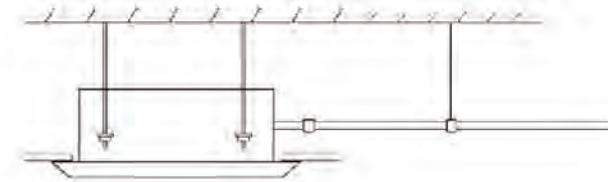
- * If the metering device is located at outdoor unit, both discharge (liquid) and suction (gas) copper lines shall be insulated securely.
- * If the metering device is located at indoor unit, for cooling only model, only suction (gas) copper line needs to be insulated; for heat pump model, both lines need to be insulated.

INSTALLATION INSTRUCTIONS

CONNECTION SIZES OF PIPE AND DRAIN HOME

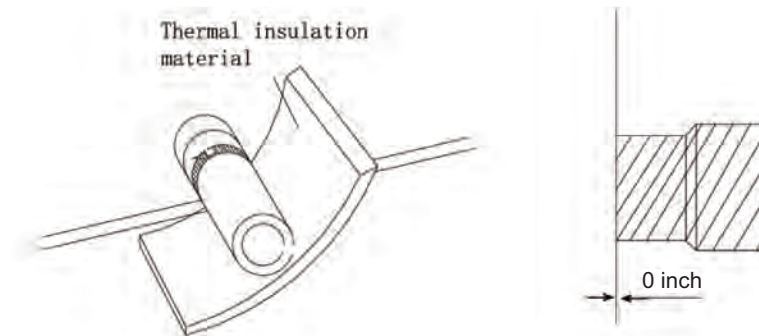
1,000 Btu/h	Valve Size Liq, Gas	Line Sizes at Different Length		Drain Pipe (inch)	
		15-30ft	31-60ft	ID	OD
18	3/8", 5/8"	3/8", 5/8"	3/8", 3/4"	7/8	1
24	3/8", 5/8"	3/8", 5/8"	3/8", 3/4"	7/8	1
30	3/8", 3/4"	3/8", 3/4"	3/8", 7/8"	7/8	1
36	3/8", 3/4"	3/8", 3/4"	3/8", 7/8"	7/8	1
48	1/2", 7/8"	1/2", 7/8"	1/2", 1 1/8"	7/8	1
60	1/2", 7/8"	1/2", 7/8"	1/2", 1 1/8"	7/8	1

█ If the suspending section of the Pipe exceeds 6 1/2 feet, a fixing bracket should be installed for every 5 feet to support its weight.



DRAIN PIPE INSTALLATION

Gradient of 5~10° should be kept for the condensate drain pipe, discharging the condensate more conveniently. Thermal insulation mate should be used at the pipe tie-in to prevent the condensate sweat dripping.



█ Make sure there is no water dripping at the tie-in of condensate drain, and wrap it with insulation material foam firmly to prevent the congealing sweat dripping..

INSTALLATION INSTRUCTIONS

INSTALL DRAIN PIPES

The connection, between the Soft Drain Pipe and the Connector for On-site PVC drainage pipe, needs to be completed when ceiling cassette indoor unit is still on the floor and before it is to be hung up.

During drain pipe installation, must pay attention NOT to make or allow bigger than allowed dimension tolerance at all drain pipe connection. Must NOT bend, pull or twist drain pipe in an effort trying to reduce or eliminate the bigger than allowed dimension tolerance gap between the two connecting parts; otherwise, drain pipe may be blocked or cracked or damaged left with condensate leakage.

Glue shall not be applied too much at each pipe connection; otherwise, it may become drain flow blockage.

On-site drain pipe shall be the regular 1" low pressure drain pipe made of hard PVC material.

Shall tie the connection between Unit Drain Stud and Soft Drain Pipe with the steel band that comes with the unit.

Drain pipe shall bear with an outwards tilting scale 1/50 to 1/100. It shall not bend upwards along the tilting path.

