



YMGI, Engineered Comfort Products for A Sustainable and Efficient Green World!

**INSTALLER'S INSTRUCTION & USER'S MANUAL
DC INVERTER MULTIPLE ZONE (55)5
Variable Refrigerant Flow (VRF)
DUCTLESS INDOOR UNIT-WALL MOUNTED (EW)**

VRFI-07EW-D2B(55)5
VRFI-09EW-D2B(55)5

VRFI-12EW-D2B(55)5
VRFI-18EW-D2B(55)5

VRFI-24EW-D2B(55)5



Thank you for choosing this YMGI product. Please read the owner's manual carefully before installation and operation and retain for your records and future reference. If you need a replacement copy, please contact your local agent or visit www.ymgigroup.com to download a current electronic version.

NOTICE

This product is designed and manufactured to be free from any defects in material and workmanship during normal use and maintenance. Installation, operation, maintenance and repair must follow all standards and professional practices for regular cooling and heating equipment, such as NEC, State, or Local Codes and all related documents/manuals provided by YMGI. Failure to follow and adhere to all codes and documentation can cause damage to equipment, property even personal injury.

Installer: Must be currently licensed/certified HVAC technicians only. Must Read the manual and all provided documents prior to installation. Complete and fill out all required information on the warranty registration card.

User: Retain this manual and all supplied documents for your records and future reference.

Servicer: Use this manual for information concerning servicing and maintenance of this product.

SAFETY WARNING

Only qualified technicians should install and service this equipment. The installation, startup, operation and servicing of this equipment can be hazardous and requires a HVAC professional who has been trained, licensed and certified. Installations, adjustments or any equipment alterations done by an unqualified person could result in serious injury and even death. When working on the equipment, observe all precautions in the provided documents, on the tags, stickers, and labels that are attached to or placed on the equipment.

TABLE OF CONTENTS

Introduction	Error! Bookmark not defined.
Note From YMGI – Must Read	5
Installing Technician/Contractor's Responsibilities	7
Limited Product Warranty	8
Limited Product Warranty Registration Card	9
Why Does YMGI Group Require Installation and Service to Be Performed 100% By Currently Licensed or Certified HVAC Technicians/Contractors	10
Suggestions to Aid You in Hiring an HVAC Contractor	10
Safety Precautions	12
Indoor Unit Diagram	13
Specification Sheet	14
Unit Dimensions, Mounting Bracket Clearance	15
Wiring Diagrams	16
Recommended Tools for Installation	17
System Layout & Installation Clearance	18
Installation-Location Selections	22
Installation-Indoor Units	24
Connect Refrigerant Pipes Between Indoor and Outdoor Units	26
Piping Guide	28
Remote Control-Button Name & Functions	28
Operation of Remote Control	172
Operation in an Emergency	18
Cleaning and Care.....	18
Protection Signs and Error Codes.....	186
Checking Units Prior To Contacting Your Technician.....	187
Exploded View and Spare Parts List.....	180
User Notes and Installation/Service/Maintenance Notes.....	186

Introduction

Read this manual carefully, making sure you understand all the instructions, practices and procedures contained in this manual. Be sure you are familiar with all the safety advisories that appear throughout this manual. Your personal safety depends upon your observance of all precautions contained in this manual.

Safety advisories appear throughout this manual and your personal safety and the proper operation of this appliance depend upon the strict observance of these precautions.

The 3 types of advisories are defined in the following table:

⚠ WARNING	Indicates a potentially hazardous situation which if not avoided could result in serious injury or even death.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.
NOTICE	Indicates a situation that could result in equipment or property-damage only. It can also be used to call attention to important details within this manual.

Important Environmental Concerns

Studies have shown that certain man-made chemicals can affect the earth's stratospheric ozone layer when released into the atmosphere. Refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs), may affect the ozone layer. Not all refrigerants have the same potential impact on the environment. YMGI Group advocates for the responsible handling of all refrigerants including industry replacements for CFCs such as HCFCs and HFCs.

Responsible Refrigerant Practices

YMGI Group believes that responsible refrigerant practices are important to our customers, the HVAC/R industry and the environment. All HVAC/R technicians who handle refrigerants must be certified. The Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants, the equipment and tools necessary to perform these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. HVAC/R technicians must know the applicable laws and follow them.

Disposal Notice

Do not dispose this product or its components as unsorted municipal waste, as they contain items that may require special treatment. Contact your local waste management company for details.

⚠ WARNING

Proper Field Wiring and Grounding Required!

Failure to follow established electrical codes can result in death, serious personal injury and property damage. All field wiring **MUST** be performed by qualified personnel, such as a currently licensed electrician. Improperly installed and grounded field wiring poses **FIRE** and **ELECTROCUTION** hazards. To avoid these hazards, you **MUST** follow the requirements for field wiring installation and grounding as described in this manual and by NEC and your state and local electrical codes.

⚠ WARNING

Personal Protective Equipment (PPE) Required!

Failure to wear proper PPE for the job being undertaken could result in serious injury or even death. Technicians must take the necessary precautions to protect themselves from potential electrical, mechanical, and chemical hazards and **MUST** follow all precautions in this manual and on the tags, stickers, and labels, as well as the instructions below:

- Before installing or servicing this unit, technicians **MUST** put on all PPE recommended for the work being undertaken. **ALWAYS** refer to appropriate Material Safety Data Sheets (MSDS) and Occupational Safety and Health Administration (OSHA) guidelines for proper PPE.
- When working with or around hazardous chemicals, **ALWAYS** refer to the appropriate MSDS sheets and OSHA guidelines for information on allowable personal exposure levels, proper respiratory protection, and handling recommendations.

If there is a risk of arc or flash, technicians **MUST** put on all PPE in accordance with NFPA 70E or other country-specific requirements for arc flash protection, **PRIOR** to servicing the unit.

Copyright

This document and the information contained therein are the sole property of YMGI Group and shall not be used or reproduced in whole or in part, without the written permission of YMGI Group. YMGI Group reserves the right to revise this manual at any time and to make changes to its content without obligation to notify anyone about any modifications, revisions or changes.

⚠ WARNING

- Instructions for installation and use of this product are provided by the manufacturer.
- Installation must be performed by authorized and licensed personnel only and in accordance with all the requirements of this manual, the NEC, CEC and any state and local codes.
- For safe operation of this unit, please read and follow all instructions carefully.
- The total operation capacity of the indoor units should not exceed 120% of the total capacity of the outdoor units if all indoor units must operate at their peak capacities all the time. Otherwise, the heating and cooling operation will be diminished and less efficient which could damage the units.
- Any person responsible for system operation or system maintenance should retain this manual for reference.
- If the unit fails to operate normally, please contact your authorized system installer or HVAC professional as soon as possible and provide the following information:
 - Data on the unit (model number, serial number and owner's name).
 - A detailed description of the unit's problem before and after the problem occurred.
- To avoid personal injury or property damage, do not disassemble the unit yourself. If disassembly is required to check the unit, contact your authorized system installer or HVAC professional as they have the experience and training necessary to perform this task.

Note: Each unit has been thoroughly tested to ensure it operates correctly before leaving the factory.

Basic Cautions and Warnings

⚠ CAUTION

All units shall be installed by an experienced HVAC licensed contractor or technician. Read all manuals before installation, startup and operation.

⚠ CAUTION

All NEC, state, local codes and installation instructions must be followed for all units, otherwise, the unit warranty will be void and could result in serious damage to people or property.

⚠ WARNING

YMGI Group is not responsible for any damage or loss due to Do-It-Yourself(DIY), self-installation or any improper installation, improper operation, improper service or natural disasters of any kind.

⚠ WARNING

Do not connect power to the unit until all wiring, tubing and all unit inspections and testing have been completed. Ground the unit according to the instructions and adhering to NEC, state and local codes.

⚠ WARNING

All wiring connections must be correct and secure. Loose wire(s) or improper contacts may cause arcs or overheating which can result in a fire hazard.

Note From YMGI – Must Read

Dear Customers, Purchasers, Installers, and Contractors

Thank you for choosing a YMGI product.

All YMGI's products are fully tested and have passed rigorous safety, performance and manufacturing standards before being packed and shipped. YMGI only uses suppliers that meet our strict standards for high quality and performance for all parts. YMGI also recognizes a quality installation is equally important therefore your system must be installed by a licensed HVAC professional. A quality installation ensures your unit will operate at its highest efficiency and peak performance for many years of worry free comfort; while a poor installation can result in unit failure and cause the unit to operate inefficiently, either immediately or over time, resulting in costly repairs.

Because a quality installation is so critical, YMGI provides detailed information in our manuals which will aid the installing technician and the owner of the unit(s).

At YMGI our goal is to ensure that your YMGI units are installed properly and correctly from the beginning.

The YMGI equipment you purchased is either a split-type or a self-contained cooling/heating system. These types of systems require a certified and licensed HVAC professional technician for proper installation. Only a certified and licensed HVAC professional technician will have the knowledge, experience, and attention for all required details to perform a complete and successful installation. This equipment is different from a window or portable type air conditioners you can purchase from local retail stores such as Home Depot, Lowe's, Sears, etc. which the manufacturer may not require certified and licensed personnel to install.

Reading and following YMGI Group recommendations and requirements contained in the following pages and other documents, is the first step to help ensure a smooth installation and proper operation of your unit for many years.

⚠WARNING

YMGI doesn't recommend nor allow any do-it-yourself (DIY) installation (partially or fully). Due to the complexity of the installation of this product most DIY installations usually have problems, either immediate or near future. These problems can cost more to fix than any upfront savings. **YMGI warranty doesn't cover any DIY units.**

If you have any questions about your unit or if the unit has a problem, you should first check the manual. If you can't find a solution, then contact your local installer or service technician to schedule a service appointment. The technician can physically inspect the unit. If at the time of inspection, the installer or service technician has any questions about the unit, they can contact YMGI technical support division directly at:

Toll Free Number: (866)833-3138 or Email: techsp@ymgigroup.com

IMPORTANT: YMGI Group is the MEDIA AUTHORITY:

YMGI Group, located in O'Fallon, MO 63366 is the author of all media produced for its products and is the only party able to give any additional explanation for any data, definitions and or descriptions found within any of its media, including but not limited to YMGI product brochures, manuals, pamphlets, catalogs, and videos. YMGI's distributors, installers, dealers, agents, customers or any other third parties will not supersede YMGI in anyway concerning YMGI-published materials and their meaning. Any concerns or questions arising from YMGI distributors, installers, dealers, agents, customers or any other third parties, should be presented directly to YMGI. YMGI will respond to any concerns or questions, if necessary, about any of its media in writing.

NOTICE

- Be sure to only hire a certified and currently licensed HVAC Company to complete 100% of the installation so that all details of the installation are performed correctly and completely.
- Be sure to have ONLY the licensed HVAC professional perform all aspects of the installation. Factory Warranty will be void if any portion of the installation is not performed by a licensed HVAC contractor/technician. DIY or partial DIY will also void ALL factory warranties.
- When hiring an HVAC technician that is offering their services as a "side job" and not hiring a licensed HVAC company may pose possible risk. This may result in an incomplete or unsatisfactory installation, no guarantee for workmanship and lack of maintenance and further service to your unit.
- Have the installation technician read in full the installation manual and all supplied documents for the product model you purchased. Details within the provided documentation contributes greatly to the success and quality of the installation. Experience with other manufacturers may not be applied fully to another manufacturer, although there will be similarities there will also be differences. Ignoring the provided installation procedures is an act of negligence and may cause unit failure or damage which could be irrevocable and permanent.
- It is possible for a licensed contractor/technician to make a mistake during the installation. YMGI doesn't supervise nor is able to control the contractor/technician's installation. It is critical that the installer take each variable into account during the initial installation. This will ensure a complete and professional installation and that all units work properly.

⚠WARNING

The following will damage the unit and its key components resulting in loss of factory warranty:

1. Any foreign substances introduced into the system because of failure to seal the ends of the refrigeration piping before pulling the piping through any structures at time of installation.
2. Not installing an oil P-trap in the copper suction line where the indoor unit is located 18 feet or more below the outdoor unit.
3. Cross piping and/or cross wiring of any units including more than one single zone or a multi zone system.
4. Not conducting a positive leak check by charging the system with dry-nitrogen and performing soap bubble testing.
5. Not conducting a negative leak check by evacuating the copper lines for 30 minutes. The vacuum must be held at 500 microns or better for at least 5 minutes, starting a 5-minute timer after the vacuum pump is turned off.
6. Not conducting a positive leak check prior to the negative leak check.
7. Not selecting the correct size wire or circuit breaker.
8. Not answering ALL questions in the technician's checklist located inside the warranty registration form.

⚠WARNING

The following may be overlooked, ignored, or considered unimportant during your installer's installation, but will cause your unit to underperform and may cause unit failure.

1. Any kinks in or improper bending of the copper piping.
2. Any poorly formed flares or not centering the flare with the flare nut, or not tightening all connections.
3. Not testing each indoor unit individually.
4. Not reading technical data (temp/time/pressure/current) after the system is stabilized (normally the compressor needs to run at least 10 minutes before reading the data). If the data is read too early, it may lead to inaccurate assessments about the unit.

In an effort to help protect our customers from possible faulty installations that can lead to premature unit failure, YMGI provides the above information for you (the owner) and the technician. You can observe while your system is being installed, even though your observation is not a guarantee your system is being or has been installed properly and professionally. With the information provided above, you will know some things to look for and questions you can ask. If at any time you feel there may be an issue with the installation, please have your technician contact YMGI at (866)833-3138 x 703 with any questions, issues or concerns you may have.

