

YMGI Group

POB 1559

O'Fallon, MO 63366, USA

Tel: (866)833-3138 Fax: (866)377-3355

Web Site: www.ymgigroup.com Email: info@ymgigroup.com

Literature Part No: LIT-WMMS-(59)2-DC IVTR-AM-II-20131130 Subject to Continuous Engineering Change and Product Improvement without Prior Notice.

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

INSTALLER'S INSTRUCTION & USER'S MANUAL

DC INVERTER MULTIPLE ZONE (59) 2 SYMPHONY CHOIR OUTDOOR UNIT (CH)









WMMS-60CH-V2B(59)2

WMMS-48CH-V2B(59)2 WMMS-42CH-V2B(59)2 WMMS-36CH-V2B(59)2 WMMS-24CH-V2B(59)2

WMMS-30CH-V2B(59)2 WMMS-21CH-V2B(59)2





A WARNING

This product is designed and manufactured free from defects in material and workmanship for normal use and maintenance. Installation, operation, maintenance and service shall follow professional practices for regular cooling and heating equipment, NEC, State, City or Local Codes and related manuals from YMGI. Otherwise, damage to equipment or property and even injury to people may occur.

Installer: Currently licensed HVAC technician only. Read manual before installation. Fully fill in warranty registration card. **User**: Keep this manual for future maintenance and service use.

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Servicer: Use this manual for service reference.



LITERATURE: LIT-WMMS-(59)2-DC IVTR-AM-II-20131130

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All Units Shall Be Installed by Experienced or Licensed Contractor Or Technician. Read Manuals before Installation.

A CAUTION Following NEC, State and Local Codes and Installation Instructions of All Units, Otherwise Unit Warranty Will Be Void and Serious Damage To People Or Property May Be Caused.

YMGI Group Will NOT Take Any Responsibilities for Any Damage or Loss Due to Do-It-Yourself(DIY) self-installation and other Improper Installation or Operation or Natural Disaster.

NARNING Don't Supply Power until All Wiring and Tubing and Checking is Completed. Ground the Unit Following Instructions and NEC, State and Local Codes.

DANGER Connect All Wiring Securely. Loose Wire or Other Bad Contact May Cause Arc or Overheating and Fire Hazard.

WELCOME AND PLEASE READ THROUGH MANUALS

Dear Customer(s)/end User(s)/unit Purchaser(s)/installer(s)/Contractor(s):

Thanks for choosing YMGI products.

The YMGI equipment you purchased is either a split-type or a self-contained cooling/heating system which requires an installer's license, certification, knowledge, experience, carefulness and details for a successful and good installation. This equipment is different from those window or portable air conditioners you can normally purchase from local retail stores such as Home Depot, Lowe's, Sears, etc. which the manufacturer may not require licensed personnel to install.

Reading and following the YMGI Group's recommendations, suggestions, and requirements, written in the following pages and other documents, is the first step to ensuring a smooth and trouble free installation & proper operation of your products for many years to come.

The quality of the installation plays a key role in whether the units will work well and for an extended period of time. The information we provide in our manuals is for the sole purpose of reminding you and your installer.

It is our ultimate goal to help insure that your YMGI units are installed properly and correctly from the very beginning to the very end. This ensures that your YMGI units will work well and not only provide a comfortable room but also peace of mind.

A WARNING

YMGI doesn't recommend nor allow any do-it-yourself (DIY) installation (partially or fully), since DIY will cause problems sooner or later to your units and your upfront saving is Not saving down the road.

YMGI warranty doesn't cover any DIY units.

If you have any questions about your unit or even doubt if the unit has any problem, you can first check against the mannds. If you can not find answers, then you can contact your local installer or service technician to physically inspect the unit. If at the time of inspection the installer or service technician have any questions they can contact YMGI technical support division directly at:

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

IMPORTANT NOTE-YMGI HOLDS FINAL EXPLANATION:

YMGI Group, POB 1559, O'Fallon, MO 63366 is the only party who holds the final explanation (in authorized writing) about any descriptions or data in YMGI-published materials, including but not limited to YMGI product brochures, manuals, pamphlets, catalogs, videos and any other media. YMGI's distributors, installers, dealers, agents, customers or any other third parties shall not supersede YMGI to make any explanation about what YMGI-published materials mean. Any uncertainty or questions, arising from YMGI distributors, installers, dealers, agents, customers or any other third parties, should be passed directly to YMGI for an explanation in writing.





WELCOME AND PLEASE READ THROUGH MANUALS

ATTENTIONS

- 1. Be sure to hire only one certified, licensed HVAC Company to complete 100% of the installation so that all details of the installation are clear, complete and well taken care of.
- 2. Be sure to have ONLY the licensed HVAC professional perform all parts of the installation. Factory Warranty will be lost if any portion of the installation is not performed by licensed HVAC contractor. DIY or partial DIY will void ALL factory warranties. One example of partial DIY would be calling the HVAC technician to release refrigerant or the sort while other installation has or is to be conducted by non-HVAC technician.
- 3. With hiring a technician that is offering their services as a "side job" and not through their licensed HVAC company may pose a possible risk of an incomplete or unsatisfactory installation of no guaranteed workmanship and lack of further service, if needed.
- 4. Have the installing technician read in full the installation manual of the product model you have. Some details may vary and some may be the key to determine the success and quality of the installation. Experience with certain manufacturer may not be applied fully to another manufacturer. For example, wiring, refrigerant adjustment and trial testing procedures may differ from manufacturer to manufacturer and model to model. Any ignoring or negligence may cause unit failure or damage which could be irrevocable and permanent.
- 5. All of YMGI's products are fully tested and have passed rigorous safety and performance standards and others related to the industry, before being packed and shipped. YMGI only uses famous brands as suppliers for their parts that are also known for their high quality and performance. The quality of the installation plays a key role as much as up to 90% importance in your unit's overall performance and lifetime. A poor installation can result in unit failure and inefficiency either immediately or over a period of time.
- 6. Some licensed contractor/technician may make a mistake some time. YMGI doesn't supervise nor is able to control their installation. It is key that the installer take each variable into account during the initial installation in order to ensure a complete and professional installation and properly working units.

A WARNING

The following will cause damage to the unit and key components and the loss of your unit's factory warranty:

- 1. Any foreign substances introduced into the system as a result of failure of not sealing the ends of the refrigeration piping before pulling through structures at time of installation.
- 2. Not installing an oil P-trap in the suction copper line where indoor unit is located 18' or more below outdoor unit.
- 3. Cross piping and/or cross wiring on 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 soap bubble testing.
- 5. Not conducting a negative leak check by evacuating the copper lines for 30 minutes. Vacuum must be held at 500 micron or better for at least 5 minutes, starting from 5 minutes after the vacuum pump is shut off.
- 6. Not conducting a positive leak check prior to the negative leak check.
- 7. Not selecting the correct size of wire or circuit breaker.
- 8. Not answering ALL questions in the technician's checklist inside the warranty registration form.

A WARNING

The following may be overlooked, ignored, or treated as not a problem during your installer's installation, but actually will cause your unit to underperform or even cause unit failure.

- 1. Any kinks or improper bending of the copper piping.
- 2. Any improper flaring or not centering of the flare with the nut, or not tightening any connection.
- 3. Not trial testing each indoor unit individually.
- 4. Not reading technical data (temp/time/pressure/current) after the system is stabilized (normally compressor needs to work at least 10 minutes). Data read too early may lead to inaccurate or false judgment or even a false sense of security.

In an effort to protect our customers from any possible faulty installation which can lead to premature unit failure, we like to provide the above information to you in addition to the technician. You can judge yourself and observe while your system is being installed, though your observation may not be treated as any guarantee whether your system would be installed properly and professionally. If at any time you feel there may be an installation issue, please have your technician contact YMGI at (866)833-3138 x 703 to clear your questions.