The connection along the PVC pipe extension, had better to be some distance away from the unit; while the support for the PVC pipe extension, better to be somewhere close to the unit. The purpose is not to leave supporting force at the PVC pipe connection.

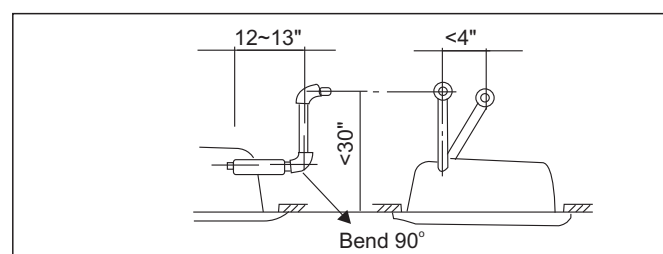
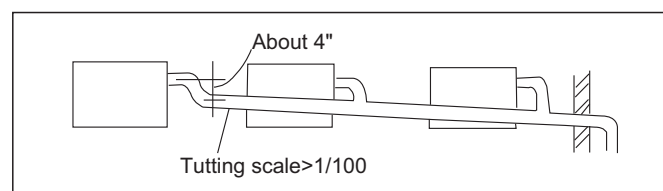
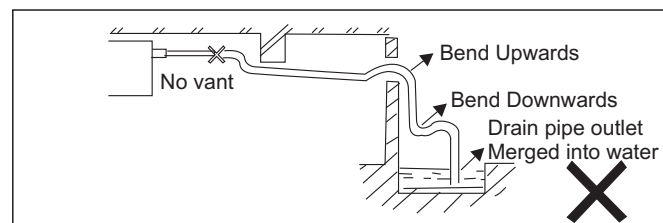
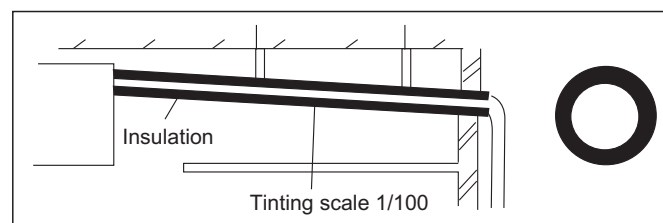
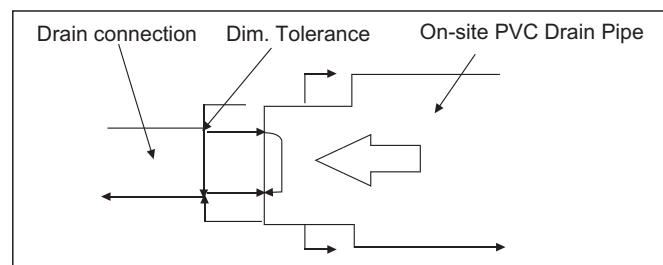
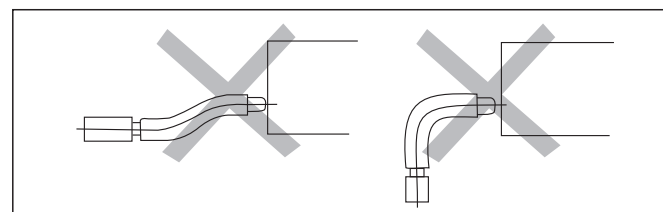
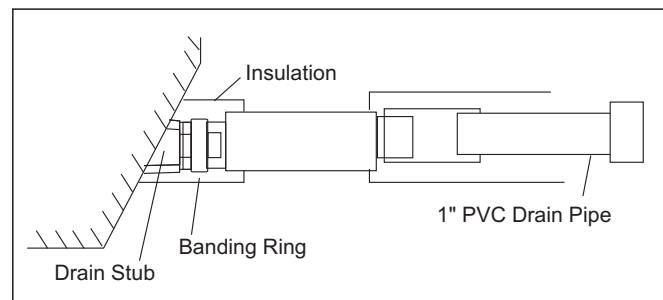
There shall not be any air vent along the drain pipe line.