INSTALLING TECHNICIAN/CONTRACTOR'S RESPONSIBILITIES

1. Discuss with the customer detailed information about the structure to be conditioned, local weather (typical design, extreme temperature/humidity conditions, cooling and heating hours), previous and existing HVAC equipment (if any), usage and dependence on new HVAC equipment or YMGI products.
2. Performing a cooling/heating load calculation by using commercially available professional programs/methods such as Right-J (Manual J) for residential HVAC applications and Right-CommLoad (ASHRAE RTS/CLTD) for light commercial and commercial HVAC applications.
3. Contact your YMGI distributor/sales department or contact the manufacturer directly to obtain additional information to fully understand your YMGI products, including but not limited to product features, cooling/heating performance at standard ratings/conditions and extreme conditions, allowed indoor and outdoor temperature and humidity ranges, installation, operation, maintenance, service, warranty, parts and any other issues pertaining to YMGI products.
4. Select the correct (most suitable) YMGI product unit models and accessories necessary for your HVAC applications and list them in the proposal/quote, in writing, on company's quotation form or letter head, based upon the information you collected from 1, 2 and 3 listed above.
5. List your currently valid HVAC license number and EPA number in your proposal/quote.
6. Make sure you are the only party to perform the entire installation and you will not sub-contract any part of the installation to any non-licensed parties or persons. You will be solely responsible for the entire installation that you have been contracted.
7. Make sure you have all the materials you need to properly, completely and correctly finish the installation. The YMGI units and accessories may be just a portion of what you will need for the project. When support issues arise, remember YMGI employees and YMGI distributors/sales, dealers and agents are not installers and may only provide suggestions. You are the only one qualified to determine what other materials you need to complete the installation.
8. When connecting electrical wires, follow all NEC, state and local codes and ensure the installation of all YMGI units and accessories meet these requirements.
9. Connect the unit to a correctly sized electrical power source. If the unit is installed in an area where lightning or storms occur frequently, a correctly sized and type of power surge protector must be installed between the outdoor unit and the power source.
10. Select the correct types and sizes of HVAC circuit breakers, disconnect switch boxes, wires and conduit from circuit breaker to disconnect box and then from disconnect box to outdoor unit.
11. Select the proper location for installing indoor units and outdoor units with all factory requirements being followed (cooling/heating air inlets and outlets are not blocked, or restricted, mounting structure is secure, installation for convenience is considered, allow adequate clearance for maintenance/service and all applicable codes are met).
12. Cap/tape the two ends of every copper line before running them through any structure to keep any foreign substances from entering the copper line causing contamination. Label the copper lines A-A, B-B, C-C, D-D, or any other identifying marks on each pair of copper lines and wiring cable sets to keep from cross-piping or cross-wiring in multiple zone installations or where pipes for different single zone systems are close to one another.
13. Secure the wiring cables that connect between the indoor unit and outdoor unit, following all applicable NEC, state and local codes for your installation. If there are no special NEC, state or local codes to govern how these wires are to be installed, you can tape/cable tie them along with insulated copper line.
14. Tighten all pipe and wire connections ensuring there is no leakage or false/loose connections.
15. Conduct a positive pressure leakage test, checking each of the inter-connecting copper lines between each indoor unit and outdoor unit by charging with dry-nitrogen at the outdoor unit's service port (**NOTE: do not back-seat stopping valve**). A liquid soap solution shall be applied at all pipe connections to check for leakage. A 1/4" - 5/16" hose/valve adaptor may be needed if you have a 1/4" traditional manifold hose connection.
16. If there is no positive leaking, then conduct a negative pressure leakage test, checking all inter-connecting copper lines between each indoor unit and outdoor unit by pulling vacuum at the outdoor unit's service port (**NOTE: do not back-seat stopping valve**) and checking that a vacuum level of 500 Microns can be held for at least 20 minutes.
17. If there is no leakage found at any of the refrigeration pipe connections, flip up the indoor unit's face panel and remove its filter, carefully pour some clear water onto the up-right aluminum coil surface to test if the water can drain freely out of each of the indoor unit's without finding any leakage.
18. If there is water leakage found, locate the source of the leak and correct it. Only after everything is clear and all the necessary inspections made, engage the correct electrical power to the system.
19. Then back-seat stopping valves of the outdoor unit to release refrigerant from the outdoor unit into the inter-connecting pipes and the indoor unit.
20. Make sure both the indoor unit and outdoor unit are powered on correctly, operating the indoor unit in fan mode first. Then move on to test cooling, dehumidifying/drying, heating and other modes.
21. Read refrigerant pressures and pipe/valve temperatures only after the system is stabilized (normally 10 minutes after cooling/heating mode is started successfully). Record this data into the technician checklist in the lower half section of the Limited Product Warranty Registration Card/Form.
22. Adjust refrigerant charging level (remove refrigerant if pipe is shorter, the temperature is colder; add refrigerant if pipe is longer the temperature is warmer), following the manufacturer's instructions. If the average pipe length is shorter or longer than 25' and pressure/temperature readings at the outdoor unit service valves are not falling into normal ranges.
23. Explain to the user/owner about proper unit operation and maintenance. Leave your contact information to allow them to reach you. If the customer finds the unit doesn't work properly and cannot resolve the issue themselves, check the customer's units/parts/accessories and correct the issue if there is one. Communicate with YMGI-technical support line at (866)833-3138 x 703, if further help necessary.

Following these requirements will aid in ensuring that the units to be installed meet general HVAC practicing standards and necessary factory requirements. Finding any possible problems early, preventing any further damage to the unit will help to ensure a properly working unit for many years.

LIMITED PRODUCT WARRANTY

Once the installation and successful testing of the system has been completely performed by a qualified licensed/certified HVAC technician/contractor, the registration card/form is filled out completely and correctly, and filed along with a valid installation invoice from the contractor within 7 days of the original installation, the following standard **Limited Product Warranty** is qualified: **10-years** on the **compressor** and **5-year** on **PARTS ONLY**. There is **no labor coverage**.

YMGI products are designed and manufactured free from defects in workmanship, and materials for normal use. However, if for any reason, including occasionally transporting between YMGI factories/warehouses and your delivery location, you discover the unit has issues, YMGI Group will help field a solution by following YMGI's established warranty procedures:

Compressor: YMGI will warrant the compressor of a YMGI-validated and approved warranty filing, for a period of 5 years from the date of successful installation at its original installation location.

Parts: YMGI will warrant parts of a YMGI-validated and approved warranty filing, for one year from the date of successful installation at original installation location.

All warranty compressors and parts replaced will become the sole property of YMGI Group and must be returned to YMGI Group upon request. Warranty parts may be new or refurbished. All parts are tested and approved before shipping.

At no time does YMGI Group warrant labor cost of any type. Warranty will start from the date of a successful installation at the original installation location, or 90 days as of original shipping date from YMGI Group, whichever comes first.

This is a standard limited liability warranty and DOES NOT cover the following:

- Any damage or repairs to properties, or persons as an incident of or consequence of improper faulty transportation, installation, operation, maintenance or service.
- Any damage caused by frozen or broken water hoses or refrigeration pipes in the event of equipment failure.
- Any damage due to floods, fire, wind, lightening, accidents, corrosive atmosphere or any other conditions beyond the control of YMGI Group.
- Any damage due to interruption or inadequate electrical service to equipment.
- Any products that are installed outside the US or Canada.
- Any unit that has been moved from its original installation address.
- Any labor costs associated with the installation or service of the unit.
- Poor unit performance due to improper unit selection (SEER, Unit size).


To validate the above warranties, ALL of the following conditions must all be fulfilled:

1. The unit was fully (100%) and successfully installed by a licensed or certified HVAC technician.
2. The unit was installed following all NEC, state and local codes.
3. The unit was installed following all the information within the Instructions and User Manuals provided by YMGI Group.
4. ALL fields, especially the technician-checklist, of the **Limited Warranty Registration Card/Form** were filled out completely by the installing technician and signed by both the installing company's technician and the unit owner.
5. The **Limited Warranty Registration Card/Form** and a copy of the original installing company's invoice have been received by YMGI Group-Warranty Dept., POB 1559, O'Fallon, MO 63366, within 7 days of successful installation.

**No warranty filing will be validated or approved, if any one of the above conditions are not met.
Product registration doesn't guarantee the validity of this limited warranty statement.**

Steps to follow for warranty part replacement:

1. The installing or service technician must contact YMGI tech support at 1-866-833-3138 ext. 703 from the installation location to check and confirm with YMGI Technical support the exact part(s) needed to fix the problem(s).
2. YMGI will check the customer's warranty filing. There will be no charge for Parts with a validated and approved warranty. Any Parts that have not been validated and approved or have an invalid warranty filing resulting in an unapproved warranty request, will be charged accordingly.
3. **YMGI will ground ship the parts ASAP. Expedited shipping is available at the customer's expense.**
4. Replacement parts that have an approved warranty registration are to be warranted for the remainder of the 1-year on parts and a 5-year compressor warranty. Purchasing of replacement parts without a valid warranty filing or unapproved warranty request, will be sold as is and are not covered by any warranty. YMGI is continually improving products with various engineering changes and these changes are made without prior notice. Such improvements or changes include but are not limited to product specification, appearance, functionality, size, packaging, etc. These improvements or changes will not void the limited warranty stated herein. YMGI is the final authority concerning this warranty policy.

 YMGI GROUP <small>Innovative, Competitive, Efficient & Convenient</small>		LIMITED PRODUCT WARRANTY REGISTRATION CARD / FORM	
<small>YMGI to Fill Top Portion, at Shipping, and Keep Copy A; Center Copy B for Installer to Fill and Mail back to YMGI; Bottom Copy C for Customer to Fill and Keep</small>			
For YMGI Use Only	The Company the Unit Was Sold Through: _____ Shipping Packing List Number: _____		Registration Card Serial No. _____
	Did the Company Pay to YMGI: _____ HVAC Contractor/Technician-Name _____		Date the Filled Registration Card YMGI Received: _____
Installation Invoice Attached to the Registration Card _____		Heard YMGI Recommended HVAC Contractor/Technician? _____	Unit(s) Work Successfully (Yes/No): _____ Warranty Approved _____ Warranty Denied _____
Outdoor Serial Number (One Outdoor Unit, One Registration Card/Form): _____		Indoor Serial Number: _____ For Multi-Zone Units: _____	Unit #1 _____ Unit #2 _____ Unit #3 _____ Unit #4 _____ Unit #5 _____ Unit #6 _____ Unit #7 _____ Unit #8 _____
Contact Where the Units are Installed: Name: _____ Phone: _____ Fax: _____ Address: _____ Email: _____ City: _____ State (Province): _____ Country: _____			
Contact of the Installing HVAC Contractor/Technician: Technician Full Name (Print): _____ HVAC Technician's Company Name: _____ Address: _____ Currently Licensed or Certified HVAC Technician License or Certification Number: _____ License Approved or Certified by: _____ Official Phone # to Check the License Validity: _____		YMGI-Recommended Contractor/Technician: Phone/Fax: _____ Email: _____ City/State (Province): _____	
<small>List for Installing HVAC Technician to Double Check Installation Quality, and Warranty Processing Purpose (if not filled by technician, or not filled fully, warranty will void)</small>			
1) Are you the only one to install whole system? If not, % of installation done by you (HVAC technician). 3) Did you read the User Manual and Installation Instruction, before you started the installation? 5) Supply electrical power V/Ph/Hz measured at wiring terminal block of outdoor unit: 7) Wire gauge, length and terminal colors between circuit breaker/disconnect switch to outdoor unit: 9) The size of HVAC circuit breaker/fuse or disconnect switch to the outdoor unit: 11) What is the refrigerant pipe length between each indoor unit and the outdoor unit? Unit A Unit B Unit C Unit D... 13) What is the elevation difference between each indoor unit and the outdoor unit? Unit A Unit B Unit C (indoor unit above outdoor unit +, below -) 15) Where is the outdoor unit located? Is the outdoor unit anchored to Ground wall balcony roof other location or pad Is the outdoor unit anchored to ground or secured onto wall bracket? 17) Were the refrigerant pipe ends capped or taped seal, prior to running them through structures to keep debris from entering the copper lines? 19) Did you charge the inter-connection copper pipes and indoor unit with nitrogen to check for positive leakage (pressures 150-200PSI), before conducting vacuuming leakage check? 21) Did you check if the compressor can be started and stopped in a correct (design) manner? 23) Measured refrigerant pressures at outdoor service suction valve, when unit was st. Heat pump (PSI): Cooling (PSI): Outdoor Ambient Temp. (F): 25) Have you checked all unit functions, with customer's witness, and all functions are correct? 27) Do you provide regular one-year free technical service for this installation?		2) What had been done, prior to your arrival? 4) Who unpacked the unit and accessory boxes to check for damage? 6) Incoming electrical power V/Ph/Hz measured at terminal blocks of indoor unit: 8) Wire gauge, length and terminal colors between each indoor and outdoor unit: Unit A Unit B Unit C Unit D... 10) Are the inter-connecting wires and copper lines between indoor and outdoor units installed/covered/protected by line set covers, or anything else? 12) Where is/are the indoor unit(s) located? Unit A Unit B Unit C Unit D... 14) Did you check the indoor unit for condensate leakage and refrigerant leakage, before and after connecting them? 16) Have you checked to make sure there is no cross-piping and no cross-wiring between any two indoor units (zones)? How did you do it, who was with you? 18) Have you checked and run cooling or heating, one unit by one unit, all working fine? 20) Did you vacuum correctly to check the connecting pipes and indoor unit for leakage, what was the micron gauge reading, for how many minutes? 22) If copper length were not made to the supplied or recommended refrigerant pipe length, how much refrigerant added or deducted? 24) What were the measured temperatures (probe not touching any metal): At cooling: indoor return air °F, discharge air °F, and outdoor °F At heating: indoor return air °F, discharge air °F, and outdoor °F 26) Did you show the user how to operate the unit? Did he/she understand you? 28) Do you list the working details in the invoice and leave a copy to the customer?	
Installation Finished and Unit Works Successfully. Print Name of Installation HVAC Technician: _____ Signature: _____ Date and time: _____		Installation Finished and Unit Works Successfully. Print Name of Owner: _____ Signature: _____ Date and time: _____	
<small>By signing above, I acknowledge the liability and responsibility for any false statement or not telling all the facts, and I authorize YMGI to check the details of the filed above, and make its decision on warranty. I understand our filing or filing the warranty card/form DOES NOT mean automatic warranty approval, because warranty is approved only to those qualified and successful installations by qualified HVAC technician. I know the warranty, if approved, is a standard 5-year compressor and 1-year other parts only, without any labor coverage. I agree to and will follow all the contents contained in the Limited Product Warranty Policy that YMGI, not other entity, stated in public, including but not limited to manual, web site, email, etc.</small>			
<small>Important Note: A copy of the installing HVAC company's invoice to show all their work details, your payment proof, center copy B of this registration card filed after a successful installation, all three (3) MUST be mailed together to Warranty Dept., YMGI Group, POB 1559, O'Fallon, MO 63366, for warranty processing. Customer keeps bottom copy C. YMGI will check against copy A that was kept at YMGI.</small>			

WHY DOES YMGI GROUP REQUIRE INSTALLATION AND SERVICE TO BE PERFORMED 100% BY CURRENTLY LICENSED OR CERTIFIED HVAC TECHNICIANS/CONTRACTORS?

1. Expertise and Safety:

They have the training and experience to accurately and safely install and service your equipment. The equipment runs with high-pressure refrigerant, oil and electrical current. The copper lines must be installed properly to prevent leakage and foreign substances from contaminating the refrigerant system.

2. You will save money in the long run:

If any problem occurs with the unit that has been fully installed by a currently licensed or certified technician/contractor, contact the original licensed or certified HVAC technician to evaluate the unit as they have the training and experience to correct the problem quickly and efficiently. A technician may be unwilling to repair an issue on a unit that they did not install. If you do find a technician willing to perform this service, there is an increased possibility of higher service fees, increased service visits, or delayed service from that technician.

3. It's the law!

The federal, state and/or local government and authorities have various governing laws or regulations, guidelines, ordinances, etc. These laws may require only licensed or certified professionals can install and service this type of high pressure HVAC equipment.