INSTALLING TECHNICIAN/CONTRACTOR'S JOBS AND RESPONSIBILITIES

- 1) Check with the customers to find out detailed information of structure to be conditioned, local weather (typical design and extreme temperature/humidity conditions, cooling and heating hours), previous and existing HVAC equipment, usage and dependence on the new HVAC equipment or the 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/jobs and Right-CommLoad (ASHRAE RTS/CLTD) for light commercial and commercial HVAC applications/jobs.
- 3) Check with YMGI distributor/sales or contact manufacturer directly to obtain information to fully understand YMGI products, including but not limited to product features, cooling/heating performance-at standard ratings/conditions and extreme conditions, allowed indoor and outdoor temperature/humidity ranges, installation, operation, maintenance, service,
- 4) Properly select correct (most suitable) YMGI product models (of units and accessories) for your HVAC applications/jobs and list them in your proposal/quote, in writing, on your company's quote form or letter head, basing upon the information you get from 1), 2) and 3) above.
- 5) List your currently valid HVAC license # and EPA # in your proposal/quote.
- 6) Make sure you are the only party to perform the whole installation job and you will not sub-contract any part of the installation to any non-licensed parties/persons. You will be solely responsibile for the full installation that you have been
- 7) Check to make sure you have all the materials you need to properly and correctly finish the installation. The YMGI units and accessories may be just a portion of what you need. YMGI employees and YMGI distributors/sales, dealers and agents are not installers and may only be able to provide suggestions to you, but you are the only sole decision maker to determine what other materials you must need and/or the customer may want to fulfill the installation job.
- 8) Check against both NEC and your local codes to make sure all the installation of YMGI units and accessories meet these
- 9) Connect the unit to correct electrical power source. In the area where lightning or storm incurs frequently, a proper type/ size of power surge protector needs to be installed between the outdoor unit and power source.
- 10) Select proper types and sizes of HVAC circuit breakers, disconnect switch boxes, wires and conduits from circuit breaker to disconnect box and then from disconnect box to outdoor unit.
- 11) Select proper location to mount indoor units and outdoor units with all factory requirements being followed (cooling/ heating/air is not blocked or restricted, mounting structure is secure, aesthetical looking, installation convenience is considered, maintenance/service clearance is ensured and all applicable codes are met and etc.).
- 12) Cap/tape the two ends of every copper line before running them through structures to keep from any foreign substances entering into pipe and causing contamination. Label them A-A, B-B, C-C, D-D, or other marks on each pair of copper line/wiring cable set to keep from any possible 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 indoor unit and outdoor unit, following applicable NEC and local codes for your particular installation. If there is no special NEC or local code 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 to keep from any possible leakage or false connection.
- 15) Conduct positive pressure leakage checking of inter-connecting copper lines between each indoor unit and outdoor unit by charging dry-nitrogen at outdoor unit service port (note: don't back-seat stopping valve, at this time). Liquid soap solution shall be applied at all pipe connections to check for leakage. A1/4-5/16" hose/valve adaptor may be needed if you have traditional manifold of 1/4" connection hose.
- 16) If there is no positive leaking, then conduct negative pressure leakage checking of inter-connecting copper lines between each indoor unit and outdoor unit by pulling vacuum at outdoor unit service port (note: don't back-seat stopping valve, at this time) and checking if the vacuum level 500 Micron can be held for at least 20 minutes.
- 17) If there is no leakage found at refrigeration pipe connections, flip up the indoor unit face panel and remove filter, carefully pour some clear water onto the up-right aluminum coil surface to test if the water can drain out of each indoor unit freely without any leakage being found.
- 18) If there is water leakage found, locate the source of the leak and correct. Only after everything is clear engage the correct electrical power to the system.
- 19) Then back-seat stopping valves of outdoor unit to release refrigerant from outdoor unit into inter-connecting pipes and
- 20) Check to make sure both indoor unit and outdoor unit are powered on correctly before controlling the indoor unit to operate 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 until the system is stabilized (normally 10 minutes after cooling/heating mode is started successfully). Put 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/temperature is colder; add refrigerant if pipe is longer/temperature is warmer), following manufacturer's instructions, if average pipe length is shorter or longer than 25' and pressure/temperature readings at outdoor unit service valves are not falling into normal ranges.
- 23) Explain to the user/owner(s) about proper unit operation and maintenance and leave your contact information for them to reach you easily.
- 24) 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 problem if there is any. Communicate with YMGI-technical support line (866)833-3138 x 703, if needing help.

Following these requirements will aid in ensuring the units to be installed to the general HVAC practicing standards and necessary factory requirements, finding any possible problems early, preventing any further damage to the unit and helping ensure a properly working unit over its lifetime.





LIMITED PRODUCT WARRANTY POLICIES

The YMGI products are designed and manufactured free from defects in workmanship, and materials for normal use. However, for any reason, including many handlings and occasions between the YMGI factories/warehouses and where you receive the products, the unit doesn't work, YMGI Group will help to remedy the occurrence in the following warranting ways:

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

Parts: YMGI will warrant parts of YMGI-validated and approved warranty filing, for one year from the date of successful installation at original 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 the YMGI Group warrant labor cost of any type. Warranty will start from the date of successful installation at initial location, or 90 days as of original shipping date from YMGI Group, whichever comes first.

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

- * Any damage or repairs to properties, or persons as an incident or consequence of improper or faulty transportation, installation, operation, maintenance or service.
- Damage caused by frozen or broken water hoses or refrigeration pipes in the event of equipment failure.
- * Any damage as a result of 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 the 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 the following conditions must all be fulfilled:

- 1. The unit was fully (100%) and successfully installed by licensed or certified HVAC technicians.
- 2. The unit was installed following all NEC, state and local codes.
- 3. The unit was installed following all instructions and manuals made by YMGI Group.
- 4. ALL fields, especially the technician-checklist, of the Limited Warranty Registration Card/Form were filled completely by the installing technician and signed by both the installing company technician and the unit owner.
- 5. The Limited Warranty Registration Card/Form and a copy of the original installing company's invoice had 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 5 conditions is not met. Product registration doesn't guarantee the validity of this limited warranty statement.

Steps to follow for warranty part replacement:

- 1. Installing or service technician contacts YMGI tech support at 1-866-833-3138 ext 703 from the jobsite, to double-check and confirm with YMGI Technical support the exact part(s) needed to fix all the problems.
- 2. YMGI will check the customer's warranty filing. Parts for validated and approved warranty will not be charged. Parts of invalid warranty filing or unapproved warranty requesting, will be charged accordingly.
- 3. YMGI will ground ship out the parts ASAP. Expedited shipping is available at the customer's cost.
- 4. Replacement parts of approved warranty registration are to be warranted for the remainder of the 1 year parts and 5 year compressor warranty. Purchasing of replacement parts of invalid warranty filing or unapproved warranty requesting, will be as they are and bear no warranty.

YMGI keeps on improving products with various engineering changes without prior notice. Such improvements or changes include but not limited to product specification, appearance, functions, sizes, packaging and others. These improvements or changes will not void the limited warranty stated herein. YMGI keeps the final explanation of this warranty policy.

LIMITED PRODUCT WARRANTY REGISTRATION CARD



LIMITED PRODUCT WARRANTY

1	Innovative, Competitive, Effic	ient & Conv	eniene	REG	ISTRA	HON CAR	KD / FOI	KINI
YMGI to	Fill Top Portion, at Shipping, and	Keep Cop	y A; Cen	ter Copy B for Installer to	Fill and Mail back to	YMGI; Bottom Copy C for C	ustomer to Fill and Ke	ер
For	The Company the Unit Was Sold Though:			Shipping Packing List Number:		Registration Card Serial No.		
/MGI Use	Did the Company Pay to YMGI:			HVAC Contractor/ Technician-Name		Date the Filled Regist Card YMGI Received		
Only	Installation Invoice Attached to the Registration Card			Hirad VMCI Basamma	ndod	Unit(s) Work Successfully (Yes/No	Warrant	ty Warrant ed Denied
	or Serial Number (One Outdoor One Registration Card/Form):	Indoor Serial Number:	For Multi Zone Units	Unit #2 Unit #3		Unit #5 Unit #6 Unit #7 Unit #8		
	act Where the Units are Install							
	e: ess:							
	State (Prov							
	act of the Installing HVAC Con nician Full Name (Print):				YMGI-Recom	nmended Contractor/Tecl	hnician:	
	Technician's Company Name: _				Email:			
Addre	ess: ntly Licensed or Certified HVAC	Tochnici	an Licon	so or Cortification Numb	City:State (Pr	ovince):	or Cortified by:	
	al Phone # to Check the License					Licerise Approved	or Certified by	
	r Installating HVAC Technician to D				ty Proposing Burn	age (if not filled by technicia	on or not filled fully w	orronty will yo
	you the only one to install whole			mation Quality, and Warran		peen done, prior to your ar		arranty will vo
	ot, % of installation done			chnician).	2) What had t	been done, prior to your an	livai :	
	you read the User Manual and rted the installation?	Installation	on Instru	ction, before you	4) Who unpac	cked the unit and accessor	y boxes to check for	damage?
	pply electrical power V/Ph/Hz me oor unit: ou			terminal block of	6) Incoming e indoor unit:	lectrical power V/Ph/Hz mouto	easured at terminal loor unit:	olocks of
7) Wi dis	re gauge, length and terminal co connect switch to outdoor unit:	lors betw	een circ	uit breaker/	8) Wire gauge outdoor un	e, length and terminal color it: Unit A Unit B		oor and Unit D
	e size of HVAC circuit breaker/fu door unit:	se or dis	connect	switch to the		er-connecting wires and cop ed/covered/protected by line		oor and outdoo g else?
	hat is the refrigerant pipe length utdoor unit? Unit A Uni	betweer t B	each ir Unit		12) Where is/ Unit A	are the indoor unit(s) locat Unit B		t D
ÓU	/hat is the elevation difference be utdoor unit? Unit A Uni door unit above outdoor unit +, b	t B		oor unit and the C Unit D	14) Did you c leakage, t	heck the indoor unit for cor pefore and after connectinູເ	ndensate leakage ar g them?	ıd refrigerant
´ G	/here is the outdoor unit located? round wall balcony roof other cation or pad	grou		or unit anchored to ecured onto wall		checked to make sure the ng between any two indoo with you?		
17) W th	ere the refrigerant pipe ends capem through structures to keep d	oped or t ebris fror	aped se n enterii	al, prior to running ng the copper lines?	18) Have you working fi	checked and run cooling one?	or heating, one unit b	y one unit, a
ni	id you charge the inter-connectic trogen to check for positive leak anducting vacuuming leakage ch	age (pres	r pipes a ssures 1	and indoor unit with 50-200PSI), before	20) Did you va leakage, v	acuum correctly to check the hat was the micron gauge	e connecting pipes ar reading, for how man	id indoor unit y minutes?
	id you check if the compressor correct (design) manner?	an be sta	arted an	d stopped in a		length were not made to th t pipe length, how much re		
W	easured refrigerant pressures at ou as st. eat pump (PSI): Cooling (PSI):			tion valve, when unit pient Temp. (°F):	At cooling:	e the measured temperatures indoor return air °F, disc indoor return air °F, disc	s (probe not touching charge air °F, and charge air °F, and	outdoor °I
	ave you checked all unit function nctions are correct?	ıs, with c		,	26) Did you sh	now the user how to operate	the unit? Did he/she	understand yo