Drain outlet shall not be merged into water.

Shall insulate drain line wherever condensate or water leakage potential is higher than others.

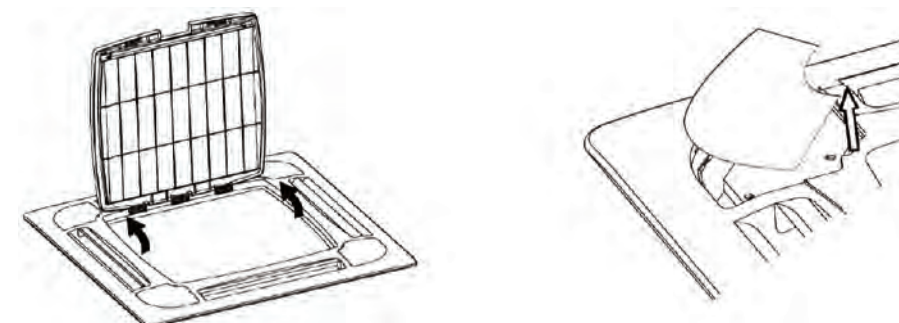
Shall make a not-more than-30 inches Drain Pipe Rise, right outside of the ceiling cassette indoor unit. Shall use some U-bend or the similar parts to ensure enough drain pipe rise, in case of complex structure above the ceiling. Shall construct the Drain Pipe Line in a way such that the drained water in drain line will not backflow into the unit, even if the unit is turned off.

Shall not put the drain pipe outlet anywhere there exists odd odor regularly; otherwise, annoying odor may backflow into the indoor room, following the drain pipe lines.