SUGGESTIONS TO AID YOU IN HIRING AN HVAC CONTRACTOR:

1. Hire a currently practicing, licensed/certified HVAC professional technician/contractor. Technicians, who are no longer practicing (retired, etc.) in this field, may not have current technical knowledge or may lack experience on the equipment you have purchased.
2. Hiring a licensed technician to install your unit as a "side job" and not hiring a licensed HVAC company may pose possible risk. This may result in an incomplete or unsatisfactory installation, no guarantee for workmanship and lack of maintenance and further service to your unit.
3. Hire a technician/contractor who services customers in your local area and one you are familiar with. Local contractors have a faster response time and it will be easier for you to determine if they are reputable.
4. Use only a reputable licensed/certified HVAC installation professional to prevent any unexpected charges because of unethical business practices.
5. Check their references, verify they provide professional service for their customers. N.A.T.E or A.C.C.A certified technicians are strongly recommended.
6. Some contractors/technicians may not feel comfortable about installing equipment that has been purchased by someone other than themselves. They prefer to purchase and install the equipment themselves. You can contact YMGI directly to check and see if there are contractors in your area who have installed our products or any similar products.
7. Ask for a detailed quote for the complete installation project. A flat rate quote is the safest contract for both you and the contractor.
8. Local HVAC technicians may charge you on a project basis or on an hourly basis. It has been our general experience; **a full single head installation normally can cost \$800 to \$1500**. These costs are estimates, and your actual costs may differ due to your specific job requirements and installation location.
9. Number of hours can vary depending upon each individual situation, some factors are, but not limited to:
 - Difficulty or complexity of securely installing the indoor unit.
 - Difficulty or length of the inter-connecting pipes and wires to be installed.
10. A successful installation is dependent on all these suggestions and all the necessary steps are followed.
11. If the contractor(s)/technician(s) are experienced with the systems/brands you purchased. **You might save on the installation cost, but remember to always ask for and verify references.**
12. The contracts should list and detail all work to be performed and the standards they will follow. Some contractors are willing to include a 1-year installation/service warranty at no extra charge. Check to see if this is an available option. If available, make sure it is included in the contract.
13. Verify and confirm the installation is completed and all the unit functions have been tested and working properly. All items on the checklist should be checked and clearly marked in the warranty registration card/form, prior to paying the contractor in full.

The cost of not having your unit professionally installed can be more expensive than the additional cost of hiring a certified contractor. Protect your investment and warranty eligibility by doing it right the first time.

⚠WARNING

Safety Precautions

1. Follow these instructions to complete the necessary installation process. Carefully read this manual before installation and unit startup or servicing.
2. Wire size of power cord should be properly sized to meet the required electrical loads. Should the power cord get damaged, the power cord should be replaced with a manufacturer approved cable.
3. After connecting the power cord, attach the electric box cover and secure properly.
4. Always meet the nitrogen charge requirements when welding pipes.
5. Never short-circuit or cancel the pressure switch as this will result in damage to the unit.
6. Connect the wired controller before energizing, otherwise the wired controller cannot be used.
7. Before using the unit, verify the piping and wiring are correct. This will avoid water leakage, refrigerant leakage, electric shock, or fire etc.
8. Do not insert fingers or objects into the air outlet or inlet grille.
9. Open a door or window for ventilation for allowing fresh air to enter the room to avoid depleting the oxygen while gas/oil supplied heating equipment is used during the installation.
10. Never start up or shut off the unit by means of directly plugging into or unplugging the power cord from the power outlet.
11. Turn off the unit after it runs at least five minutes, otherwise it will influence the oil return of the compressor.
12. Do not allow children to operate this unit.
13. Do not operate this unit with wet hands.
14. Turn off the unit or disconnect the power supply before cleaning the unit. This will avoid possible electric shock or personnel injury.
15. Never spray or splash water towards the unit. This can cause a malfunction in the unit or can result in electric shock.
16. Do not expose the unit to moist or corrosive environments.
17. While operating in cooling mode, do not set the indoor units room temperature too low. Keeping the temperature difference between indoor and outdoor unit within 41°F (5°C).
18. YMGI Group recommends that only properly trained and authorized personnel be allowed to repair or service the unit. Improper repairs or servicing can result in electric shock or fire hazards. Please contact YMGI Group if you need help locating a qualified repair or service technician.
19. Before installation, check the power supply to ensure it is sufficient to meet and is in accordance with the requirements specified on the nameplate of the unit. Ensure the power overload is functioning correctly and make sure it is properly maintained.
20. Installation must be performed only by an authorized installer or HVAC professional in accordance with the requirements set by the NEC and CEC. Do not attempt to install the unit yourself. Improper handling may result in water leakage, electric shock, fire, and voiding of the warranty.
21. Be sure to use only approved accessories and parts to prevent water leakage, electric shock and fire.
22. Make sure the unit is grounded properly prior to connecting to power source, to avoid electric shock. Do not connect the ground wire to a gas pipe, water pipe, lightning rod or telephone line.
23. Energize the unit for 8 hours before operation. Turn off or disconnect the power within 24 hours to prevent short-cycling (to protect the compressor).
24. If refrigerant leakage happens in a confined space during installation, ventilate immediately. Poisonous gases can occur if the refrigerant gas is exposed to fire.
25. Volatile liquids, such as paint thinners or solvents if exposed to the unit's surface will cause damage to the surface finish. Only use a soft cloth along with a mild non-abrasive detergent to clean the outer casing of the unit.
26. If the unit does not operate normally or if you notice any type of burning odor, power off the unit and turn off the main power supply, then immediately contact your YMGI authorized repair service center or HVAC professional.

NOTICE

YMGI Group will not be responsible for any personal injury or any property damage caused by improper or incorrect installation, improper service or maintenance or by not following the instructions listed in this manual.

DO NOT pull on the power supply cords or refrigeration lines that are connected to the indoor and outdoor units. Install the power supply cords and secure them into position. PVC line set cover is recommended for the outdoor unit to protect against rain, sunlight and accidental damage.

DO NOT allow cold air to blow directly onto people for a prolonged period, as this could make people cold and uncomfortable.

DO NOT undersize any of the power supply wires.

DO NOT connect several units to a single breaker. Don't undersize or oversize the circuit breaker. A poorly sized circuit breaker can cause unit failure and even fire.

DO NOT wire or open a unit while the unit is running. Make sure to disconnect the power supply and switch off all circuits prior to inspecting or servicing the unit. Inspecting and servicing the unit while the power supply is connected, and the circuits are switched on could cause an electrical shock or fire.

DO NOT install the indoor unit near any cooking surfaces, in direct sunlight or any ventilation systems. Poor placement could decrease efficiency and waste energy.

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

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

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

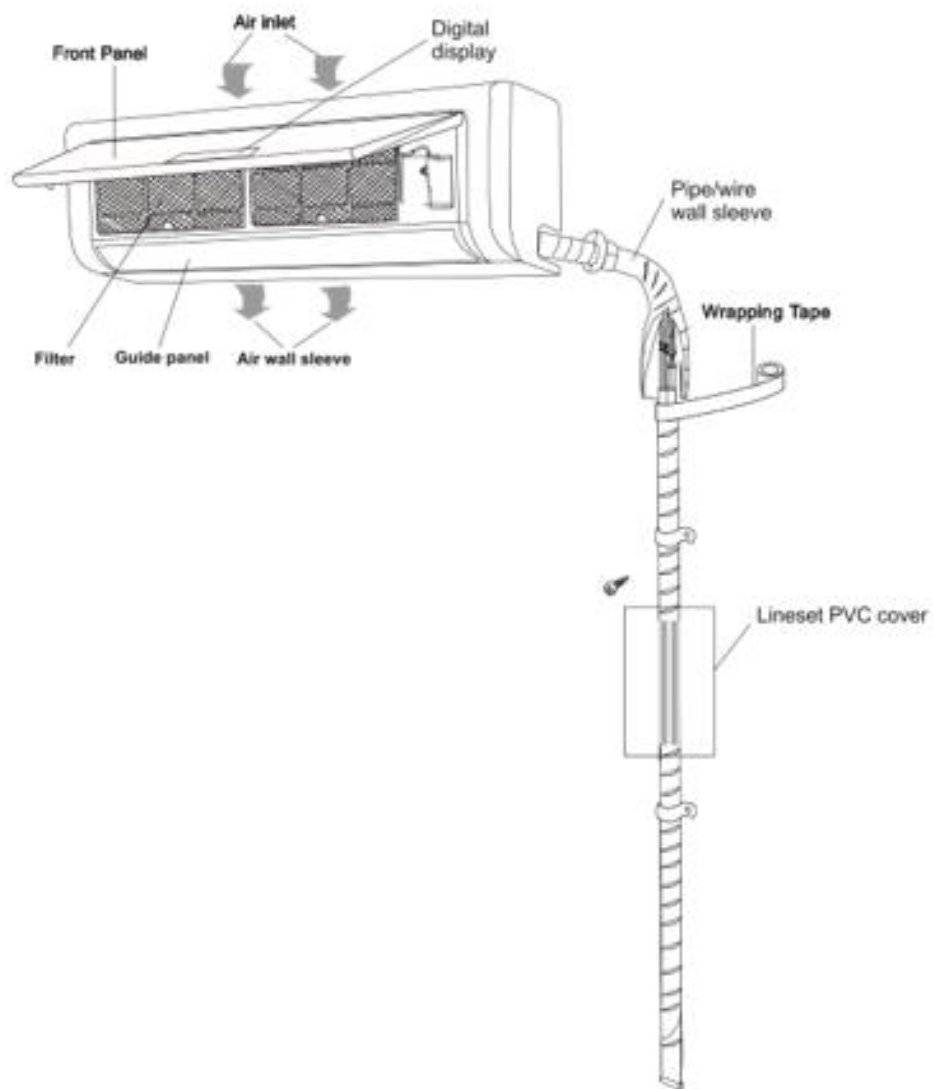
DO NOT use the system for anything other than what it was designed.

DO NOT store or install the units near food, paint, or other chemicals.

DO NOT use the unit in cool or dry mode for prolonged periods where humidity is higher than 90%.

DO NOT operate the unit for prolonged periods without refreshing ambient air. Open a door or window periodically to allow in fresh air.

Indoor Unit Diagram



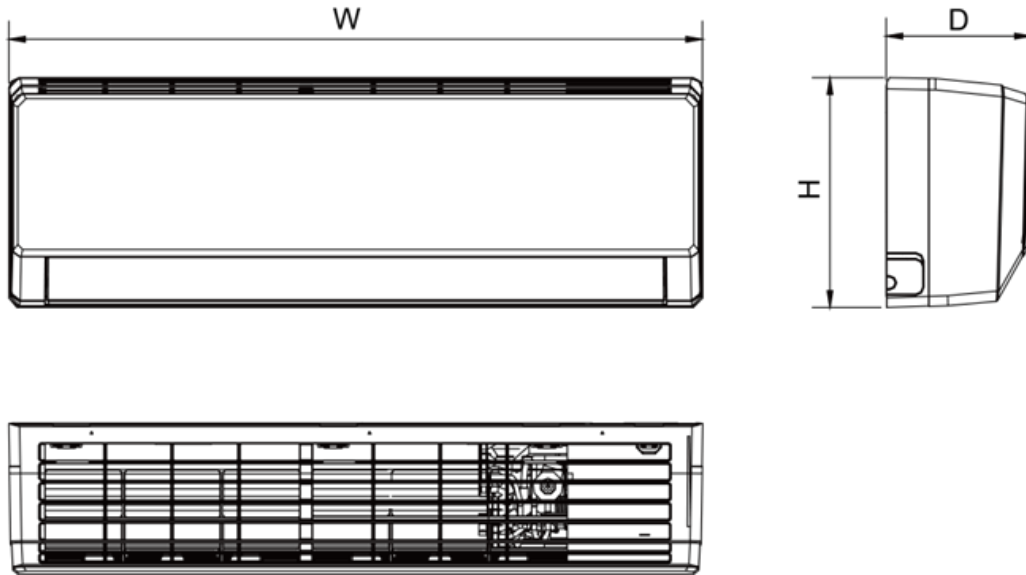
Rated Operating Condition

	Indoor Side Condition		Outdoor Side Condition	
	Dry Bulb Temp C°(F°)	Wet Bulb Temp C°(F°)	Dry Bulb Temp C°(F°)	Wet Bulb Temp C°(F°)
Rated Cooling	27(80.6)	19(66.2)	35(95)	24(75.2)
Rated Heating	20(68.0)	15(59.0)	7(44.6)	6(42.8)

Specification Sheet

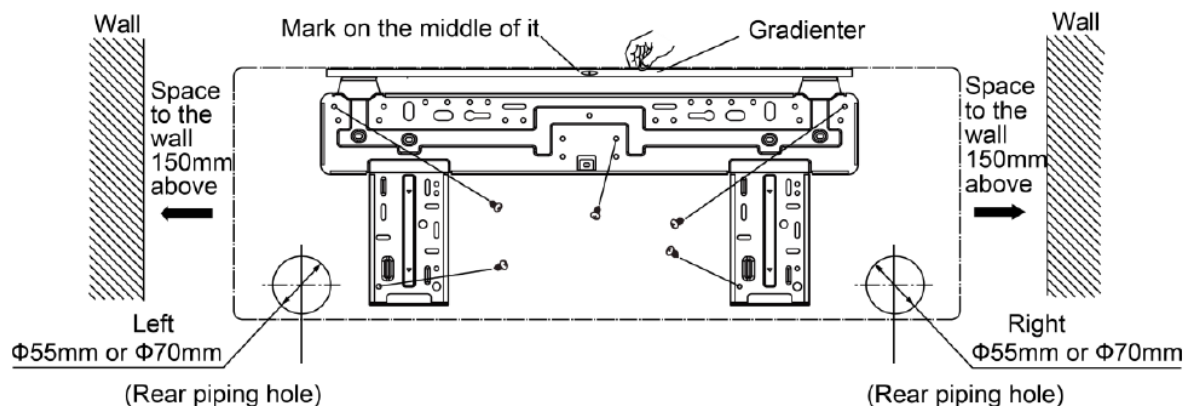
Items	Unit / Conditions	WMMS-07EW-V2B(59)2	WMMS-09EW-V2B(59)2	WMMS-12EW-V2B(59)2	WMMS-18EW-V2B(59)2	WMMS-24EW-V2B(59)2
Cooling Capacity	Btu/h	7,500	9,500	12,000	18,000	24,000
Heating Capacity	Btu/h	8,500	10,500	13,500	20,000	25,500
Power Supply	Voltage/Ph/Hz	208/230/1/60	208/230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
Power Consumption	W	50	50	60	60	70
Airflow Volume	M ³ /h	500/420/350	500/420/350	630/550/480	630/550/480	750/600/500
	CFM	294/247/206	294/247/206	371/324/282	371/324/282	441/353/294
Related Current Heating/Cooling	A	0.2	0.2	0.21	0.21	0.31
Sound Pressure Level	dB(A)	38/34/30	38/34/30	44/41/38	44/41/38	44/41/38
Liquid Connecting Pipe Dia.	In.	Ø1/4	Ø1/4	Ø1/4	Ø1/4	Ø3/8
Gas Connecting Pipe Dia.	In.	Ø3/8	Ø3/8	Ø3/8	Ø3/8	Ø5/8
Drain Pipe External Dia.	In.	Ø11/16	Ø11/16	Ø11/16	Ø11/16	Ø1 1/16
Drain Pipe Thickness	In.	1/16	1/16	1/16	1/16	1/16
Dimensions (W x D x H)	In.	33 7/32 x 7 x 10 7/8	33 7/32 x 7 x 10 7/8	37 x 7 7/8 x 11 3/4	37 x 7 7/8 x 11 3/4	39 11/16 x 8 3/4 x 12 9/16
Shipping Dimensions (W x D x H)	In.	38 3/8 x 10 3/16 x 14 9/16	38 3/8 x 10 3/16 x 14 9/16	42 x 11 3/8 x 15 9/16	42 x 11 11/32 x 15 9/16	44 1/2 x 15 11/16 x 13
Net Weight/Gross Weight	Lbs.	22/27.6	22/27.6	27.6/33.1	27.6/33.1	33.1/40.8
Refrigerant	R410A	Yes	Yes	Yes	Yes	Yes