Installation Finished and Unit Works Successfully Print Name of Installation HVAC Technician

27) Do you provide regular one-year free technical service for this

Date and time:

Installation Finished and Unit Works Successfully Print Name of Owner

28) Do you list the working details in the invoice and leave a copy to the

Date and time:

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 filled above, and make its decision on warranty. I understand our filing or filling the warranty card/form DOESNT 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 manuals, web site, email, etc.

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 filled 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.





YMGI warrants to the purchaser/owner(s) that YMGI products be free from defects in material and workmanship under the normal use and maintenance, with the standard Limited Product Warranty Policies that comes with the unit or sales package.

YMGI IS NOT RESPONSIBLE FOR

- * Damage or repairs required as a consequence Customer do-it-yoursely(DIY) installation and/or any other faulty installation or improper application.
- * Damage or repairs needed as a consequence of any misapplication, abuse, improper servicing, unauthorized alteration, or improper operation.
- * Damage as a result of floods, winds, fires, lightening, accidents, corrosive atmosphere, or other conditions beyond the control of YMGI.
- * Any damages to person or property of whatever kind, direct or indirect, special or consequential, whether resulting from use or loss of use of the product.
- * Failure to start due to voltage conditions, blown fuses, open circuit breakers, or other damages due to the inadequacy or interruption of electrical service.
- * Parts not supplied or designated by YMGI.
- * Products installed outside USA or Canada.
- * Regular equipment maintenance or field service or field inspection.
- * Any problems due to improper cooling and heating load calcuation of the room/building the air conditioner/heat pump system is to be installed. Equipment users can get the calculation schedule from your room/building architect or your installation or related service HVAC contractor, who should have the knowledge and the tools to do these calculations correctly.
- * Any problems due to improper sizing and selecting air conditioner/heat pump system. These equipment sizing and selection work should be conducted by either your room/building architect or your installation or related service HVAC contractor, who should have the knowledge and the tools to do these calculations correctly, and get your approval, before purchasing the air conditioner or heat pump equipment.
- * Any problems due to improper installing of the air conditioner/heat pump system. Installation should be conducted by currently licensed HVAC technician, following manufacturer installation instructions, all governing safety codes, with care and professionalism.
- * Any problems due to improper operation of the air conditioner/heat pump system. Users shall keep the manual and refer to it for the correct understanding of how the unit will work and how to operate the unit correctly.
- * Any problems due to improper maintenance of the air conditioner/heat pump system. Like a car, regular maintenance or yearly checking is necessary for the unit to work properly for you, before the season comes. For example, air filter shall be checked for cleaness from time to time. Remote control batteries shall be checked for enough power, before judging the unit is not working...

CONTACT FOR FIELD SERVICE OR REPAIR

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

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

CONTACT FOR GENERAL TECHNICAL QUESTIONS OR SUPPORT, IN A SEQUENCE:

- 1) The original installer; otherwise,
- 2) The current service contractor; otherwise,

The original licensed installer or current service contractor should be contacted first of all, since they installed the unit and/or know more details than anybody else.

They will check the unit and find out the problems with the professional knowledge about HVAC and electric product installation by using special tools or instrument.

They can contact YMGI technical support for technical help during unit installation or inspection.

Product model and serial numbers needed, which can be found on unit nameplate sticker, so that our technician can quickly identify the unit, parts and wiring diagrams, among our many products and models.

- 3) The distributor; where the unit is purchased from otherwise,
- 4) YMGI Technical Support:

Tel: (866) 833-3138*703

Email: techsp@ymgigroup.com

WARNINGS FOR INSTALLATION, OPERATION, MAINTAINING AND SERVICE

When smelling a burning or smoke odor, turn off unit, disconnect the power and contact your installation or service provider immediately.



If the occurrence is not diagnosed and resolved, operating the unit may cause damage including

Must connect the unit to dedicated HVAC circuit breaker of proper

Do not turn the power on and then off frequently.

Must not cut off or damage power cables and control wires.

In case of any damage found on wires, must replace with good one without any delay.



Don't entangle electrical wires or leave extra length of wire in the

electric shock or fire.



Never use indoor wires for outdoor

switch.

Not to connect unit to the wall



Disconnect the power supply, if not using the unit for guite a while.

Never drag wires too hard, or use wire to hang or band or fasten anything.





BRIEF UNIT INFORMATION

Before cleaning, it is necessary to stop unit operation and turn off the power supply.





Must turn off unit and disconnect electrical power, before cleaning or servicing the unit.

It is Suggested to put a warning sign at the switch, to avoid accidental return of power by somebody who doesn't know service is in progress.

Only apply correct electrical power to the unit (208-230/1/60).

The compressor will vibrate if the voltage is too low or too high. Electrical components may fail, if voltage is too high.

Don't attempt to install or repair the unit yourself. The little bit of savings up front is not worth missing the chance to have a licensed professional to diagnose and repair the unit. Also, factory warranty will be lost.





successfully conduct some work. But, it is about responsibility and liability. Customer will have to take responsibility and liability for the DIY installation or or repair.

Mounting bracket must be sturdy and secured.



Outdoor unit. especially the heatpump

outdoor unit, must be installed at least 3-5 inches above the ground, to keep from possible ice being built up in cold weather.

Don't step onto the top of unit. Don't place anything atop of it.





The unit must be securely grounded.

The cable shall be connected to the grounding device in the home or building.









NAMES OF THE PARTS

A WARNING

- * Be sure to cut off the power supply before cleaning the air conditioner; otherwise electric shock might happen.
- * Do not spray any liquids directly inside the cabinet of the outdoor unit. There is risk of electric
- * Volatile liquids such as thinner or gasoline will cause damage to the appearance of the air conditioner. (Only use a soft dry cloth or a moist cloth if needed to clean the cabinet of the outdoor unit.)
- * This product cannot be disposed with domestic waste. This product has to be disposed at an authorized place for recycling of electrical and electronic appliances.
- * The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.



NO.	WMMS-21CH WMMS-30CH	WMMS-24CH WMMS-36CH	WMMS-42CH	WMMS-48CH	WMMS-60CH
1	Air Discharge grille	Air Discharge grille	Air Discharge grille	Air Discharge grille	Air Discharge grille
2	Wiring Panel/Handle	Front side panel/handle	Front side panel/handle	Front side panel/handle	Front side panel/handle
3	Valves	Valves	Valves	Valves	Valves

TECHNICAL DATA

MOD		WMMS-21CH WMMS-30CH	WMMS-24CH WMMS-36CH	WMMS-42CH	WMMS-48CH	WMMS-60CH	UNIT
Electricity data							
Electricity supply				208-230/1/60			
HVAC type fuse or circuit breaker		30	30	30/40	40	50	AMP
Minimum power cord size		10	10	8	8	8	AWG
Refrigerant charge (R410A)		56	88	88	88	169	OZ
Size							
W1	W1	33.3	35.25	35.25	37.4	40.25	Inch
H	Н	23.5	27.6	27.6	27.5	43.5	Inch
	D0	15.0	15.75	15.75	15.75	17.5	Inch



	Outdoor side DB(°F)				
Maximum cooling	115(T1)				
Minimum cooling	20				
Maximum heating	75				
Minimum heating	5				