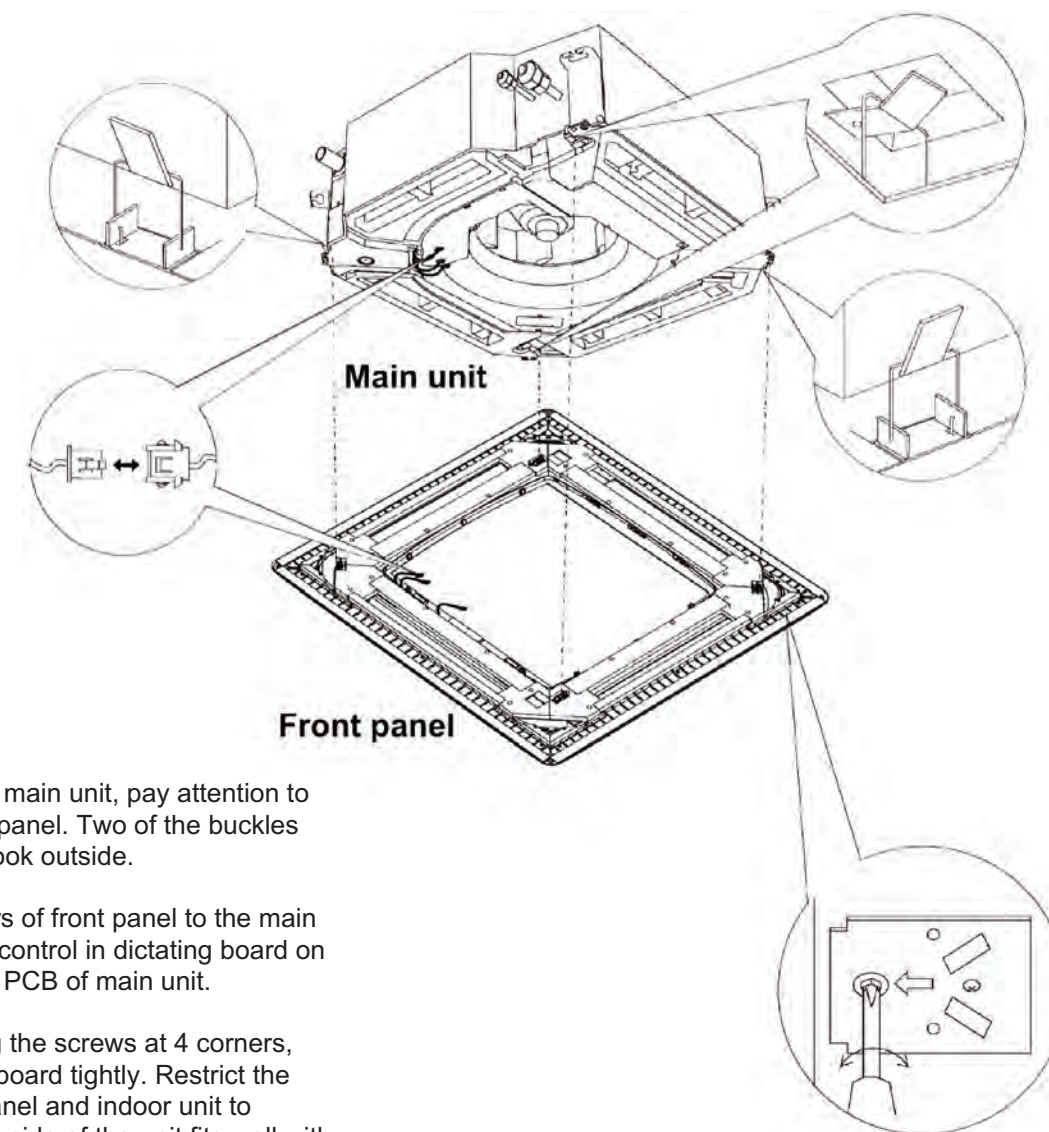


INSTALLATION INSTRUCTIONS

FRONT PANEL INSTALLATION



* Remove 4 corner panels from the air inlet grill of front panel as shown above;



Buckle the front panel to the main unit, pay attention to the correct direction of front panel. Two of the buckles hook inside, the other two hook outside.

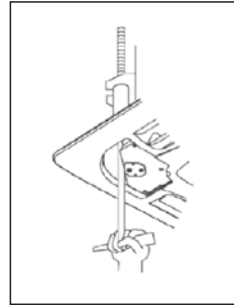
Connect the three connectors of front panel to the main unit, fan motors and remote control in dictating board on the front panel to the control PCB of main unit.

Lift the front panel by turning the screws at 4 corners, until it adheres to the ceilingboard tightly. Restrict the sponge between the front panel and indoor unit to 1/5~5/16 inch, allowing each side of the unit fits well with the front panel to avoid airflow leaks from the gap.

Adjust the tightness between the front panel and the main unit by turning the screws clockwise or counter-clockwise.