UNIT DIMENSIONS



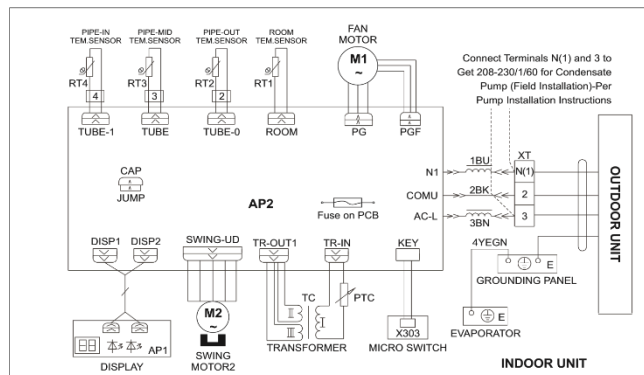
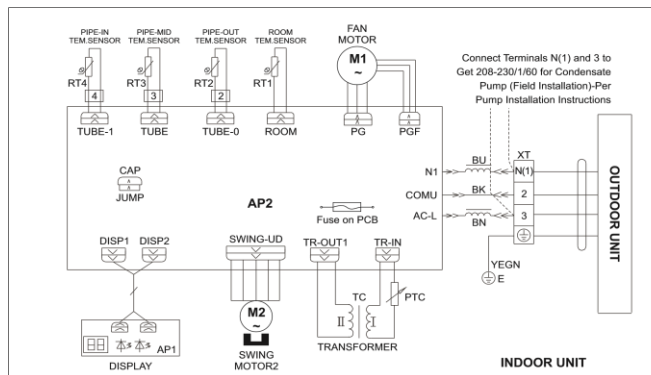
Model	W mm (inches)	H mm (inches)	D mm (inches)
VRFI-07EW-D2B(55)5	843	275	180
VRFI-09EW-D2B(55)5	(33-1/4)	(10-7/8)	(7)
VRFI-12EW-D2B(55)5	940	298	200
VRFI-18EW-D2B(55)5	(37)	(11-3/4)	(7-7/8)
VRFI-24EW-D2B(55)5	1008	319	221
	(39-11/16)	(12-9/16)	(8-11/16)

MOUNTING BRACKET CLEARREANCE



Note: Actual unit/part may appear differently than what is the above illustration.

Electrical Installation



Model	Power Supply	MCA(A)	MOP(A)
VRFI-07EW-D2B(55)5	208/230V-1ph-60Hz	1	15
VRFI-09EW-D2B(55)5		1	15
VRFI-12EW-D2B(55)5		1	15
VRFI-18EW-D2B(55)5		1	15
VRFI-24EW-D2B(55)5		1	15

RECOMMENDED TOOLS FOR INSTALLATION

1. Mounting Indoor & Outdoor Units and Running Piping/Wiring

- Ruler
- Stud-Finder
- Dry-Wall Saw
- Electric Drill
- 3" Hole Saw
- Drill Extension
- Hammer Drill and Bit
- Measuring Tape
- Level
- Flash Light
- Screw Driver (Phillips and Flat)
- Hammer
- Knife
- Scissors
- Goggled Glasses
- Mask
- Gloves
- Ladder

2. Refrigeration Related Work

- Flat Surface Wrench (Two)
- Flare-Nut Tool Set
- Hex Head Key Set
- Torch for AC Application
- Heat Absorption Flux
- Nitrogen
- Soap Bubble
- Vacuum Pump
- Helium Leakage Check
- Manifold

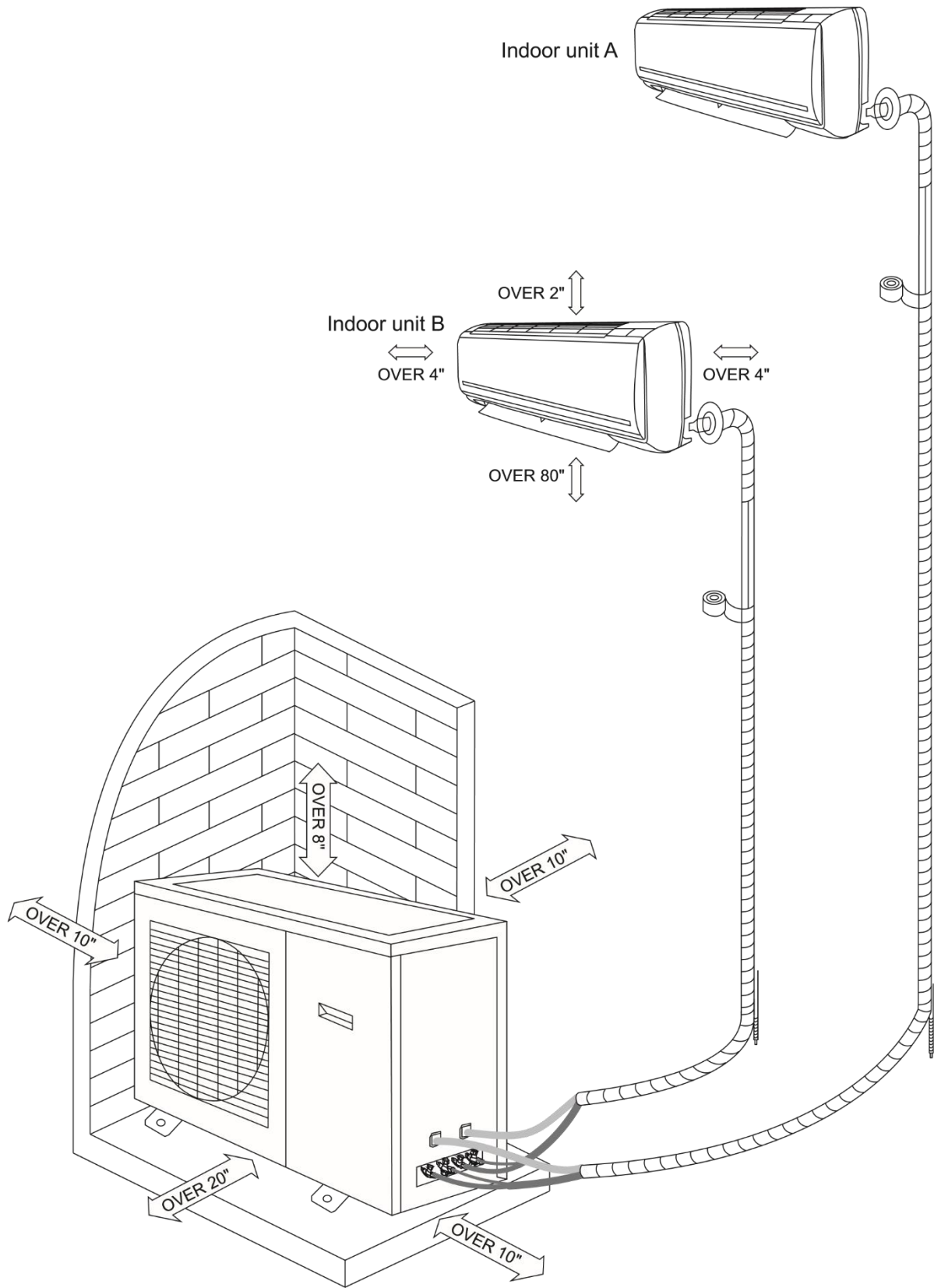
3. Electrical Related Installation

- Wire Cutter
- Wire Stripper
- Sharp Plier
- Cable Ties
- Black Tape for Electrical Use
- Electrical Meter

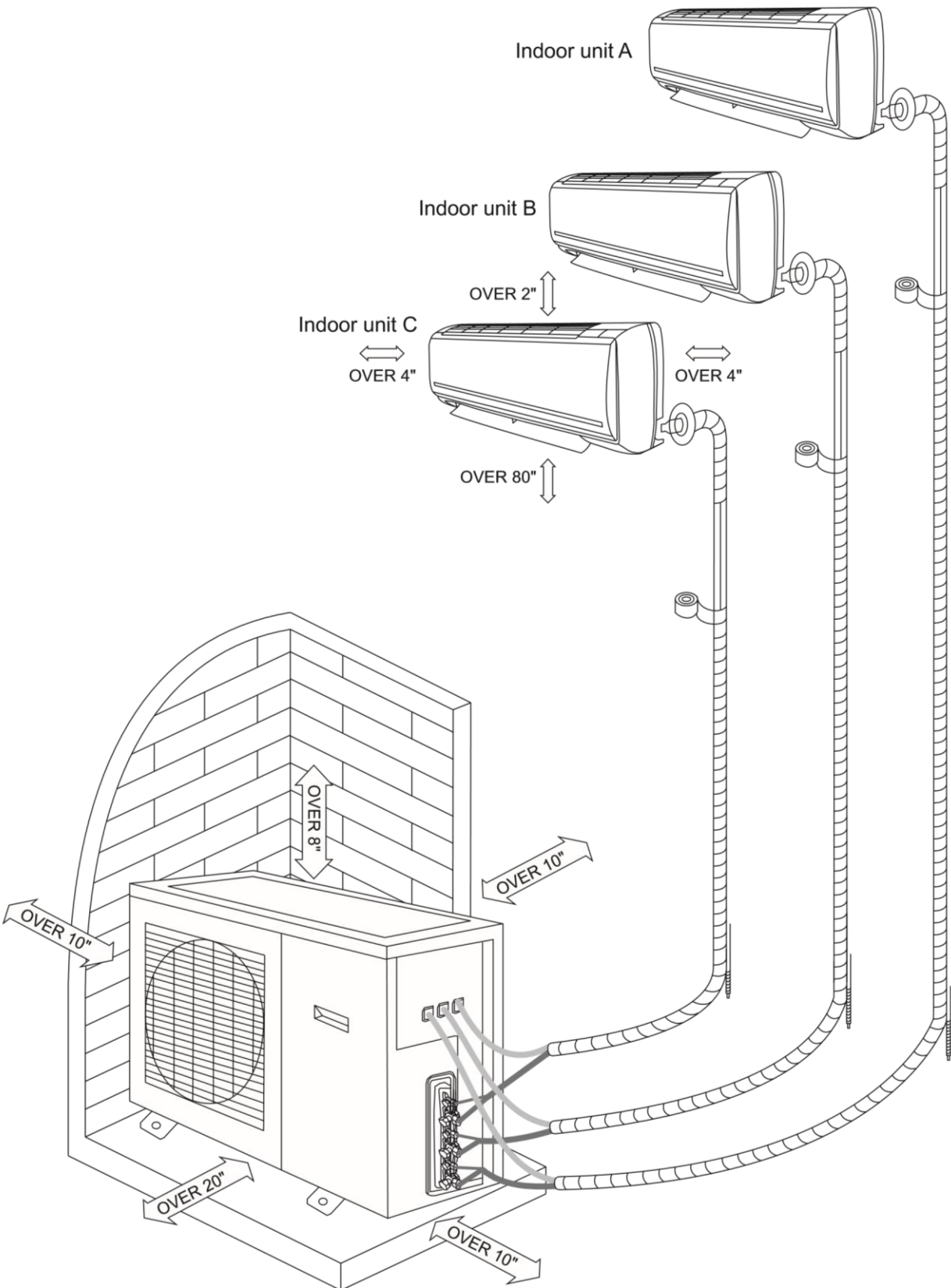
4. Trial Running Units and Inspection

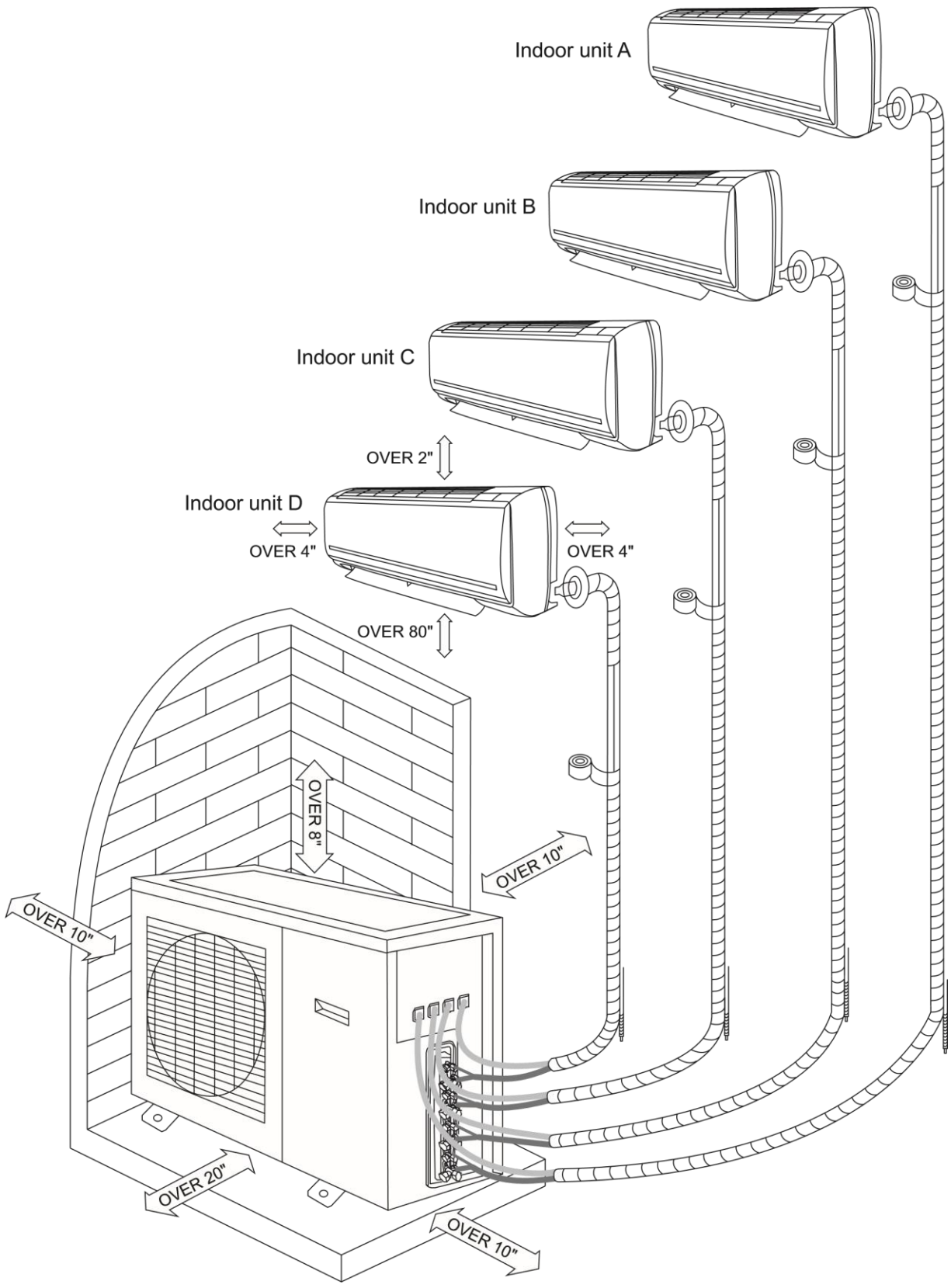
- Clamp Meter
- Manifold
- Infrared Thermometer