BRIEF UNIT INFORMATION

SPECIFICATION

Outdoo	or Unit Models	WMMS-21CH-V2B(59)(2) (1 to 2) WMMS-30CH-V2B(59)(2) (1 to 2)	WMMS-24CH-V2B(59)(2) (1 to 3) WMMS-36CH-V2B(59)(2) (1 to 3)	WMMS-42CH-V2B(59)(2) (1 to 4)	WMMS-48CH-V2B(59)(2) (1 to 4)	WMMS-60CH-V2B(59)(2) (1 to 5)
Pov	wer Supply			208-230/1/60		
	Max. Allowed IDU Cap. Total	30,000	36,000	48,000	57,000	72,000
Cooling Capacity* (Btu/h)	Rated	18,000	24,000	28,000	30,000	42,000
(Starry)	Min.	7,200	10,000	10,000	10,000	12,000
	Max.	2300	3300	4500	4500	5100
Total Power Input in Cooling Mode* (W)	Rated	1550	2250	2600	2600	3950
,	Min.	650	800	900	1000	1200
	SEER	16.0	16.0	16.0	16.0	16.0
	HSPF	8.2	8.2	8.2	8.2	8.2
	Max. Allowed IDU Cap. Total	32,000	38,000	50,000	59,000	74,000
Heating Capacity* (Btu/h)	Rated	19,000	29,500	31,000	33,000	46,000
(=13)	Min.	6,500	9,000	9,000	9,000	10,000
	Max.	2400	3000	3500	3500	4800
Total Power Input in Heating Mode*	Rated	1750	2500	2920	2920	4400
	Min.	650	800	900	1000	1200
Liqui	d Valve Size	2 x 1/4"	3 x 1/4"	4 x 1/4"	4 x 1/4"	4 x 1/4" + 3/8"
Gas	Valve Size	2 x 3/8"	3 x 3/8"	4 x 3/8"	4 x 3/8"	2 x 3/8" + 2 x 1/2" + 5/8"
Compressor Ma	anufacturer/trademark	Sanyo / Mitsubishi / Others	Sanyo / Mitsubishi / Others	Sanyo / Mitsubishi / Others	Sanyo / Mitsubishi / Others	Sanyo / Mitsubishi / Others
Com	npressor Oil	/ FV50S /	/ FV50S /	/ FV50S /	/ FV50S /	/ FV50S /
L	.R.A. (A)	27	45	45	45	55
Compr	ressor RLA (A)	8.4	9.7	9.7	10	13
Compresso	or Power Input (W)	1245	2200	2200	2200	3000
1	MCA (A)	15	20	20/30	30	50
Fuse or Circuit	Breaker (HVAC Type)	30	30	30/40	40	50
Throt	ttling Method	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Star	ting Method	Transducer starting	Transducer starting	Transducer starting	Transducer starting	Transducer starting
Recommended Working	ng Ambient Temp Ranges (F)	AC: 20 to 115 HP: 5 to 75	AC: 20 to 115 HP: 5 to 75	AC: 20 to 115 HP: 5 to 75	AC: 20 to 115 HP: 5 to 75	AC: 20 to 115 HP: 5 to 75
C	ondenser	Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube
Output o	f Fan Motor (W)	60	60	60	60	140
Fan M	flotor RLA (A)	0.65	0.65	0.65	0.65	1.1
Fan Moto	or Capacitor (uF)	3	3.5	3.5	3.5	6
Air Flow Ra	ate of Outdoor Unit	1	1	1	1	1
Fan	Type-Piece	Axial fan 1	Axial fan 1	Axial fan 1	Axial fan 1	Axial fan 1
Fan Dia	imeter (Inches)	18.1	18.1	18.1	18.1	22.5
Defro	sting Method	Auto Defrost	Auto Defrost	Auto Defrost	Auto Defrost	Auto Defrost
Clir	mate Type	T1	T1	T1	T1	T1
I	solation	I.	1	ı	I	ı
Moistu	ure Protection	IP24	IP24	IP24	IP24	IP24
Max. Operating Pr	ressure at High Side (PSI)	550	550	550	550	550
Max. Operating Pr	ressure at Low Side (PSI)	175	175	175	175	175
Sound Pressu	ire Level dB (A) (H/L)	56/54	56/54	56/54	56/54	56/54
Sound Power	er Level dB (A) (H/L)	66/64	66/64	66/64	66/64	66/64
Dimensions of Outdo	or Unit (W x H x D) (Inches)	33.3 x 27.0 x 11.8	37.4 X 27.5 X 15.5	37.2 X 27.6 X 15.75	37.4 X 27.5 X 15.5	42.25 X 43.5 X 17.5
Dimensions of Pag	ckage (W x H x D) (Inches)	39.1 x 29.5 x 16.9	40.6 X 29.5 X 16.5	40.5 X 29.5 X 18.0	40.6 X 29.5 X 16.5	46.0 X 48.6 X 19.4
Net Weight /	Gross Weight (LBs)	115 / 126	150 / 161	165 / 176	165 / 176	225 / 248
Refrigerant /Factor	y Pre-Charge for 25' (LBs)	R410A / 2.97	R410A / 4.84	R410A / 4.84	R410A / 4.84	R410A / 10.6
	20' Container	87	80	80	80	50
Loading Quantity	40' Container	183	170	170	170	100
, ,	40' High Cube Container	183	170	170	170	100
		•				





OUTDOOR UNIT WORKING TEMPERATURE RANGE

RECOMMENDED MATCHING INDOOR AND OUTDOOR UNITS (NOT ALL POSSIBILITIES BEING LISTED)

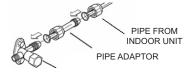
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		Inc	loor Unit Mix a	nd Match Size P	ossibilities (Sa	mples), to Wor	with: Outdoo	r Unit WM	MS-21CH-V2	2B(59)(2)	/ WMMS-30C	H-V2B(59)(2)			
1 Indoor	r Unit		2 Indoor Un	its		3	Indoor Units				4 Indoor Units				
09K	12K	09K+0	09K	09K+12K			lot allowed				Not allowed				
18K	24K	12K+1		12K+18K									·u		
		Inc	loor Unit Mix a	nd Match Size P	ossibilities (Sa	mples), to Wor	with: Outdoo	r Unit WM	MS-24CH-V2	2B(59)(2)	/ WMMS-36C	H-V2B(59)(2)			
1 Indoor	1 Indoor Unit 2 Indoor Units					3	Indoor Units					4 Indoor Ur	iits		
Not alla	Not allowed 09K+12K 12K+12K					-09K 09F	(+09K+12K	09K+0	9K+18K			Not allowe	d		
09K+18K 18K+18K				09K+12K+12K 09K+12K+18K 12K+12K+12K							NOT allowe	·u			
Indoor Unit Mix and Match Size Possibilities (Samples), to Work with: Outdoor Unit WMMS-42CH-V2B(59)(2)															
1 Indoor	r Unit		2 Indoor Un	its		3 Indoor Units						4 Indoor Units			
		12K+1	12K	09K+18K	9K+9K+	9K 09F	(+09K+12K	09K+12K+12K		09K+09	9K+09K+09K	09K+09K+09K	+12K	09K+09K+12K+12K	
Not allo	wed	12K+1	18K	12K+24K	9K+9K+1	18K 09F	(+12K+18K	12K+1	12K+18K	09K+1	2K+12K+12K	12K+12K+12K	+12K	09K+09K+09K+18K	
		18K+1		18K+24K	12K+12K+				12K+24K		9K+12K+18K				
			Indo	or Unit Mix and	Match Size Po	ssibilities (Sam	oles), to Work	with: Outo	loor Unit Wi	MMS-480	H-V2B(59)(2)				
1 Indoor	r Unit		2 Indoor U	nits		3 Indoor Units					4 Indoor Units				
		12K+1	18K	09K+24K	09K+09K+	-09K 09F	(+09K+12K	09K+12K+12K		09K+09	9K+09K+09K	09K+09K+09K	+12K	09K+09K+09K+18K	
Not allo	wed	18K+1	18K	12K+24K	09K+09K+	-18K 12F	(+12K+12K	09K+1	12K+18K	09K+09	9K+12K+18K	09K+12K+12K	+18K	12K+12K+12K+12K	
		18K+2	24K	24K+24K	12K+12K+	-18K 09F	(+12K+24K	12K+1	12K+24K	09K+09	9K+09K+24K	09K+09K+12K	+24K	09K+12K+12K+24K	
			Indo	or Unit Mix and	Match Size Po	ssibilities (Sam	oles), to Work	with: Outo	loor Unit Wi	MMS-60C	H-V2B(59)(2)				
1 Indoor Uni	1 Indoor Unit 2 Indoor Units 3 Indoor Units				S	4 Indoor Units						5 Indoo	or Units	1	
						9K+12K+12K 09K+09K+09K+12K 09K+09K+09K+09K 09K+09K+09									
Not allowed	18K+18k	12K+24K	09K+09K+18K	12K+12K+18K	09K+12K+18K	09K+09K+12K+	18K 09K+12k	+12K+18K	12K+12K+1	12K+12K	09K+09K+12K+	12K+12K/18K/24K	_	12K+12K+12K+12K/18K	
	18K+24H	< 24K+24K	12K+12K+12K	12K+12K+24K	09K+12K+24K	09K+09K+12K+	24K 09K+12k	+12K+24K	12K+12K+1	12K+24K	2K+24K 12K+12K+12K+12K/18K 09K+09K+12		K+09K+12K+12K+18K K+12K+12K+18K+18K		
											55/(105/(11		031	TO TELL TELL TOIC TOIC	