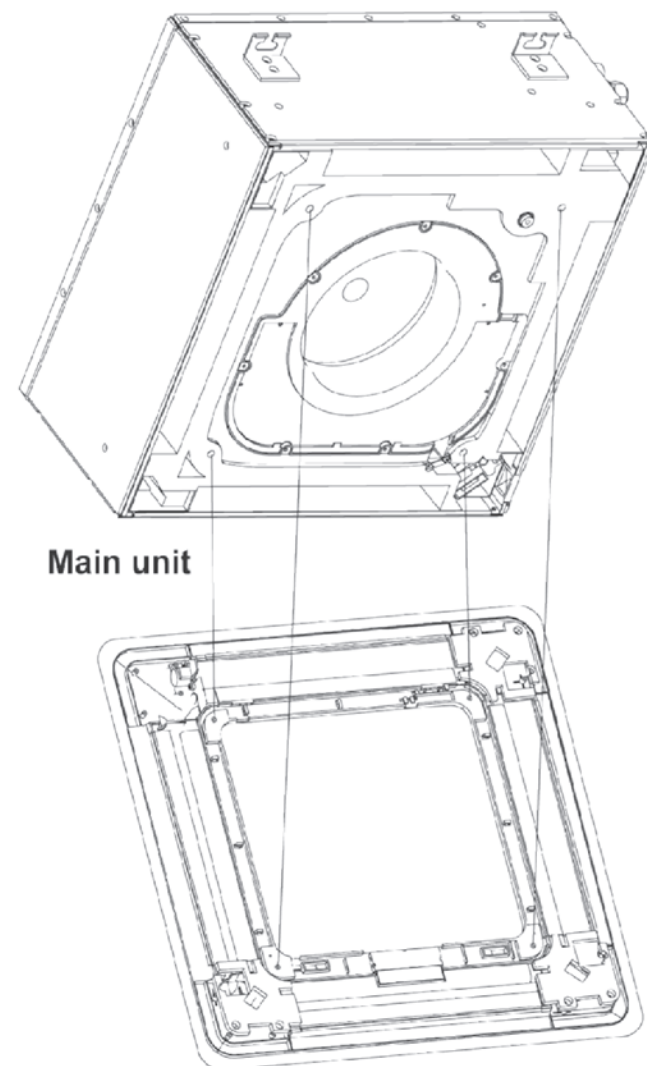
INSTALLATION INSTRUCTIONS

FRONT PANEL INSTALLATION



If necessary, use a special wrench to adjust the indoor unit, ensure that the main unit and front panel, the front panel and ceiling board fit well.

Reinstall the air inlet grill and 4 corner panels back to the front panel.



Main unit

Front panel

* Use 4 bolts to fasten main unit and front panel as shown above.

INSPECT BEFORE TRIAL OPERATION

Check the indoor unit, to make sure:

- * The indoor unit is secured to the installation structure.
- * The indoor blower fan wheel can rotate freely.
- * The cables between the wiring terminals of the main unit to its power supply and its controller are connected correctly and securely.
- * There is no obstacle around intake and discharge vent.
- * There is no sunlight or spot light or other strong light spotting onto the indoor unit, especially the signal receiving window.
- * The batteries for the remote or line controller are good and installed in the correct polarity.

Check the refrigerant line, to make sure:

The connections are correct and tight.

Check the drain hose, to make sure:

- * The connections are good and tight.
- * When feeding some water into the Checking Opening at indoor unit, water can flow out of the drain line freely.
- * There is no water leakage is found anywhere in the unit or drain line.

Check the power supply, to make sure:

- * The power supply is in right voltage, phase and frequency. For 208-230/1 or 3/60 powered unit, 187-253v shall be the allowed voltage range.
- * For 3Ph unit, there is no phase-loss found in power supply. Failure to supply fully correct 3Ph power will cause damage to the unit and/or personal property, and/or body injuries.

- * The correctly sized circuit breaker and disconnect switch are installed properly. Oversized or undersized components will cause malfunction or damage to units and even electric shock or fire.

Check the outdoor unit, to make sure:

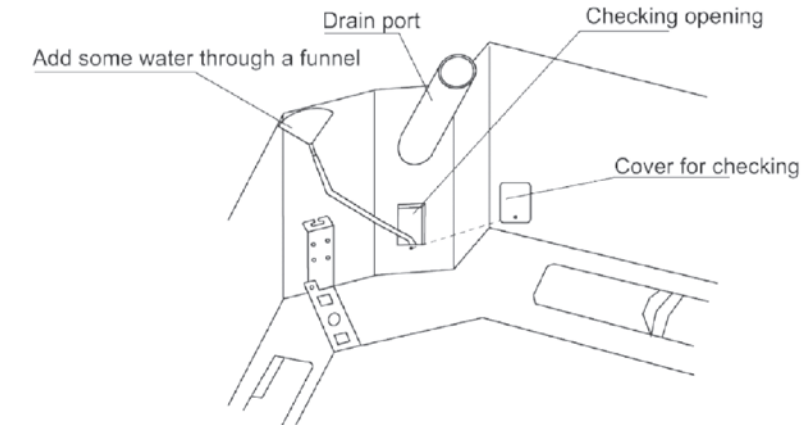
- * The outdoor unit is secured to the installation structure.
- * The outdoor blower fan wheel/blade can rotate freely.
- * The cables between the wiring terminals of the main unit to its power supply and its controller are connected correctly and securely.
- * There is no obstacle around intake and discharge vent.