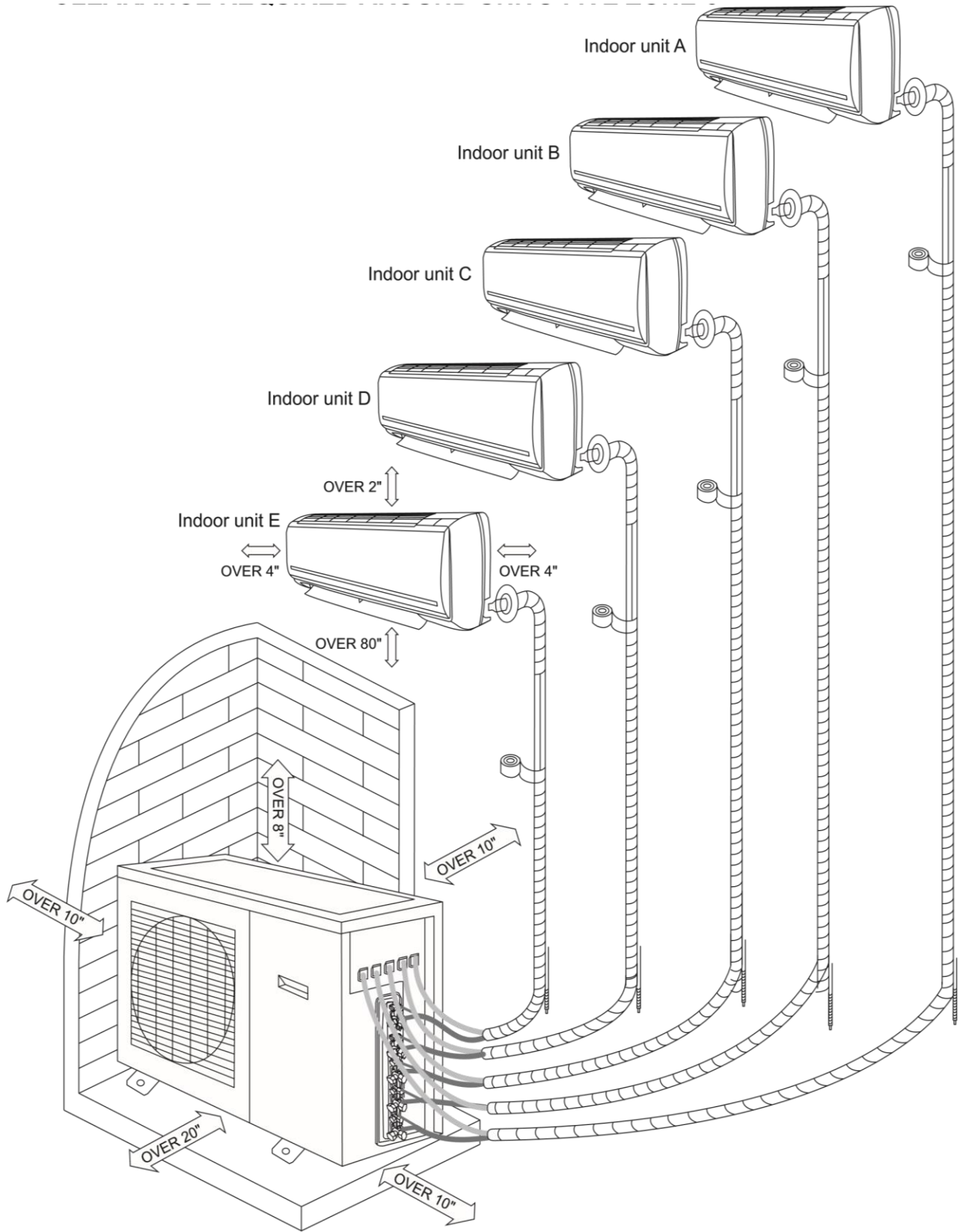
SYSTEM LAYOUT & INSTALLATION CLEARANCE



SYSTEM LAYOUT & INSTALLATION CLEARANCE







INSTALLATION LOCATION SELECTION

⚠ CAUTION

All Units Shall Be Installed by Licensed Contractors or Technicians.

Read Manuals before Installation.

- The location and structure should also be convenient for both installation and service.
- The location should NOT be where discharge air and noise could annoy a neighbor.
- The location should NOT be where drain may cause any damage to property or annoy a neighbor.
- The location should NOT be where brazing work may cause fire or smoke to the surrounding materials.
- The location should NOT be near flammable gases.
- The location should NOT be in or close to corrosive gases.
- The location should NOT be where children can access.

⚠ CAUTION

CAUTION & SUGGESTIONS TO FOLLOW PRIOR TO INSTALLATION

- Check the unit for damage and missing parts or accessories. If there is damage is found or parts are found missing, call the distributor right away.
- Spin fan wheels or blades to check if they can rotate freely. If the fan wheel scratches the housing, call the distributor right away and do not proceed with the installation until it is fixed.
- Check the unit to make sure no foreign materials have been left inside the unit.
- Check to be sure you have all the additional parts and accessories that are required for the installation and those provided with the unit.
- It is strongly recommended to only use YMGI supplied or approved parts and accessories.
- Be sure a properly sized circuit breaker is installed for the electric power supplying the units.
- Pre-build the support platform on the ground or bracket for the wall before or during construction and before installation.
- Read installation instructions for all units thoroughly.
- Ask rep./distributor/YMGI Group anything you are not sure about.
- Get your tools and parts ready and start the installation.

BASIC REQUIREMENTS FOR THE INSTALLATION LOCATION

- Choose a location where there are no strong heat sources, vapors, flammable gas or volatile objects.
- Choose a location where there are no high-frequency waves being generated by radio equipment, welders and medical equipment.
- Choose a location where there are not a lot of salinities, such as coastal areas.
- Choose a location where there is no oil (machine oil) contained in the air.
- Choose a location where there is no Sulfur gas present, such as areas close to hot springs.
- Choose a location where there is no other special circumstance.

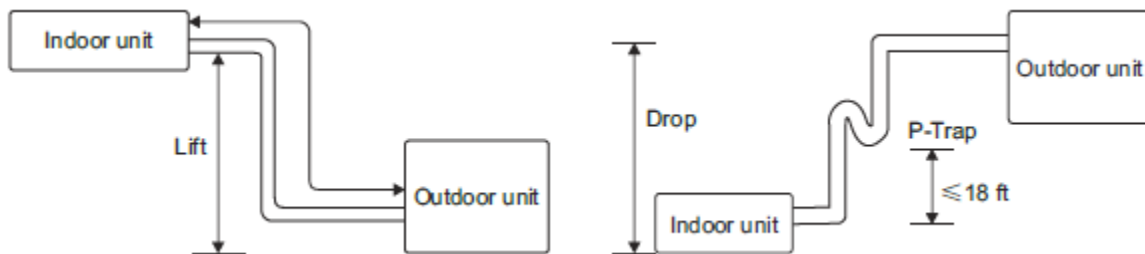
SELECTION OF INDOOR UNIT INSTALLING LOCATION

- The air inlet and outlet vent should be far from any obstructions, making sure that the air can be blown through the entire room.
- Select a location where the condensate water can be easily drained, and can be easily connected to the outdoor unit.
- Select a location where children cannot reach the unit.
- Select a location that is strong enough to support the full weight of the unit and the vibration which will allow the unit to operate more quietly.
- Be sure to leave enough space to allow access for routine maintenance. The height of the installed location should be 78 inches or more from the floor.
- Select a place about 3 feet or more away from television or any other electric appliances.
- Select a place where the filter can be easily maintained.
- Make sure that the indoor unit is installed in accordance with the dimensioned diagram.

PIPING AND WIRING SIZES-UNITS

Unit	Connection Copper Pipe Sizes	Min./Max. Length +/- Elevation	Wires from Outdoor to Indoor Unit	Min. Wire Size Outdoor – Indoor Units	Fuse is Factory Installed
07K	1/4" Liq. / 3/8" Gas	15/50/30/15	N(1)/2/3/G	18AWG	At Indoor Control Board
09K	1/4" Liq. / 3/8" Gas	15/50/30/15	N(1)/2/3/G	18AWG	At Indoor Control Board
12K	1/4 Liq. / 1/2" Gas	15/50/30/15	N(1)/2/3/G	18AWG	At Indoor Control Board
18K	1/4 Liq. / 1/2" Gas	15/75/30/15	N(1)/2/3/G	16AWG	At Indoor Control Board
24K	3/8 Liq. / 5/8" Gas	15/75/30/15	N(1)/2/3/G	16AWG	At Indoor Control Board

- The indoor unit and the outdoor unit can be at different heights either above or below each other. The height for the difference must follow the stated requirements shown in the table below.
- Keep bending of the piping line to a minimum to avoid any possible negative impacts on the performance of the units.
- Make a P-trap if the elevation drop difference is more than 25 inches, as illustrated below.



Refrigerant Pipe Min/Max. Length, Rise and Drop Height

Btu/h	Min. Length (ft.)	Max. Length (ft.)	Max Rise Height (ft.)	Max. Drop Height (ft.)
07K - 12K	15	50	20	28
18K - 24K	15	75	25	35
30K - 36K	15	100	35	50

INSTALL THE WALL MOUNTING PLATE

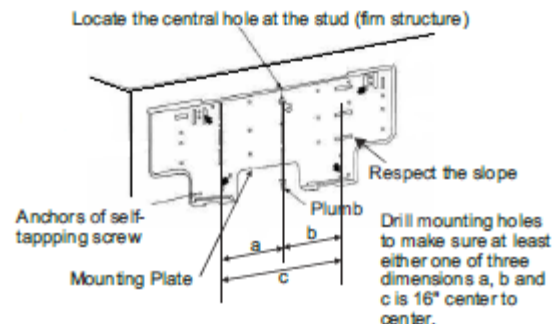
- Prior to installing the mounting plate, check the unit and make sure the unit is in good condition and ready to install.
- Check to make sure the installation location is strong enough to hold the weight of the whole unit and is in a location that is convenient to install, maintain, service and close to the outdoor unit.
- Install the indoor unit. Use enough anchor bolts to secure the mounting plates to the wall for indoor units. The mounting plate should be level and secure and ready to receive the indoor unit.

Install Mounting Plate and Drill Hole for Combination of Copper Line/Wire Cable/Drain Hose

NOTES:

Anchors must be put into the holes, where the solid arrows are pointing, as shown, to secure the mounting plate firmly and to hold the weight of the indoor unit. If more screws/anchors are required, make sure, to keep the two holes close to each other, at least 2 inches apart.

The mounting plate should be attached to the structural part of the wall. Minimum clearance, as shown, is required to ensure proper airflow and allows enough room for easier service.



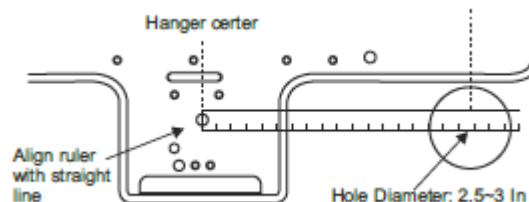
Steps to Mount Plate

- Mark all drill positions. At least 4 anchor holes are required, one at each perimeter corner of the plate. These are needed to secure the plate, where the bold arrows are pointing, as shown in the picture above. Refer to the specification sheet for unit weight so that enough anchors are installed at the proper locations.
- Pre-drill guiding holes which are marked for anchors or screws on the wall.
- Confirm the position of the holes and finish drilling to the depth required for anchors (NOT for screws).
- Align the mounting plate holes with the holes drilled on the wall and put anchors or screws into the holes to secure the mounting plate.

INSTALLATION OF INDOOR UNIT

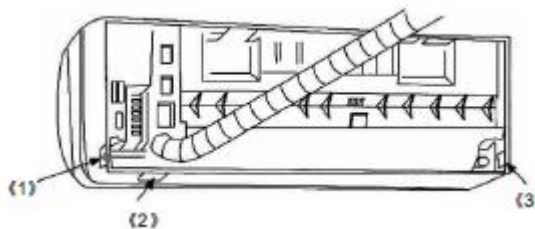
DRILL 3 INCH HOLE FOR PIPING/WIRING/DRAIN

- Locate the center where the hole will need to be drilled.
- Drill the holes of 2.5 – 3 Inches in diameter. A down pitch of about 1/4 inch per foot, as illustrated, is needed for the hole, to drain the condensate properly.



PREPARE INDOOR UNIT- COPPER LINE SET/DRAIN HOSE

- If pipes need to come out of the right side (facing the front of indoor unit) of the indoor unit, snap off portion (1) on plastic casing.
- If pipes need to come out of the bottom side (facing the front of indoor unit) of the indoor unit, snap off portion (2) on plastic casing.
- If pipes need to come out of the left side (facing the front of indoor unit) of the indoor unit, snap off portion (3) on plastic casing.
- If pipes need to be rerouted to a different direction from the one preset at factory (towards left side, if facing the front cover of indoor unit), lay down the indoor unit on soft cushion or foam. Don't rub the plastic casing.
- To keep from damaging the pipes, bend the copper tubing set gently and slowly (A 90° bend should take a minimum of 10 seconds), by firmly holding the pipe at the root of the original 90° bend. Don't rub the two copper lines while bending. It is better to cut off the insulation and bend the two pipes individually and not together.
- If the pipes need to come out of the rear side (facing the front of the indoor unit) of the indoor unit, there is no need to snap off anything.



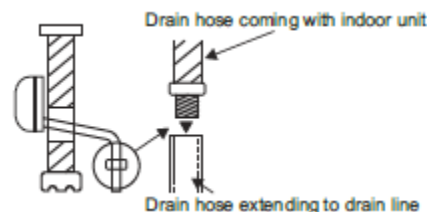
Slice the insulation before bending.



Hold the 90 degree bend root, bend one tube one time, slowly, no quicker than 10 seconds/ 90 degree bend.

INSTALL THE INDOOR DRAIN PIPE

- The drain hose must be placed beneath the copper pipes and **MUST NOT** be kinked or bent sharply.
- Do not pull the drain hose too hard, as it may break.
- Before passing the drain hose through the hole, wrap it with insulation to keep it from possible damage.
- The copper pipe and the drain hose must be wrapped with piping wrap.
- The insulation pad (underlay) should be used where the pipe contacts the wall.