Important Notes:

- * When the rated total capacity of all the indoor units exceeds the rated capacity of outdoor unit, each indoor unit may not output the rated capacity and one may differ from other, upon other installation/operation factors, if all units are turned on to run compressor simultaneously.
- * Must follow pipe length and refrigerant charge adjustment as instructed in below table:

PIPE ADAPTOR

Whenever the outdoor unit gas valve of size 3/8" is to connect with indoor unit gas pipe of 1/2" or 5/8", one 3/8" - 1/2" or 3/8" - 5/8" adaptor is to be used in between. This reducer is packed separately and



OUTDOOR UNIT VALVE

SAMPLE SIZE COMBINATIONS AND PERFORMANCE DATA

WN	WMMS-2AM21-V2B(59)(2) / WMMS-2AM30-V2B(59)(2) Cooling Performance Nominal Data													
Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.~Max.)	Input Power Rating-Watts (Min.~Max.)							
9K	9K	10880				10880 (9180~12240)	1050 (1000~1300)							
12K	12K	11900				11900 (9180~14960)	1050 (1000~1500)							
18K	18K	17000				17000 (11220~22780)	1400 (1000~2600)							
9+9K	18K	8500	8500			17000 (11220~22780)	1400 (1000~2600)							
9+12K	21K	8500	11900			20400 (11220~26520)	1800 (1000~3300)							
12+12K	24K	11900	11900			23800 (11220~27880)	2300 (1000~3800)							
9+18K	27K	8840	15300			24140 (11220~32300)	2200 (1000~4600)							
12+18K	30K	11900	12240			24140 (11220~32300)	2200 (1000~4600)							

WMMS-3AM24-V2B(59)(2) / WMMS-3AM36-V2B(59)(2) Cooling Performance Nominal Data												
Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.~Max.)	Input Power Rating-Watt (Min.~Max.)					
9+9K	18K	8500	8500			17000 (11220~22780)	1400 (1000~2600)					
9+12K	21K	8500	11900			20400 (11220~26520)	1800 (1000~3300)					
12+12K	24K	11900	11900			23800 (11220~27880)	2300 (1000~3800)					
9+18K	27K	8840	15300			24140 (11220~32300)	2200 (1000~4600)					
12+18K	30K	11900	12240			24140 (11220~32300)	2200 (1000~4600)					
9+9+9K	27K	8075	8075	8075		24140 (11220~32300)	2200 (1000~4600)					
9+9+12K	30K	7140	7140	9860		24140 (11220~32300)	2200 (1000~4600)					
9+12+12K	33K	6460	8840	8840		24140 (11220~32640)	2200 (1000~4650)					
12+12+12K	36K	8075	8075	8075		24140 (11220~32640)	2200 (1000~4650)					
9+9+18K	36K	7480	7480	9180		24140 (11220~32640)	2200 (1000~4650)					
9+12+18K	39K	7140	7820	9180		24140 (11220~32640)	2200 (1000~4650)					
12+12+18K	42K	7820	7820	8500		24140 (11220~32640)	2200 (1000~4650)					

		WMMS-	4AM42-V	2B(59)(2)	Cooling P	erformance Nominal Data	1
Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.~Max.)	Input Power Rating-Watts (Min.~Max.)
9+9K	18K	8500	8500			10880 (9180~12240)	1400 (1000~2600)
9+12K	21K	8500	11900			11900 (9180~14960)	1800 (1000~3300)
12+12K	24K	11900	11900			17000 (11220~22780)	2300 (1000~3800)
9+18K	27K	8840	15300			17000 (11220~22780)	2200 (1000~4600)
12+18K	30K	11900	12240			20400 (11220~26520)	2200 (1000~4600)
9+9+9K	27K	8044	8044	8044		23800 (11220~27880)	2200 (1000~4600)
9+9+12K	30K	7140	7140	9860		24140 (11220~32300)	2200 (1000~4600)
9+12+12K	33K	6460	8840	8840		24140 (11220~32300)	2200 (1000~4650)
12+12+12K	36K	8044	8044	8044		24140 (11220~32300)	2200 (1000~4650)
9+9+18K	36K	7480	7480	9180		24140 (11220~32300)	2200 (1000~4650)
9+12+18K	39K	7140	7820	9180		24140 (11220~32640)	2200 (1000~4650)
12+12+18K	42K	7820	7820	8500		24140 (11220~32640)	2200 (1000~4650)
9+9+9+9K	36K	6800	6800	6800	6800	24140 (11220~32640)	2480 (1000~4650)
9+9+9+12K	39K	1750	1750	1750	2750	24140 (11220~32640)	2480 (1000~4650)
9+9+12+12K	42K	1500	1500	2500	2500	24140 (11220~32640)	2480 (1000~4700)
9+12+12+12K	45K	1700	2100	2100	2100	27200 (11220~32640)	2480 (1000~4700)

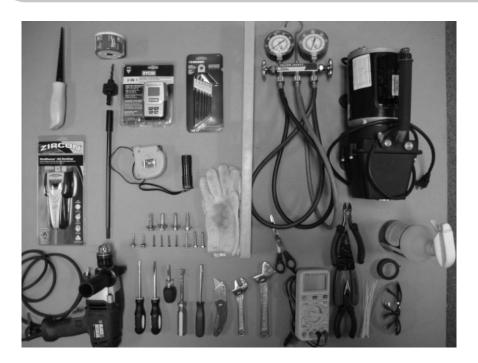
W M	WMMS-2AM21-V2B(59)(2) / WMMS-2AM30-V2B(59)(2) Heating Performance Nominal Data												
Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.~Max.)	Input Power Rating-Watts (Min.~Max.)						
9K	9K		9860			9860 (6630~15980)	1100 (850~2450)						
12K	12K			13260		13260 (6800~17000)	1450 (850~2500)						
18K	18K	19720				19720 (8670~27880)	1850 (900~2950)						
9+9K	18K	10880	10880			21760 (8670~29240)	2050 (900~2950)						
9+12K	21K	10880	13600			24480 (8670~30600)	2300 (900~3300)						
12+12K	24K	13260	13260			26520 (10200~32640)	2400 (900~3500)						
9+18K	27K	12240	17000			26860 (10200~31620)	2400 (900~3500)						
12+18K	30K	12240	15300			27540 (10540~33660)							
14/4	WMMS-3AM24-V2B(59)(2) / WMMS-3AM36-V2B(59)(2) Heating Performance Nominal Data												
VVIV	INS-3AN	124-V2B(5	9)(2) / WW	IMS-3AM3	6-V2B(59)	(2) Heating Performance	Nominai Data						
Indoor Unit	Total	Room A	Room B	Boom C	Room D	Capacity Rating-Btu/h	Input Power Rating-Watts						

WN	IMS-3AM	124-V2B(5	9)(2) / WM	MS-3AM3	6-V2B(59)	(2) Heating Performance	Nominal Data
Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.∼Max.)	Input Power Rating-Watts (Min.~Max.)
9+9K	18K	10880	10880			21760 (8670~29240)	2050 (900~2950)
9+12K	21K	10880	13600			24480 (8670~30600)	2300 (900~3300)
12+12K	24K	13260	13260			26520 (10200~32640)	2400 (900~3500)
9+18K	27K	12240	17000			26860 (10200~31620)	2400 (900~3500)
12+18K	30K	12240	15300			27540 (10540~33660)	2600 (900~3800)
9+9+9K	27K	9632	9632	9632		28900 (10540~37400)	2600 (900~3800)
9+9+12K	30K	9010	9010	10880		28900 (10540~37400)	2600 (900~3800)
9+12+12K	33K	7820	10880	10880		29580 (10540~37400)	2600 (900~3800)
9+9+18K	36K	7990	7990	13600		29580 (10540~37400)	2400 (1000~3900)
12+12+12K	36K	9860	9860	9860		29580 (10540~37400)	2350 (1000~4000)
9+12+18K	39K	7480	9180	12920		29580 (10540~37400)	2350 (1000~4000)
12+12+18K	42K	8500	8500	12580		29580 (10540~37400)	2400 (1000~4000)