Check others, to make sure:

- * All installation follows factory-provided Installation Instructions.
- * All installation follows NEC, National, State/Province, City and local codes.
- * Warranty Registration Card is ready for installer to check against.

INSTALLATION INSTRUCTIONS

Check to make sure the drain pipe flows well and no water leakage is found, prior to the trial operation.



TRIAL OPERATION

Turn on the main switch, circuit breaker and disconnect switch, in a row, if nothing abnormal is found.

The power-on indicator on unit shall be lit.

Then, put controller at Cooling Mode, or Heating Mode, set up the target temperature.

The outdoor compressor and fan motor should be working.

Refrigerant flow can be witnessed by hearing or feeling at the copper line.

After 5 minutes or so, one of the pair of refrigerant pipes at both indoor and outdoor units, should be felt warmer than the other.

The indoor fan motor should be working, immediately, or a little while after outdoor compressor and fan motor work for a while.

There should be no abnormal noise being found at either indoor unit or outdoor unit.

In Cooling Mode, outdoor unit should be blowing warm/hot air into the ambient, the indoor unit should be blowing cool air into the room.

In Heating Mode, outdoor unit should be blowing cool/chilly air into the ambient, the indoor unit should be blowing warm air into the room.

When the set temperature is satisfied, the outdoor compressor and fan motor shall stop working. Immediately, or a little while later, the indoor fan motor shall stop working too.

Then, can go ahead to check other function modes, one by one-Fan Only, Dehumidification, Sleep, Auto, as many as provided.

FINISH UP INSTALLATION

Collect all the tools and extra parts.

Clean all debris and dust.

Mark properly on either unit or sign or other documents, if needed.

Fill out and sign on the Warranty Registration Card and hand it to the owner.

Instruct or show the owner with all the Warnings & Cautions.

Ask if the owner has any questions.

LIMITED PRODUCT WARRANTY POLICIES



LIMITED PRODUCT WARRANTY POLICIES

YMGI Group (YMGI) products are designed and manufactured free from defects in workmanship and materials for normal use and maintenance. YMGI products are designed and manufactured to the qualities to keep installer(s) and user(s) from any trouble and to bring total comfort to unit(s) owner(s) and end user(s).

YMGI warrants its products against any unexpected issues occurred to product itself, though designed and manufactured and expected to work much longer than the warranted period, as follows:

1. Five-year compressor and sealed system
2. One-year other parts
3. Ground shipping only

Above warranties valid only if all the following are satisfied:

1. The unit was installed by authorized technician(s) of state certified or licensed contractor(s) only.
2. The unit is installed per national and local codes.
3. The unit is installed following installation instruction coming with YMGI products.
4. The unit is fully checked and tested by installer(s) to make sure installed unit functions as expected.
5. Right operation of the unit is explained clearly to the owner(s) by installer(s).
6. All fields are filled or checked, signed and dated by both installer(s) and owner(s) on the **LIMITED PRODUCT WARRANTY REGISTRATION CARD** on the other side of this page.
7. Registration card must be mailed within 7 calendar days after the original installation is finished or your NEW home (unit is not checked or used yet) is closed, whichever comes later, by the owner(s) to YMGI Warranty Registration, POB 1559, O'Fallon, MO 63366.
8. A full copy of warranty registration card must be kept by owner(s) safely along with other documents that come with the product.

No warranty may be valid if any one of above 8 conditions is not fulfilled.

Warranty begins on the date of the original installation or the date of NEW home (unit is not checked or used yet) is closed, whichever comes later.