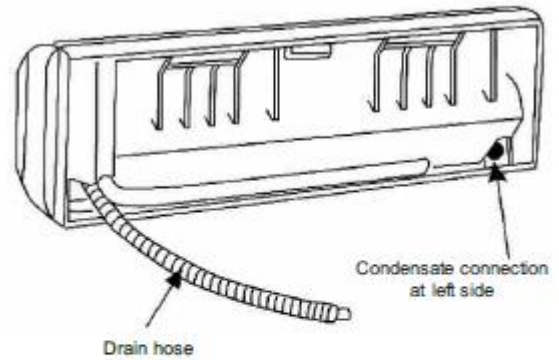


REFIT DRAIN HOSE FROM THE RIGHT TO THE LEFT SIDE

If the drain hose needs to be refitted from its original position (right side) to left side of the indoor unit, careful handling is necessary as not to damage the unit.

- Refitting method: remove the drain hose from its original position, without breaking the hose. Remove the plug at the left side. Apply water-resistant glue to fit the drain hose and the fitting before securing it.
- Apply water-resistant glue onto the plug and fit it back into the condensate connection at right side.

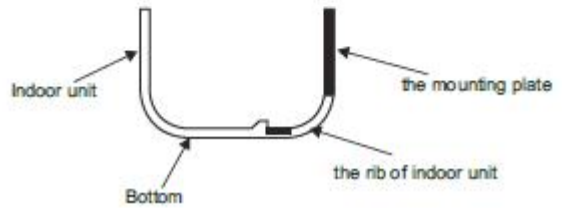
NOTES: One can use a clamp to further secure the connections.



HANG INDOOR UNIT

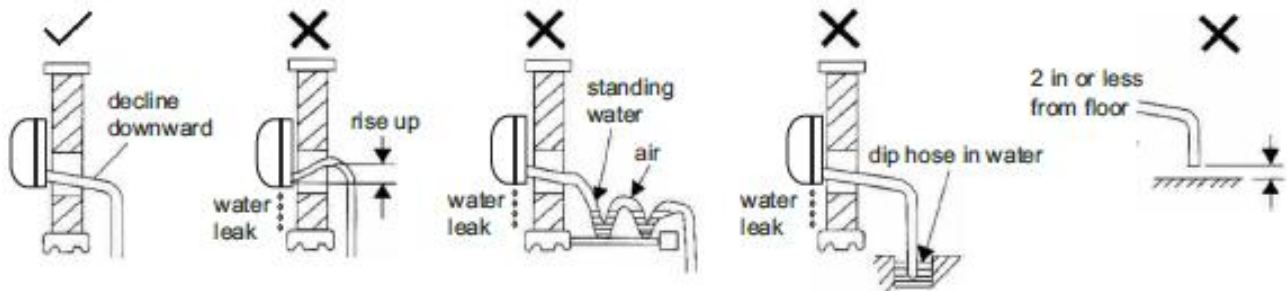
Run copper set/wire cables/drain hose through the wall hole and hang the indoor unit onto the mounting plate (place the hook on the mounting plate into the hanging rib at rear side of plastic casing).

- Snap the plastic casing bottom into the mounting plate, gently.



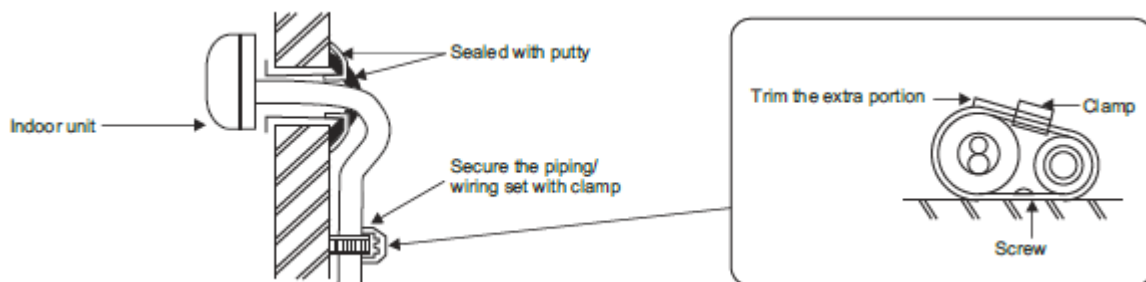
SHAPE THE DRAIN HOSE

- To drain the condensate easily, the drain hose should be angled downward (pitched towards the drain direction at 1/4" per foot).
- Figures below from the 2nd to 5th show some incorrect practices.
- The drain hose may be extended using the hose supplied with the installation list.



STUFF AND SEAL THE HOLE FOR COPPER LINE SET/WIRE and CABLE/DRAIN HOSE

- Use putty to seal the wall hole.
- Use a clamp (pipe fastener) to secure the pipe at the specified location.



CONNECT REFRIGERANT PIPES BETWEEN THE INDOOR AND OUTDOOR UNITS

First, connect the copper tubes at indoor unit. Bend the pipes accordingly using pipe bending tools. Do Not hand bend the pipes as this could kink the pipe. Extra length is required for future service.

REFRIGERANT PIPES

For a distance other than 25' between indoor and horizontal venting condensing units, refer to the following table for copper sizes.

Refrigerant Valve and Pipe Size/Length

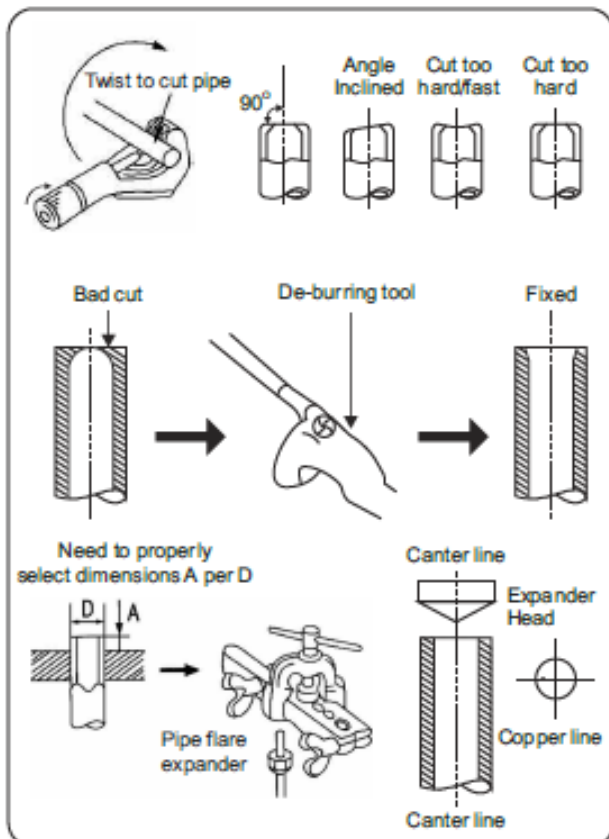
Btu/h	Valve Size	Line Sizes at Different Lengths	
	Liquid Gas	15 – 30 ft.	31 – 60 ft.
07K	1/4", 3/8"	1/4", 3/8"	1/4", 3/8"
09K	1/4", 3/8"	1/4", 3/8"	1/4", 3/8"
12K	1/4", 3/8"	1/4", 3/8"	1/4", 3/8"
18K	1/4", 1/2"	1/4", 1/2"	1/4", 1/2"
24K	1/4", 5/8"	1/4", 5/8"	3/8", 5/8"

Running Interconnecting Refrigerant Lines:

Use clean refrigeration grade copper pipe only. Keep the copper lines from kinking and transmitting any noise to walls, cabinets, etc. Pipe length not to exceed 150 feet, elevation not to exceed 35 feet. Insulate both the liquid and gas copper lines with at least 3/8-inch-thick insulation tubes. Band, tape and secure the refrigerant lines. Support copper lines at a proper distance apart to keep the tubes from sagging.

CUT REFRIGERANT PIPE

Make sure where the pipe is to be cut is straight and smooth. Engage the cutting blade. The cutting blade must be straight and perpendicular to the pipe surface. Don't cut too fast or apply too much pressure. Turn and tighten the tube cutter slowly. Remove residual and de-bur the cut edge. The cut edge should be smooth and clean.



**CONNECT REFRIGERANT PIPES:
Refrigerant Pipe Length and Height**

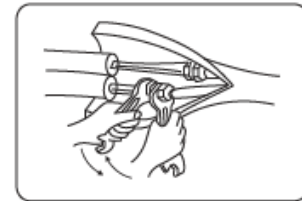
Btu/h	Length (ft.)	Height (ft.)
07K	23	3.82
09K	23	3.82
12K	24.3	3.6
18K	31.4	3.8
24K	50	5.0

Connect Copper Pipes-Flare/Nut Connection at Both Indoor and Outdoor Units

Proper torque shall be applied to create a good connection at the female nut, flare and male nut, as recommended in the following table. Too much torque may damage and break the flare/nut seal. Too little torque may not ensure a good seal. ALWAYS use a pair of wrenches when tightening.

Refrigerant Pipe Flare/Nut Connection Tightening Torque

Flare Nut	Tightening Torque
1/4" – 3/8"	25 ft. lbs. (350 kg-cm)
1/4" – 1/2"	40 ft. lbs. (560 kg-cm)
1/2" – 3/4"	60 ft. lbs. (840 kg-cm)
7/8" – 1 1/8"	110 ft. lbs. (1540 kg-cm)

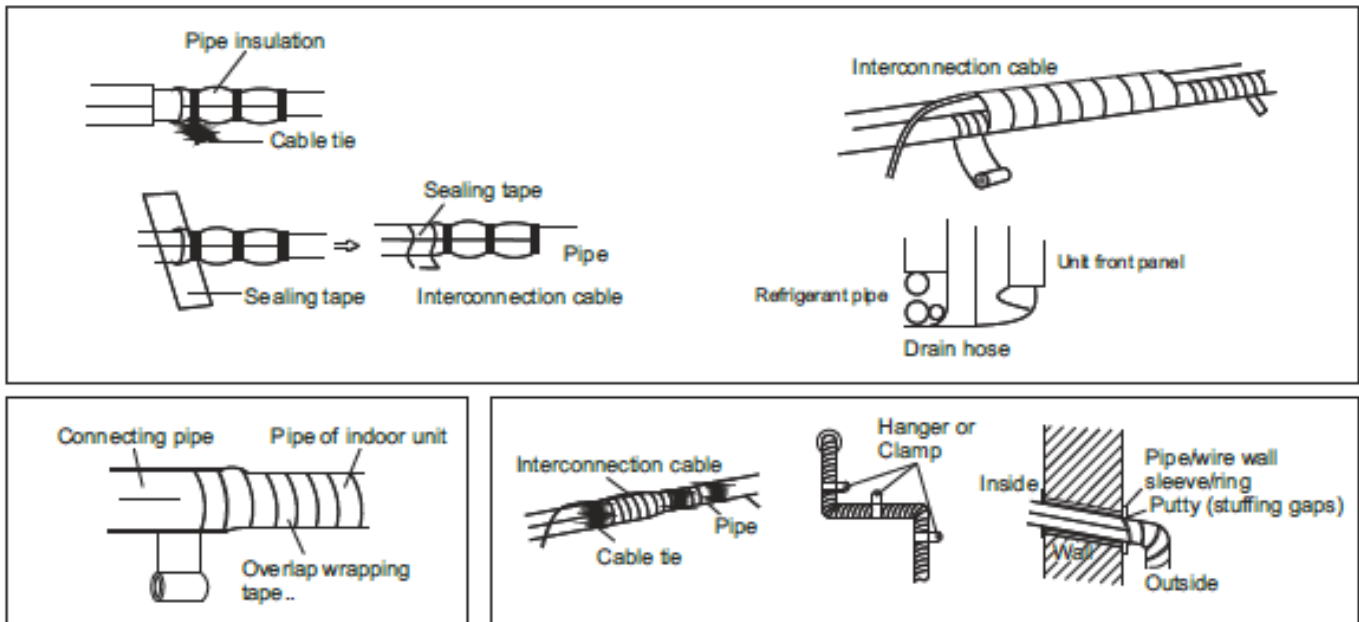


Connect Copper Pipes-Sweat Connection

In this case, wrap a wet rag around the pipe to protect the valves or other components from being overheated. When using flux, rub the tube surface using steel wool to any oxidation then clean and dry to protect the system from any possible contamination.











CONNECT REFRIGERANT PIPES BETWEEN THE INDOOR AND OUTDOOR UNITS

Seal Copper Line Set/Wire and Cable/Drain Hose Line Combination



- Run cables along with the refrigerating copper line sets and secure them with tape, 6 feet apart.
- Wrap tape tight (cover a third of the width of the wrapping tape applied early) to ensure a good seal.
- Tape and seal the end of the wrapping tape.
- Shape the pipe combination gently, without causing kinking, sharp bends, or other damage to it.
- Fix the pipe combination securely on the external wall with proper clamps, 6 feet apart.
- Fill the gap between the wall hole and wall sleeve with putty to keep rain or dust entering inside.

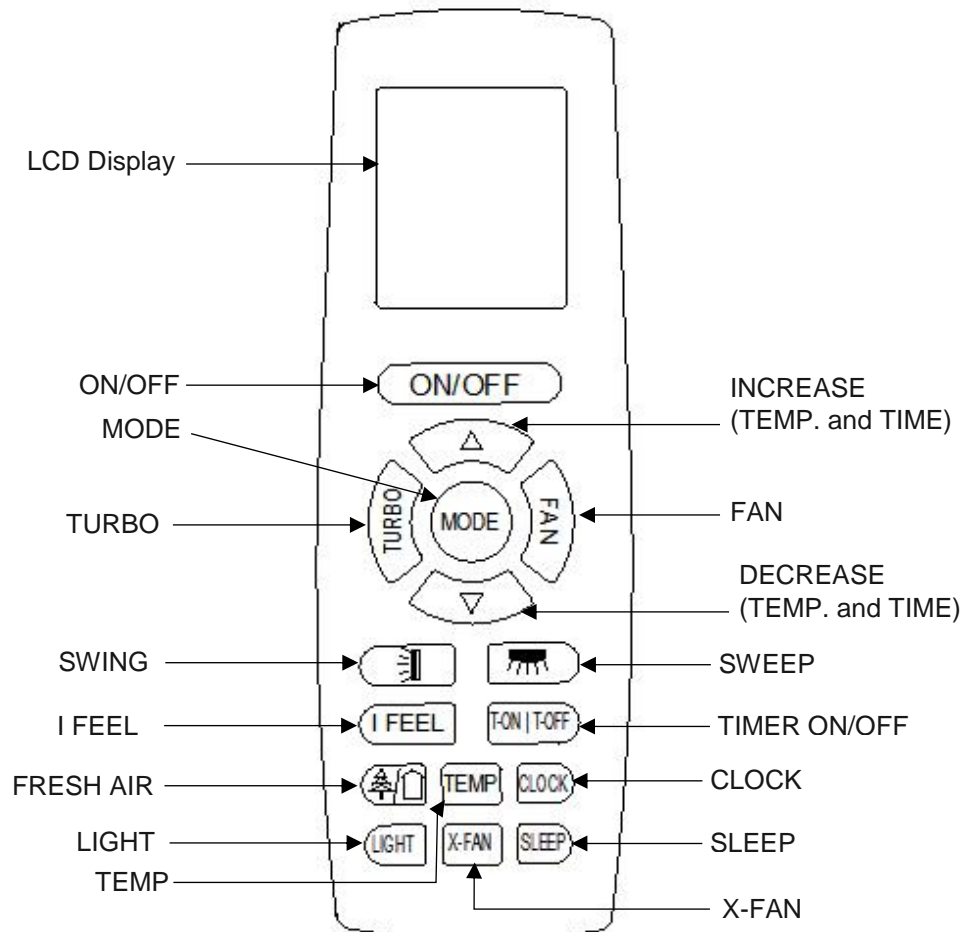
PIPING GUIDE

Set the packed pipes in a vertical position and then unwind them slowly.			Do not unwind only one end of the coiled pipes.
Use pulley or a bending tool to ensure a safe bending radius.			Do not make any sharp or small radius bends.
May also use rolling wheel to reduce internal pipe tension and avoid possible deformation.			Do not bend long sections of pipe without using bending tools.
Use an elbow tool for consistent bending radius.			Do not make bends that are less than 90 degrees.
Maintain the minimum bending radius.			Do not bend shot pipes.