		WMMS-	4AM42-V2	2B(59)(2)	Heating P	erformance Nominal Data	a
Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.~Max.)	Input Power Rating-Watts (Min.~Max.)
9+9K	18K	10880	10880			21760 (8670~27880)	2050 (900~2950)
9+12K	21K	10880	13600			24480 (8670~28900)	2300 (900~3300)
12+12K	24K	13260	13260			26520 (10200~31620)	2400 (900~3500)
9+18K	27K	9860	17000			26860 (10200~31620)	2400 (900~3500)
12+18K	30K	12240	15300			27540 (10540~33660)	2400 (1000~3900)
9+9+9K	27K	9180	9180	9180		27540 (10540~33660)	2400 (1000~4000)
9+9+12K	30K	8500	8500	10540		27540 (10540~33660)	2400 (1000~4000)
9+12+12K	33K	7480	10370	10370		28220 (10540~33660)	2450 (1000~4000)
9+9+18K	36K	7990	7990	11560		27540 (10540~33660)	2400 (1000~4000)
12+12+12K	36K	9690	9690	9690		29070 (10540~33660)	2500 (1000~4000)
9+12+18K	39K	7480	9180	10880		27540 (10540~33660)	2400 (1000~4000)
12+12+18K	42K	8500	8500	10540		27540 (10540~33660)	2400 (1000~4000)
9+9+9+9K	36K	8160	8160	8160	8160	32640 (11220~37400)	2600 (1100~4200)
9+9+9+12K	39K	7480	7480	7480	10200	32640 (11220~37400)	2600 (1100~4200)
9+9+12+12K	42K	7140	7140	9180	9180	32640 (11220~37400)	2600 (1100~4200)
9+12+12+12K	45K	6120	8840	8840	8840	32640 (11220~37400)	2600 (1100~4200)

- 1) The DC inverter outdoor unit may work with many different combinations of styles (wall, ceiling, ceiling/floor, concealed, etc.) and sizes of indoor units.
 2) In real world, there might be small percentage of applications where all indoor units will be working at peak demand of cooling or heating needs. One room
- could be at peak demand, others may not. This way, the outdoor unit doesn't need to work at peak speed/load all the time.
- 3) Not all pairs of refrigerant valves need to be connected at initial installation. But, there is minimum amount of indoor units shall be connected (refer to the spec. sheet for details). If only few of indoor units are installed initially, other indoor units can still be installed in the future whenever ready (need to vacuum and adjust refrigerant
- charge accordingly)
- 4) These outdoor unit can only drive all indoor units for one thermal mode at one time. Shall not run cooling in one indoor unit, and heating in another one. In case of mode conflict or clash, correct the thermal mode which is different from others, or shut off power and select one thermal mode for all indoor units

RECOMMENDED TOOLS FOR INSTALLATION





1) Mounting Indoor & Outdoor **Units and Running** Piping/Wiring

Ruler (Not Shown)

Stud-Finder

Dry-Wall Saw

Electric Drill

3" Hole Saw

Drill Extension

Hammer Drill and Bit (Not Shown)

Measuring Tape

Level

Flash Light

Screw Driver (Phillps and Flat)

Hammer

Knife

Scissors

Goggled Glass

Mask

Gloves

Ladder

2) Refrigeration Related Work

Individual Wrench Set (Use Two at One Time)

Flare-Nut Tool Set (Not Shown) Hex Head Allen Wrench sets (Metric and Imperial)

INSTALLATION INSTUCTIONS

Brazing Rods and Brazing Torch Outfit for AC Application (Not Shown) Brazing Flux

Nitrogen Cylinder for Positive Pressure Leakage Check (Not Shown) Soap Bubble for Positive Pressure Leakage Check (Not Shown) Vacuum Pump for Negative Pressure Leakage Check

Helium Refrigerant Minor Leakage Check (Not Shown)

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 (Not Shown) Infra Thermometer (Not Shown)





HANDLING



After having removed the packaging, check that the contents are intact and complete.



The outdoor unit must always be kept upright.



to direct sunlight.

Handling must be done by suitably equipped qualified technical personnel using equipment that is suitable for the weight of the appliance.

* Do not install the outdoor unit in pits or air vents.

* Do not install the outdoor unit where it is exposed

INSTALLING OUTDOOR UNIT

LOCATION



Use bolts to secure the unit to a flat, solid floor. When mounting the unit on a wall or the roof, make sure the support is firmly secured so that it cannot move in the event of intense vibrations or a strong wind.

INSTALLING THE PIPES



Use suitable connecting pipes and equipment for the refrigerant R410A.

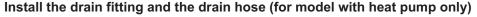
The refrigerant pipes must not exceed the maximum



lengths given in the technical data table. Lag all the refrigerant pipes and joints.

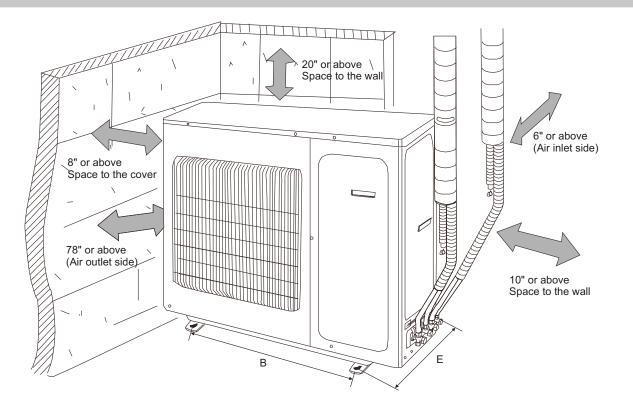


Tighten the connections using two wrenches working in opposite directions.



Condensation is produced and flows from the outdoor unit when the appliance is operating in the heating mode. In order not to disturb neighbors and to respect the environment, install a drain fitting and a drain hose to channel the condensate water. Install the drain fitting and rubber washer on the outdoor unit chassis and connect a drain hose to it as shown in the figure.

INSTALLATION CLEARANCE



INSTALLATION CLEARANCE

Мо	del	WMMS-21CH-V2B(59)(2) (1 to 2) WMMS-30CH-V2B(59)(2) (1 to 2)		WMMS-42CH-V2B(59)(2) (1 to 4)	WMMS-48CH-V2B(59)(2) (1 to 4)	WMMS-60CH-V2B(59)(2) (1 to 5)
В	Inch	21.7	22.75	22.75	22.5	24.75
E	Inch	13.5	13.5	13.5	13.5	16.9

A WARNING



The installation must be done by trained and qualified service personnel with reliability according to this manual.



Contact service center if you have any questions, before, during, or after installation, in order to prevent any unit malfunctions or failures, due to an unprofessional installation.



If Picking up and moving the units, you must hire a trained and qualified contractor/ technician with the proper tools.



Ensure that the recommended clearance is left around the unit, for proper installation, operation and service in the future..

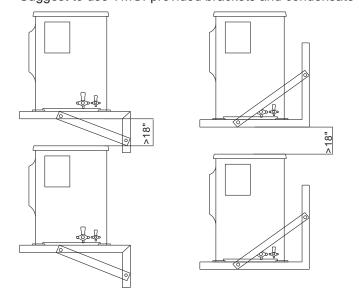
INSTALLATION POSITIONS FOR OUTDOOR UNIT

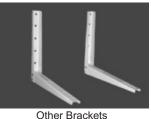
- * To be installed at the position where the air delivered from the unit can reach every comer of the room.
- * To avoid being affected by the outdoor air.
- * To avoid blockage to the air inlet or outlet of the unit.
- * To avoid excessive oil smoke or steam.
- * To avoid possible generation, inflow, lingering or leakage of flammable gases.
- * To avoid high-frequency facilities (such as high frequency arc welders, etc.).
- * To avoid the places where acid solutions are frequently used.
- * To avoid the places where some special sprayers (sulfides) are frequently used.
- * Not to install on top of the musical instruments, TV, computer etc. valuable appliance.
- * Not to install a fire alarming device near the air outlet of the unit (during operation, the fire alarm device might be erroneously triggered by the warm air from the unit).

INSTALLATION-OUTDOOR UNIT

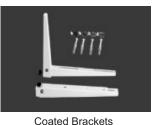
INSTALL OUTDOOR UNIT

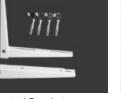
Strongly suggest to install the outdoor unit above the ground either on platform or brackets as shown below. Heat pump unit must be lifted up from ground level, since condensate must be drained out of the drain pan of the condensing unit; othewise, condensate may accumulate and ice up causing damage to the condensing unit. Suggest to use YMGI-provided brackets and condensate drainage fitting accessories.

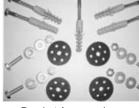




Heavy-Duty PVC Riser for Ground Mounting







Bracket Accessories W A ccessories

(Actual unit/parts or installation may look differently from the illustrated)





INSTALLATION-OUTDOOR UNIT

INSTALLATION & PICTURES-WALL MOUNT BRACKET FOR OUTDOOR UNIT(S) (PART VARIES UPON MODELS/AVAILABILITY)

- * Select a secured location where the outdoor unit will be installed properly.
- * Orient the unit rear side (intake grill) towards wall and front side (discharge grill) away from wall.
- * For ground installation, use factory-provided riser and accessories. Not to bolt unit feet directly onto ground. Riser or brackets shall be levelled at outdoor unit foot surfaces. Secure unit foot by tightening bolts, nuts and anti-vibration pads.
- * For wall mount installation, use factory-provided brackets, anchors and accessories.