As its only responsibility, and your only remedy, YMGI will furnish replacement part, without charge for the PART(S) and Ground Shipping ONLY, to replace any part found to be defective due to manufacture workmanship or materials under normal use and maintenance. Any part replaced pursuant to this warranty is warranted only for the unexpired portion of the warranty term applying to the original part.

These warranties do not apply to any other cost associated with the service, repair or operation of the product.

For warranty credit, defective product(s) or part(s) must be identified by **YMGI's distributor(s) or approved YMGI Service Center(s)**. In case no distributor(s) or service center(s) available in the area where unit is installed, owner(s) need to contact YMGI for assistance before further action is to be taken.

Warranty policy herein DOESN'T cover:

1. Any damage or repairs to properties and person(s) as an incident or consequence of faulty or improper transportation, installation, operation, maintenance, or service that ISN'T physically performed by YMGI.
2. Any damage caused by frozen or broken water pipes in the event of equipment failure.
3. Any damage as a result of floods, fires, winds, lightning, accidents, corrosive atmosphere or other conditions beyond the control of YMGI.
4. Any damage resulted from use of components or accessories not specified, supplied or designated by YMGI.
5. Any damage because of failure to start due to interruption and/or inadequate electrical service.
6. Any products sold or installed outside the United States or Canada.

Any damage due to service performed by third parties, it is the product receivers(s) or owner(s)'s responsibility to claim such damage resulted from these activities to the responsible party:

1. Transportation, installation and operation.
2. Normal maintenance and service as described in the installation and operating manual, such as cleaning of the coils, filter, cleaning and/or replacement and lubrication.

YMGI keeps on product improvement and such improvement is purposed to further benefit installers, owners, users and others. Such improvement or changes, even without notice, including but not limited to specifications, functions, appearance, sizes, packages or others, of the products are YMGI's sole right(s). These improvement or changes will not invalidate the limited warranty stated herein.

For further information about this warranty, contact YMGI Warranty Registration

LIMITED PRODUCT WARRANTY REGISTRATION CARD



LIMITED PRODUCT WARRANTY REGISTRATION CARD

Product-Indoor Unit Model No.: _____ Outdoor Unit Model No.: _____
 Product-Indoor Unit Serial No.: _____ Outdoor Unit Serial No.: _____

Installed at Address: _____ Installed on Date (mm/dd/yyyy): _____

Street name and number, _____ City, State, Zip code, _____ Phone No. _____ Fax No. _____

Purchased from Distributor Company/Branch Office Located at:

Street name and number, _____ City, State, Zip code, _____ Phone No. _____ Fax No. _____
 Indoor Unit Outdoor Unit Packaged Unit (Please Check Whatever Applicable)

Installed by Licensed HVAC Contractor Company/Branch Office Located at:

Street name and number, _____ City, State, Zip code, _____ Phone No. _____ Fax No. _____

Valid Contracting Company License No.: _____

Full Name of Installer Technician: _____ Cell Ph.: _____ Office Ph.: _____

YMGI Packing List No: _____

Licensed Installing HVAC Contractor/Technician Checklist:

- Are you a licensed contractor/technician?
- Did you read through the manual(s) prior to installation?
- Is unit unpacked and checked by the installer for obvious damage?
- Supply power V/Ph/Hz measured at circuit breaker to the outdoor unit: _____ or Indoor unit: _____
- Incoming power V/Ph/Hz measured at terminal blocks of outdoor unit: _____ or Indoor unit: _____
- Wire gauge and qty. between circuit breaker/disconnect switch to outdoor unit: _____
- Wire gauge and qty. between outdoor unit and indoor unit: _____
- What are installed before HVAC Licensed Technician took over?
- Is field wiring checked following national and local codes?
- Selected the correct electrical components (HVAC circuit breaker or fuse or disconnect switch for the power to the outdoor unit, connecting wires between circuit breaker/disconnect switch and outdoor unit, wires between outdoor and indoor units)?
- Is indoor coil and/or outdoor coil sealing checked and passed prior to installation?
- Is refrigerant piping length within stated ranges and free from kinks or too much bending?
- Indoor unit away from ceiling and outdoor unit away from the wall, bushes and other obstacles enough and safe clear distance, required in the manuals?
- Do air intake and discharge grills have enough open area free from any blocking?
- Indoor unit is installed on secured bracket, outdoor unit is placed on level platform, pad, or bracket securely?
- Taped the inter-connecting pipe ends before running through structures, keep from getting dust or other dirties into the pipes to damage the refrigeration system and void your factory warranty and cost you much more money?
- Is condensate drain pan or pipe checked all right free of any leakage?
- Vacuumed the connecting pipes for leakage check, before back-seating the stopping valves at outdoor condensing unit?
- Refrigerant suction pressures PSI: _____ discharge pressures PSI: _____ Outdoor Temperature F _____
- Are both indoor fan wheels and outdoor unit fan blades checked for smooth rotation free of abnormal noise?
- Is outdoor unit compressor observed being started, running and stopped in right ways?
- Are all system/unit functions tested and checked to be surely all right, before you fill this card?
- Is system/unit tested to run for at least 30 minutes?
- Did you explain or teach owner(s) or end user(s) clearly the right operation or normal maintenance of the system/unit?
- Does your company provide and will follow installation/service warranty policy?

Print Name of Licensed HVAC Installer: _____
 Signature of Licensed HVAC Installer: _____
 Date: _____

Print Name of Unit Owner/User: _____
 Signature of Unit Owner/User: _____
 Date: _____

To Validate the Warranty, Need to Mail the Fully Filled and Signed Card to Warranty Dept., YMGI Group, POB 1559, O'Fallon, MO 63366 within 7 Calendar Days after Original Installation, or New Home (Unit is Not Used Yet) is Closed, Whichever Comes Later.



WARRANTY AND TECH. SUPPORT

YMGI warrants to the purchaser/owner(s) that YMGI products be free from defects in material and workmanship under the normal use and maintenance, with the following policies:

Please see **Warranty Policy** that comes with the unit or sales package for more details.

YMGI IS NOT RESPONSIBLE FOR

- Regular equipment maintenance.
- Damage or repairs required as a consequence of faulty installation or application.
- Failure to start due to voltage conditions, blown fuses, open circuit breakers, or other damages due to the inadequacy or interruption of electrical service.
- Damage or repairs needed as a consequence of any misapplication, abuse, improper servicing, unauthorized alteration, or improper operation.
- Damage as a result of floods, winds, fires, lightening, accidents, corrosive atmosphere, or other conditions beyond the control of YMGI.
- Parts not supplied or designated by YMGI.
- Products installed outside USA or Canada.
- Any damages to person or property of whatever kind, direct or indirect, special or consequential, whether resulting from use or loss of use of the product.

CONTACT FOR FIELD SERVICE OR REPAIR

The following people, in a prioritized sequence, will take care of your request or issue:

- 1) The original installer; otherwise,
- 2) Your current service contractor; otherwise,
- 3) Authorized contractor in YMGI list that is close to you; otherwise,
- 4) Authorized Distributor in YMGI Distributor list; otherwise,
- 5) Contractor/Distributor you prefer who is close to you.

CONTACT FOR GENERAL TECHNICAL QUESTIONS OR SUPPORT:

- 1) The original installer; otherwise,
- 2) The current service contractor; otherwise,
- 3) The nearest distributor; otherwise,
- 4) YMGI Technical Support:
Tel: (866) 833-3138*703
Email: techsp@ymgigroup.com

USER NOTES AND SERVICE LOG

USER NOTES

Put down whatever questions you have or phenomenon you have seen as a unit history:

No.	Date	Questions or Phenomenon	Remarks

SERVICE/MAINTENANCE LOG

Put down whatever questions you have or phenomenon you have seen as a unit history:

No.	Date	Service/Maintenance Conducted	Person/Phone