REMOTE CONTROL-BUTTON NAME AND FUNCTIONS

NOTE 1: This is a general use remote control that can be used for numerous air conditioning model numbers. There may be some buttons on the remote that are not for use with the unit purchased. When these buttons are pressed you may hear a beep sound emitted from the remote. This will not affect the unit status.

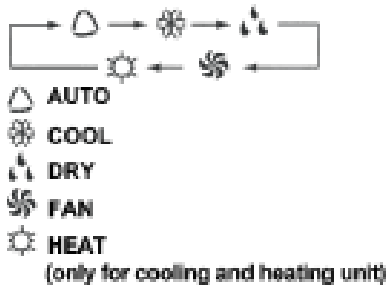
NOTE 2: Be sure there are no obstructions between the indoor unit and the remote control. Do not drop or allow any liquids near the remote. Do not place the remote in direct sunlight or any place that can become very hot.



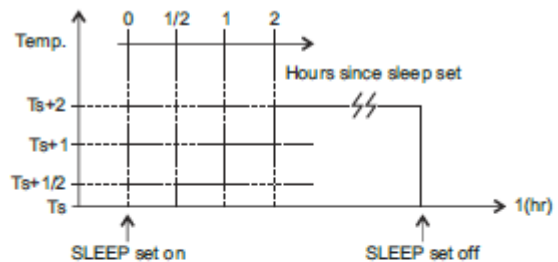
"SLEEP" BUTTON: This function will increase or decrease the set temperature depending on what mode the unit is running in. When **SLEEP** mode is turned on, while in cooling mode, the temperature will automatically increase 0.5 to 1.0 degree once every 30 minutes to one hour several times over a period of 2 hours and remain at that temperature until **SLEEP** mode is turned off. When **SLEEP** mode is turned on while in heating mode the set temp will automatically decrease 0.5 to 1.0 degree once every half to one hour for several times over a period of 2 hours and remain at that temperature until **SLEEP** mode is turned off. This way when the unit is in **SLEEP** mode during cooling the fan will blow at a lower speed to accommodate for the decreased cooling load due to less activity and a lower outdoor temperature. The same principle of savings is applied to heat mode. To activate the sleep mode, press the **SLEEP** button once. You will see a picture of a moon and stars in the lower left-hand corner. To turn off the **SLEEP** mode simply press the button once more and the moon and stars will disappear from the remote screen.

"ON/OFF" BUTTON: Press this button to turn the unit on. Press once more to turn the unit off. When turning the unit **ON/OFF**, the **TIMER**, and **SLEEP** functions will be canceled. The preset time will remain.

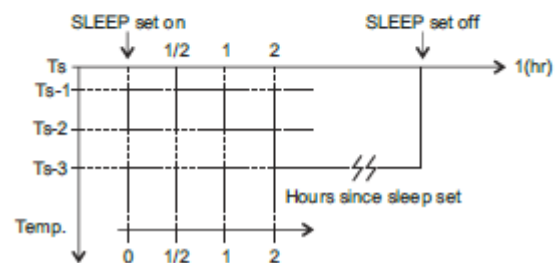
"MODE" BUTTON: By pressing this button you can choose what mode you would like the unit to run in. When the remote is first turned on the mode displayed will be the **AUTO** mode. The temperature cannot be adjusted in this mode and will not display on the indoor unit. This is a factory preset temperature of 78°F. While the unit is in **AUTO** mode and the room temperature drops below the factory set temp of 78°F, the unit will run in **HEAT** mode until that temperature is satisfied. If the room temperature rises above the set temp of 78°F, then the unit will run in **COOL** mode until the room temperature is satisfied. The unit itself will determine what mode to run in in-order to maintain the temperature of 78°F. Under **HEAT** mode the initial set temperature will be 82°F (28°C). Under other modes the initial set temp will be 77°F.



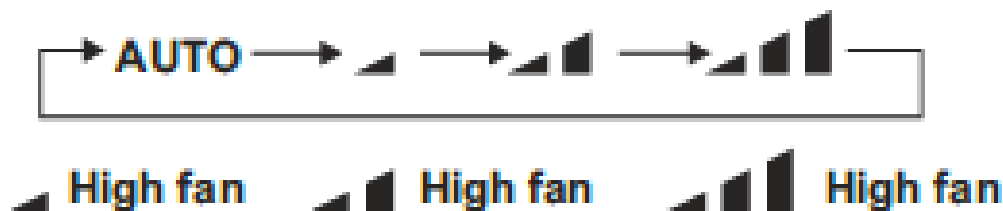
The COOL mode SLEEP profile is as follows:



The HEAT mode SLEEP profile is as follows:



"FAN" BUTTON: By pressing this button you can select from 4 different fan speeds AUTO→Low→Medium→High. When the unit is first powered on the default fan speed setting is **AUTO**. When running the unit in **DRY** mode the fan speed will only run in low speed.



Note: Under the **Dry Mode**, the fan speed isn't adjustable, low fan speed is imperative.

"CLOCK" BUTTON: The time function runs on a 24-hour clock. To set the time press the **CLOCK** button once. You will see a flashing clock appear on the remote. Press the **"UP"** button to increase the time; press the **"DOWN"** button to decrease the time until the desired time is set. Press the **CLOCK** button once more to set the time. You will notice the clock symbol is not flashing.

"LIGHT" BUTTON: This allows you to turn the indoor unit display light on and off. If the light emitted by the display is not desired, simply press the **LIGHT** button on the remote and the display will turn off. To turn the display back on simply press the light button once more.

"TURBO" BUTTON: When you press this button, you will see a symbol of a fan appear on the remote. In either heat or cooling mode, when this button is pushed the compressor and or fan will blow at a higher speed to achieve the set temp quicker. When the indoor unit senses that the set temp is being approached, the fan speed will slow down. To turn this function off simply press the **TURBO** button until the fan symbol is no longer displayed on the remote.

"UP" Button: By pressing this button the set temperature will increase 1° each time the **"UP"** is pressed. If this button is held for more than 2 seconds, the temperature will increase more rapidly. When operating in **AUTO** mode the temperature cannot be changed. The temperature range for this remote is 61°F to 86°F. **"DOWN" Button:** By pressing this button the set temperature will decrease 1° each time the **"-"** is pressed. If this button is pushed without releasing for over 2 seconds, the temperature will decrease more rapidly. In **AUTO** mode the temperature cannot be changed. The temperature range for this remote is 61°F to 86°F.

"TEMP" Button: When the unit is first turned on the remote will display the last set temperature. When the **TEMP** button is pushed twice the indoor unit will display the room temperature for approximately 5 seconds before going back to the set temp.

SWITCH BETWEEN F° AND C°: The remote default is Fahrenheit. If you would like to switch between the remote displaying Fahrenheit and Celsius the press the **MODE** and **"DOWN"** button simultaneously while the unit is turned off.

"TIMER ON/OFF" BUTTON: This button allows you to set a time you would like the unit to turn on. The clock is a 24 hour clock. Press the **TIMER ON/OFF** button once and you will see the word "on" flashing next to a time displayed. By pressing either the **"UP"** or **"DOWN"** button, choose the time you would like the unit to turn on. Once you have the desired time displayed on the remote press the **TIMER ON/OFF** button once more and the word **ON** will stop blinking and stay on the remote. The time you would like the unit to turn on is now set.

"TIMER ON/OFF" BUTTON: This allows you to set the time that you would like the unit to turn off. Simply follow the above steps but this time press the **TIMER ON/OFF** button instead of the **TIMER ON/OFF** button. When the word **OFF** is set on the remote screen, the time you would like the unit to turn off is now set.

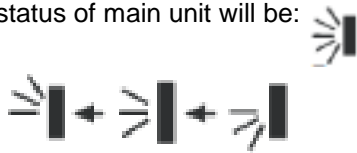
"SWING" BUTTON: Hold the **Swing Button** (symbol shown above) for more than 2 seconds and the indoor air louver will start to swing between the highest and lowest limits. Once the swing button is released the louver will stay in the last position where the button was released. If the swing button is pushed just once the swing icon will appear on the remote and the louver will swing up and down continuously between the highest and lowest points. Push the **Swing Button** once more and the icon will disappear on the remote and the louver will remain at the last point the button was pushed. When the unit is powered off by the remote the louver will close on the indoor unit. Press this button to set up the desired swing angle which circularly changes as below.

SWING UP AND DOWN" BUTTON


Press this button, to set up swing angle, which circularly changes as shown below:



This is a universal remote control. If the remote control shows the following three kinds of status, then the swing status of main unit will be:

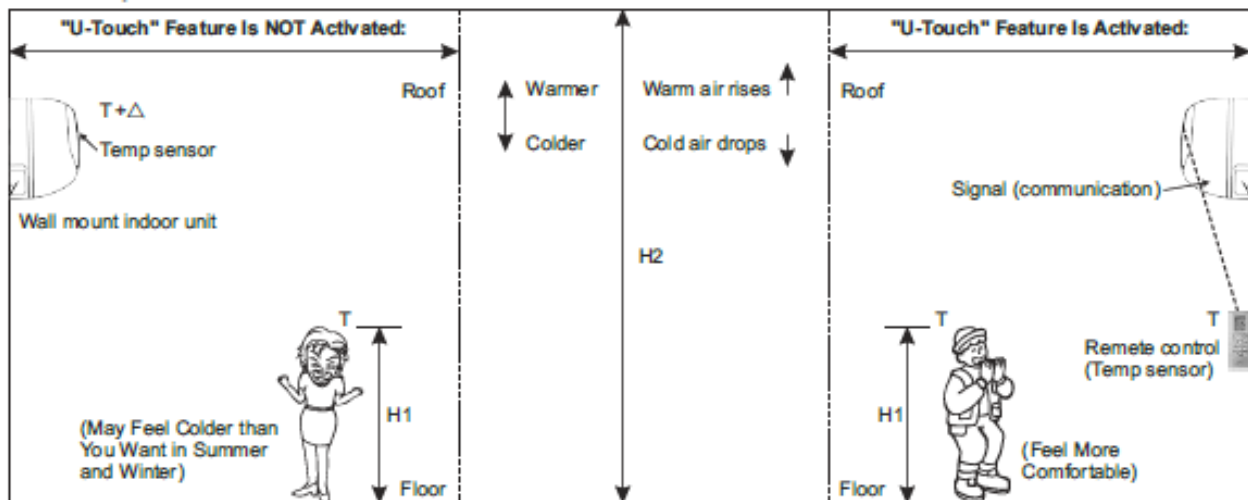


When the guide louver starts to swing up and down and the unit is turned off the swing of the air guide louver will stop at current its position.

 When shown, indicates the guide louver swings up and down between all five positions.

"I FEEL" BUTTON: Since the indoor unit is normally mounted high up on a wall or attached to a ceiling, the temperature where the return air sensor is installed (inside the indoor unit) is a higher temperature than occupied areas, check the air temperature (4 to 7 feet above the floor). If the unit uses the return air temperature as its target control, then the occupied areas may be colder than the target temperatures in both cooling mode and heating mode. The facts of air stratification and warm air rising, and cold air dropping will require the users to set up, by experimenting or by experience, the target temperature may be several degrees higher than what you really want, in order to reach a satisfied or more precise indoor comfort temperature. This is a common drawback of AC/HP units made by other manufacturers. With YMGI's **I FEEL** feature, this can be avoided, and your comfort level can be improved. When you press the **I FEEL** button on the remote control, the unit will use the temperature where the remote is located as its target temperature control. Once you do so, you will notice a figure of a person surrounded by stars appear on the remote.

Once the **I FEEL** stars appear, the remote will send a signal from the remote-local temperature to the indoor unit, and the remote-local temperature will supersede the return air temperature as the unit's target temperature. Every 10 minutes a signal will be sent from the remote to the indoor unit updating the remote-local temperature. If at any time during this process no signal is received by the indoor unit from the remote, the unit will switch back to the previously set temperature before the **I FEEL** feature was activated. To turn the **I FEEL** feature off, simply press the **I FEEL** button until you see the symbol disappear from the remote screen. By doing so, the return air temperature will take place of remote-local temperature as the unit's target temperature. **I FEEL** is what YOU WANT. **I FEEL** feature brings to you a true comfort level wherever and whenever you want.



SYMBOL DISPLAY

When power is first applied to the unit, but the power has not been turned on by the remote control, the red power light only is displayed. When the unit has been powered on by the remote control the running LED is displayed and the current running mode symbol is displayed at the same time.

- COOLING:** Running symbol and cooling symbol are displayed.
- HEATING:** Running lamp and heating symbol are displayed.
- DRY:** Running lamp and dry lamp are displayed.
- FAN:** Running lamp and fan lamp are displayed.
- AUTO:** Auto lamp, running lamp and actual running mode are displayed.

ALPHA NUMERIC DISPLAY

- The setting temperature range for the unit is 61°F to 86°F.
- Under **AUTO** mode the unit will display 77°F for cooling and 68°F for heating modes.

INTRODUCTION FOR SPECIAL FUNCTION

About Blow function

This function indicates that there is moisture on the evaporator of the indoor unit and will continue to blow after the unit has stopped to avoid mold.

1. Having set **BLOW** function to on: After turning the unit off by pressing **ON/OFF** button, the indoor fan will continue running for about 10 minutes at low speed. While in this period, press the **Blow** button to stop indoor fan.
2. Having set the blow function to off: After turning the unit off by pressing **ON/OFF** button, the complete unit will be off.

About AUTO RUN

When **AUTO RUN** mode is selected, the setting temperature will not be displayed on the LCD, the unit will be in accordance with the room temperature automatically to select the suitable running method and to make the ambient air comfortable.

About TURBO function

At the start of this function, the unit will blow at a super high speed to cool or heat quickly, so the room temperature approaches the preset temperature as soon as possible.