WIRING OUTDOOR UNIT

CONNECT WIRING BETWEEN OUTDOOR UNIT AND INDOOR UNIT

- * Check the nameplate for rated electrical data. Connect unit to the correct electrical power source.
- * Select power wire of proper type and size. Suggest to use UL approved 105°C/221°F multi-strand copper wire for outdoor use. Refer to the following tables, for proper selection of wire gauge, size and circuit breaker.

OUTDOOR WIRING: OUTDOOR-INDOOR UNIT & DISCONNECT SWITCH BOX/CIRCUIT BREAKER/FUSE

- * Remove the wiring diagram cover where also the handle for moving unit is located.
- * Follow the wiring diagrams on the unit or the wiring diagram in the manual that comes with the indoor unit. Before attempting to wire the units review the wiring diagrams to get familiar with procedure. Always review all wiring before applying any power to the unit. If there is any discrepancy between the

Strictly follow NEC or state or local codes to select wires, circuit breaker, conduits and to perform installation work.

Bring in line-voltage power input wires from circuit breaker to linevoltage wire terminal block at outdoor unit. Pass through certified wire pipes, harnesses and knockouts. Enough length shall be left for future service. Only copper wire is allowed.







copper wire is allowed.

printed manual and the unit wiring diagram always

use the information that is provided on the unit itself.

unit-power wire from outdoor to Indoor, control wires

from Indoor unit to outdoor unit. Pass wire through

Enough length shall be left for future service. Only

* Connect wires between indoor unit and outdoor

certified wire pipes, harnesses and knockouts.

Disconnect switch box for outdoor unit



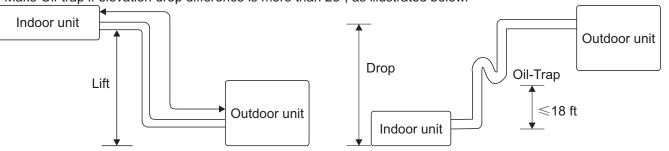
Non-Metalic Power Whip for Outdoor Use (Field-Supplied, Not Spliced and Not Knotted. Water-Proof Sealed Tight, **UL** Approved)

PIPING AND WIRING SIZES-UNITS MADE AFTER 09/2012

Unit	Connection Copper Pipe Sizes	Min/Max.Length +/- Elevation	Wires from Outdoor to Each Indoor Unit	Mini. Wire Size from Outdoor to Circuit Breaker	HVAC Type Circuit Breaker
21/30CH	2*(1/4+3/8")	15/75/25/35	N(1)/2/3/G	12AWG	30AMP
24/36CH	3*(1/4+3/8")	15/75/25/35	N(1)/2/3/G	10AWG	30AMP
42CH	4*(1/4+3/8")	15/75/25/35	N(1)/2/3/G	10AWG	40AMP
48CH	4*(1/4+3/8")	15/75/25/35	N(1)/2/3/G	8AWG	40AMP
60CH	2*(1/4+3/8")+2*(1/4+1/2") +(1/4+5/8")	15/75/25/35	N(1)/2/3/G	8AWG	50AMP

HEIGHT LIMITS OF INDOOR AND OUTDOOR UNITS

- * Either the indoor unit or the outdoor unit can be higher, but the height difference must comply with the stated requirements.
- * Try to reduce the bending of the piping line as much as possible so as to avoid possible negative impacts upon the performances of the units.
- * Make Oil-trap if elevation drop difference is more than 25", as illustrated below.



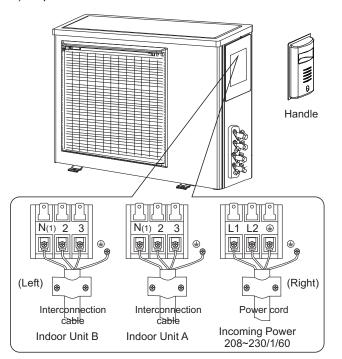
Refrigerant Pipe Min/Max. Length, Rise and Drop Height

1,000 Btu/h	Min. Length (Ft.)	Max. Length (Ft.)	Max. Rise Height (Ft.)	Max. Drop Height (Ft.)
09-12	15	50	20	28
18-24	15	75	25	35
30-36	15	100	35	50

ELECTRICAL CONNECTIONS

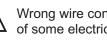
WMMS-21CH-V2B(59)(2) (1 to 2) / WMMS-30CH-V2B(59)(2) (1 to 2)

- 1) Remove the handle at the right side plate of the outdoor unit (one screw).
- 2) Remove the cable clamp, Connect the interconnecting power cable to the terminal block and secure the connection. Be sure to match terminal to terminal matching the indoor unit wiring. The fitting line distributing must be consistent with the indoor unit, terminal of line bank. Wiring should meet that of indoor unit.
- 3) Fix power connection wire by wire clamp.
- 4) Ensure wire has been fastened well.
- 5) Replace handle when done.



An all-pole disconnection switch having a contact separation of at least 1/10" all poles should be connected in with wires that are secured to the unit meta structure.

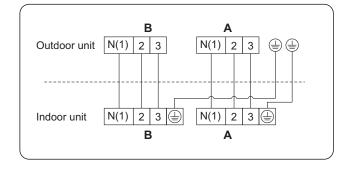
INSTALLATION INSTUCTIONS



Wrong wire connection may cause malfunction of some electric components. After fixing cable, ensure that leads between connection to fixed point are well separated..

The connection pipes and the connectiong wiring of the unit A and unit B must be corresponding to each other respectively.

The system shall be installed in accordance with NEC.







WMMS-24CH-V2B(59)(2) (1 to 3) / WMMS-36CH-V2B(59)(2) (1 to 3)

- 1) Disassemble the front side plate on the outdoor unit front side plate.(4pc screw).
- 2) Remove the cable clamp, Connect the interconnecting power cable to the terminal block and secure the connection. Be sure to match terminal to terminal matching the indoor unit wiring. The fitting line distributing must be consistent with the indoor unit. terminal of line bank, wiring should meet that of indoor unit.
- 3) Fix power connection wire by wire clamp.
- 4) Ensure wire has been fixed well.
- 5) Install the front side plate.

 \triangle

An all-pole disconnection switch having a contact separation of at least 0.12" in all pole should be connected in fixed wiring.



Wrong wire connection may cause malfunction of some electric components. After fixing cable, ensure that leads between connection to fixed point have some space.



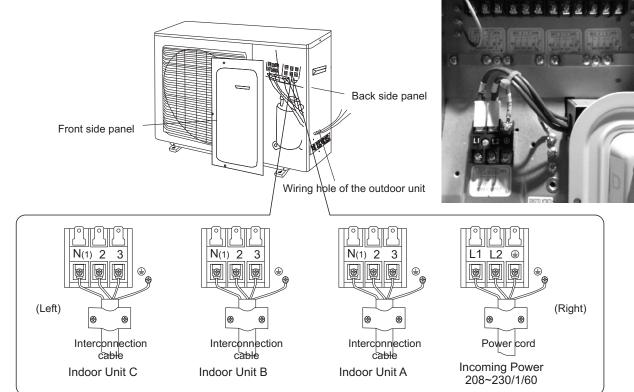
The connection pipes and the connectiong wirings of the unit A and unit B must be corresponding to each other respective.

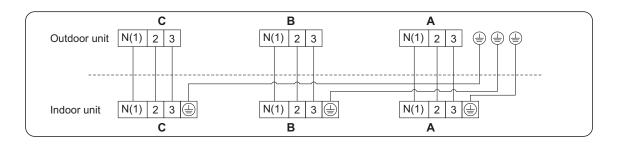


The appliance shall be installed in accordance with national wiring regulations.



Do not install the outdoor unit where it is exposed to sunlight.





ELECTRICAL CONNECTIONS

WMMS-42CH-V2B(59)(2) (1 to 4) / WMMS-48CH-V2B(59)(2) (1 to 4)

- 1) Remove the handle at the right side plate of the outdoor unit (one screw).
- 2) Remove the cable clamp, Connect the interconnecting power cable to the terminal block and secure the connection. Be sure to match terminal to terminal matching the indoor unit wiring. The fitting line distributing must be consistent with the indoor unit. terminal of line bank. Wiring should meet that of indoor unit.
- 3) Fix power connection wire by wire clamp.
- 4) Ensure wire has been fixed well.
- 5) Install the handle.

<u>^</u>

An all-pole disconnection switch having a contact separation of at least 0.12" in all pole should be connected in fixed wiring.



Wrong wire connection may cause malfunction of some electric components. After fixing cable, ensure that leads between connection to fixed point have some space.



The connection pipes and the connectiong wiring of the unit A ,unit B and unit C must be corresponding to eachother respective.