UNIT DEFROSTING CYCLE

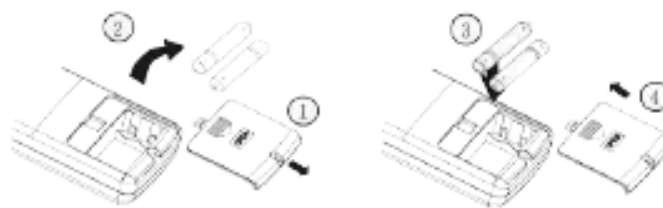
While the unit is running in **HEAT** mode during colder weather, frost can build up on the outdoor coil. This is common on all heat pump units made by all manufactures. If the unit is running and the automatic defrost mode is enacted the indoor unit will stop running and display an **H1** code. Once the defrost cycle is finished and the outdoor coil is defrosted the indoor unit will start to run again in the mode that it was last set up for.

ON DEMAND DEFROSTING

If at any time you would like to send the unit into the defrost cycle, you can choose to by turning the remote controller off and pressing the **BLOW** and the **MODE** buttons simultaneously. You will see the symbol of **H1** appear on the remote. To stop the defrost cycle simply press the **BLOW** and **MODE** buttons again and the **H1** will disappear from the remote screen.

CHANGING BATTERIES AND NOTICES

- 1) Press slightly along the arrowhead direction to push the back cover open on the remote control.
- 2) Take out the old batteries. (As show in figure)
- 3) Insert two new AAA1.5V dry batteries, and pay attention to the polarity. (As show in figure)
- 4) Attach the back cover of wireless remote control. (As show in figure)



Sketch map for
changing batteries

NOTE:

When changing the batteries, do not use the old or different batteries, otherwise, it can cause the remote control to malfunction. The operation should be in its receiving range. It should be placed where it is 36 inches away from a TV set or stereo. If the wireless remote control cannot operate normally, please take the batteries out, wait 30 seconds and reinsert them, if the remote doesn't operate normally, please change the batteries. If the wireless remote control will not be used for an extended period, it is recommended to remove the batteries. Leaving the batteries in could cause them to leak. This will cause damage to the remote control.

ABOUT MODE CLASH/CONFLICT BETWEEN INDOOR UNITS

If any two indoor units are controlled to run in the following modes, the indoor unit will run into mode clash or conflict. All indoor units will stop to run and show **Protection/Error code E7**, unless the unit is turned-off and then turned back on:

Some on **HEAT** Mode, while others on **COOL** Mode and/or **DRY**(Dehumidify) Mode and/or **FAN** Mode.

NOTE:

COOL mode is compatible with **DRY** and **FAN** mode. In other words, there will be no problem for some indoor units to run **COOL**, while others may run either one or few of modes **COOL**, **DRY** (Dehumidifying) and **FAN**. No **Protection/Error** code will show up.

OPERATION AT EMERGENCY

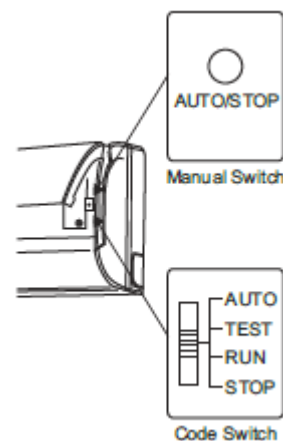
If at any time the remote control becomes damaged or lost, you can switch to **Manual** mode on the indoor unit. This will allow the unit to run in **AUTO** mode only. While in **AUTO** mode the unit temperature cannot be switched. Contact your local service provider for instructions on replacing the remote control.

The manual switch can be operated as follow:

- **Operation:** When the unit has stopped running, press **ON/OFF** button, unit will enter **AUTO RUN** mode. The microcomputer will acquire the room temperature to select the (**COOL, HEAT, FAN**) mode automatically, to obtain the correct setting.
- **Stopping:** When the unit is running, press the **ON/OFF** button of the manual switch, the unit will stop working.

The code switch can be operated as follow:

- **Operation:** When the unit has stopped running, adjust the code switch to **AUTO**, the unit will enter **AUTO RUN** mode. The microcomputer will acquire the room temperature to select the (**COOL, HEAT, FAN**) mode automatically, to obtain the correct setting.
- **Stopping:** When the unit is running, adjusts the code switch to the **STOP** position, the unit will stop working.



CLEAN AND CARE

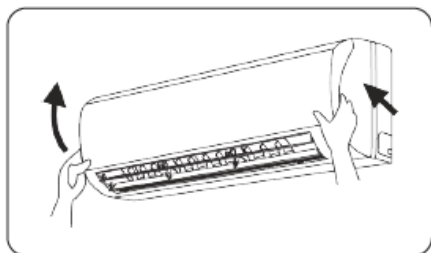
⚠ CAUTION

- Turn the unit power off and unplug the power cord before cleaning the air conditioner. Failure to do so can result in electric shock.
- Never sprinkle water on the indoor unit for cleaning because it can cause an electric shock.
- Volatile liquids (e.g. thinner or gasoline) will damage the air conditioner. (So, wipe the units with a dry soft cloth, or a cloth slightly moistened with water or a mild nonabrasive cleanser.)

CLEAN THE FRONT PANEL (MAKE SURE TO TAKE IT OFF BEFORE CLEANING)

Take off the front panel

Along the direction of arrows, lift the front panel up, meanwhile hold both slots of the front panel and remove.



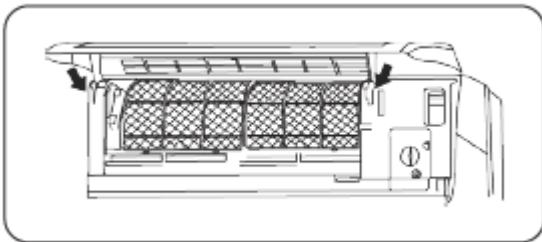
Washing

Clean with a soft brush, water and neutral detergent and then dry it. (Note: Before cleaning the unit, please remove the display box first, then wash the panel. (If the unit has displayed on the front panel.) Never use water that has a temperature above 113°F to wash the panel or it could cause deformation or discoloration.)



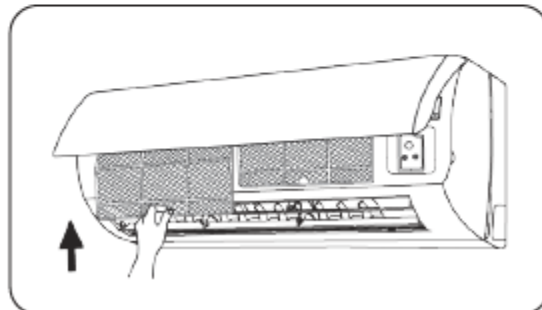
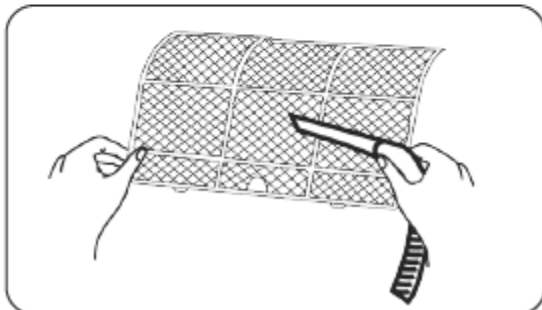
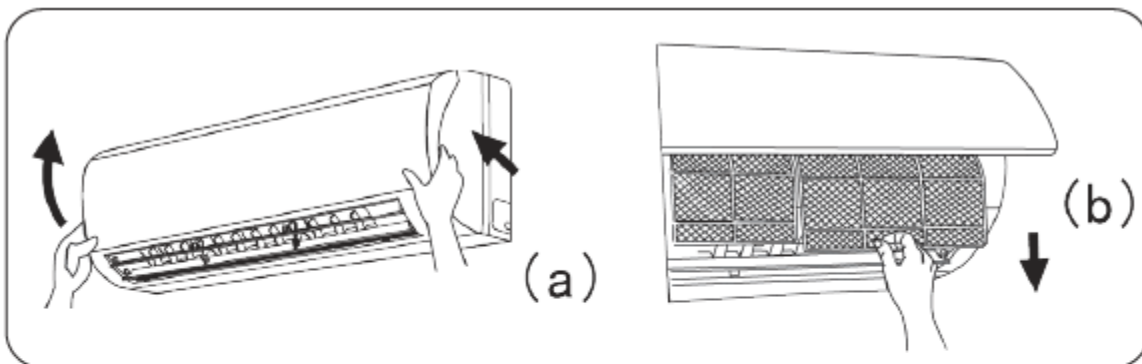
Install front panel

Place two supports of the front panel into the slots, along the direction of arrows to cover and clasp the front panel. As show in figure.



CLEANING THE AIR FILTERS (RECOMMENDED ONCE EVERY THREE MONTHS)

Note: If the unit is in a dusty area, the air filters should be cleaned more often. After taking off the filter, be sure not to touch the fin on the indoor unit as this can cause injury.



To Remove the Air Filter

By holding onto the bottom slot of the air filter slightly push the filter in an upward at a slight angle and pull downward carefully.

Cleaning

To clean the dust adhering to the filters, you can either use a vacuum cleaner, or wash them with warm water and a neutral detergent, the water should be below 113°F. When the filters have been cleaned, dry them air dry completely out of direct sunlight.

NOTE: Never use water hotter than 113°F to wash the unit or the filters as this can discolor and/or deform the unit. Never dry the filters by a fire or open flame as this can be dangerous. Always air dry the filters.

Reinsert the filters

Reinsert the filters aligning with the arrow head, then cover the surface panel and clasp it.

CHECKING BEFORE COOLING/HEATING SEASON COMES:

1. If the unit is still connected to the correct electric power V/Ph/Hz.
2. If the unit is still securely fastened.
3. If the batteries of remote control are good.
4. If the filter is loaded and clean
5. If the intake and discharge vents are clear from any obstructions.



MAINTENANCE AFTER USING

1. Turn main power off, by disconnecting electrical power disconnect switch.
2. Clean filter and unit.
3. Cover the unit to keep dust or moisture out of the unit.

PROTECTION AND ERROR CODES

Error Code	Content	Error Code	Content	Error Code	Content
L0	Indoor Unit Error	L9	Quantity of Group Control Indoor Units Setting Error	d8	Water Temperature Sensor Error
L1	Indoor Fan Protection	LA	Indoor Units Incompatibility Error	d9	Jumper Cap Error
L2	E-heater Protection	LH	Low Air Quality Warning	dA	Indoor Unit Network Address Error
L3	Water Full Protection	LC	Outdoor-Indoor Incompatibility Error	dH	Wired Controller Circuit Board Error
L4	Wired Controller Power Supply Error	D1	Indoor Unit Circuit Board Error	dC	Capacity DIP Switch Setting Error
L5	Anti-freezing Protection	D3	Ambient Temperature Sensor Error	dE	Indoor Unit CO ₂ Sensor Error
L7	No Master Indoor Unit Error	D4	Inlet Pipe Temperature Sensor Error	C0	Communication Error
L8	Power Insufficiency Protection	D6	Outlet Pipe Temperature Sensor Error	AJ	Filter Cleaning Reminding
db	Special Code: Project Debugging Code	dL	Outlet Air Temperature Sensor Error		

CHECKING UNITS PRIOR TO CONTACTING YOUR TECHNICIAN

⚠WARNING

Do not repair the air conditioner yourself. An Incorrect repair may cause electric shock or fire, so please contact an authorized service center for professional repair.

Following checks prior to contacting an authorized service center may save you time and costs.

Phenomenon	Normal or Abnormal
The unit doesn't deliver cooling or heating, immediately after the unit is restarted (remote control or power resuming).	If the unit is powered off, and then restored, it will not run the compressor until 3 minutes later. This is normal 3-minutes restarting protection due to high internal refrigerant pressure.
The unit emits a smell.	For a new unit, some of the odor is normal. For any bad or abnormal odor, shut off the unit and check the unit and the area around the unit for anything visible that could cause the odor. May need to call your technician.
Hearing the sound of "water flow" inside the unit.	Normally this is due to refrigerant flowing through the coils.
Mist is blowing out of the unit.	Normally this happens during cooling startup period, when the indoor air is hot and humid.
Hearing creaking noise during unit starting or shutting off.	Normally this is caused by the expansion or contraction of components due to temperature changes.
The unit doesn't operate at all.	<ol style="list-style-type: none"> 1) Is power shut off or lost? 2) Is the TIMER set up? 3) Is the circuit breaker engaged, or tripped? 4) Is the fuse connected, or blown? 5) Is the voltage too high or low? 6) Is the flow control or other switches breaking the circuit? 7) Is the unit under the 3-minute restarting protection period? 8) Does the remote control have power?
Unit doesn't respond to remote control.	<ol style="list-style-type: none"> 1) Does the remote control have battery power? 2) Is the remote control pointing at sunshine or bright lights? 3) Is the remote control signal blocked? 4) Is the remote control too far away from indoor unit? 5) Is the fuse on indoor unit blown? 6) Is the indoor unit powered on? 7) Is the indoor unit transformer good? 8) Is the indoor unit control board good?
Cooling (heating) is weak.	<ol style="list-style-type: none"> 1) Is the set temperature too high or too low? 2) Is the filter dirty? 3) Is the air vent blocked? 4) Is the unit undersized? 5) Is there a window or door opened? 6) Is the unit refrigerant at a lower level? 7) Is the outdoor temperature too hot or cold? 8) Is fan speed set at a low speed?
Indoor unit doesn't blow air.	<ol style="list-style-type: none"> 1) Is the unit in 3-minutes restarting protection period? 2) In heating mode, the indoor fan motor will not rotate before the indoor coil is hot enough. This is a normal anti-cold air blowing function. 3) Is the outdoor unit defrosting? 4) Is the unit in fan-pausing period for dehumidification mode? 5) Is the filter dirty? 6) Is the fan motor setting screw loose? 7) Is the fan capacitor bad? 8) Is the fan motor bad?
Condensate forms at air discharge louver.	This is normal when the conditioned cool air is mixed with the warm/hot and humid indoor air. Condensate may go away gradually once the indoor air is dehumidified and cooled down.
Water drips out of the indoor unit.	<ol style="list-style-type: none"> 1. Is indoor air too warm and humid? 2. Is the condensate drain hose/connection leaking? 3. Is the condensate drain hose clogged or restricted? 4. Is the condensate drain hose insulated? 5. Is the 3" hole at exterior wall staffed or sealed?
Phenomenon	Normal or Abnormal
Noise is heard at the indoor unit.	<ol style="list-style-type: none"> 1. Is the fan motor or compressor relay energized? 2. Is it due to temperature change that causes part expansion or contraction?

Must stop all unit operations, disconnect power and contact your service technician, in the following situations:

1. Harsh sound is heard
2. Bad odor is detected;
3. Water is leaking out of the indoor unit;
4. Circuit breaker trips or fuse is blown a few times;
5. Wires or connections are very hot;
6. Oil or refrigerant leakage is found;
7. Unit vibrates abnormally;
8. Any other abnormal situations.