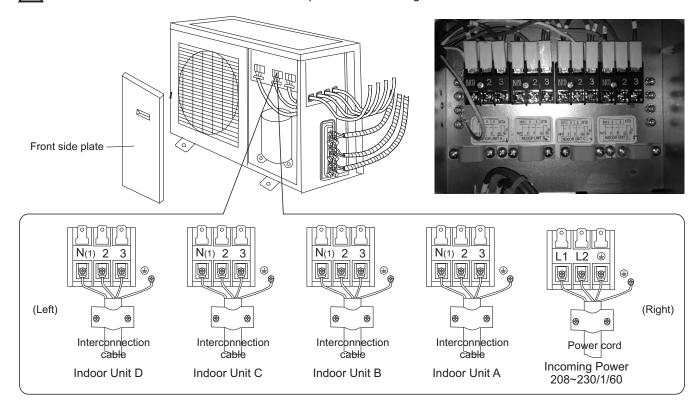
INSTALLATION INSTUCTIONS

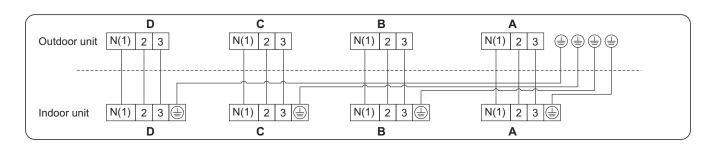


The appliance shall be installed in accordance with national wiring regulations.



Do not install the outdoor unit where it is exposed to the sunlight.







WMMS-60CH-V2B(59)(2) (1 to 5)

- 1) Remove the handle at the right side plate of the outdoor unit (one screw).
- 2) Remove the cable clamp, Connect the interconnecting power cable to the terminal block and secure the connection. Be sure to match terminal to terminal matching the indoor unit wiring. The fitting line distributing must be consistent with the indoor unit. terminal of line bank. Wiring should meet that of indoor unit.
- 3) Fix power connection wire by wire clamp.
- 4) Ensure wire has been fixed well.
- 5) Install the handle.

 \triangle

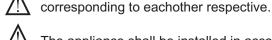
An all-pole disconnection switch having a contact separation of at least 0.12" in all pole should be connected in fixed wiring.



leads between connection to fixed point have some space.

The connection pipes and the connectiong wiring of the unit A, unit B, unit C and unit D must be

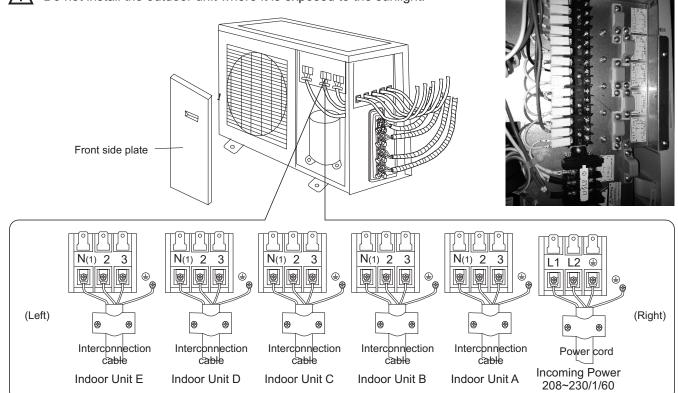
Wrong wire connection may cause malfunction of some electric components. After fixing cable, ensure that

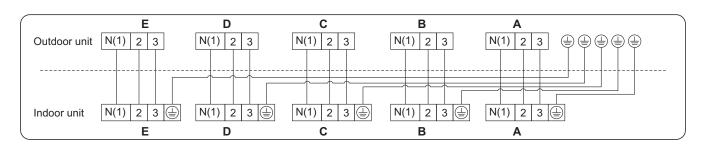


The appliance shall be installed in accordance with national wiring regulations.

 \bigwedge D

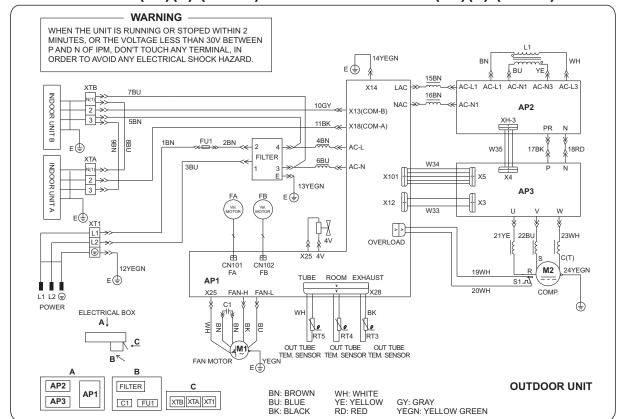
Do not install the outdoor unit where it is exposed to the sunlight.



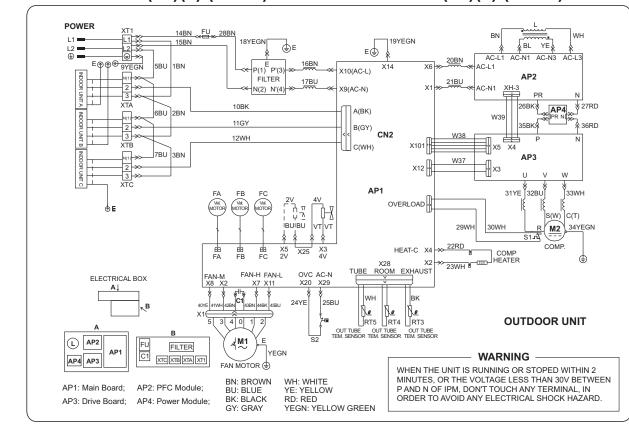


WIRING DIAGRAMS

WMMS-21CH-V2B(59)(2) (1 to 2) / WMMS-30CH-V2B(59)(2) (1 to 2)



WMMS-24CH-V2B(59)(2) (1 to 3) / WMMS-36CH-V2B(59)(2) (1 to 3)

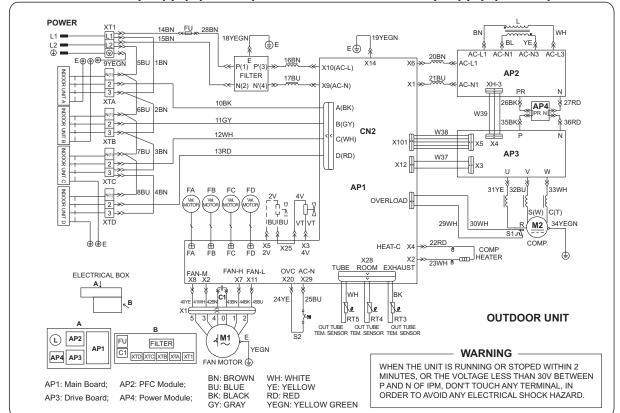




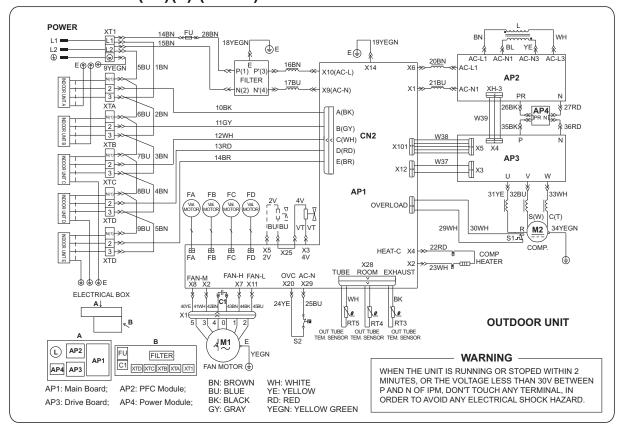


WIRING DIAGRAMS

WMMS-42CH-V2B(59)(2) (1 to 4) / WMMS-48CH-V2B(59)(2) (1 to 4)

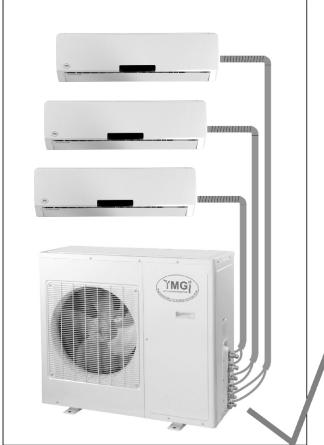


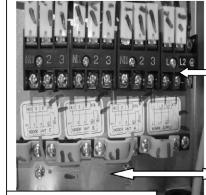
WMMS-60CH-V2B(59)(2) (1 to 5)



NOT TO CROSS-WIRING & NOT TO CROSS-PIPING

Not to Cross-Wiring, Not to Cross-Piping Between Any Two Zones Mini Split-DC Inverter Multiple Zones-(59 Series)-(A-A B-B C-C D-D)





Power Cable from Disconnect Switch Box to Connect to Outdoor **Unit Terminal Block:** L1/L2/G 208-230/1/60

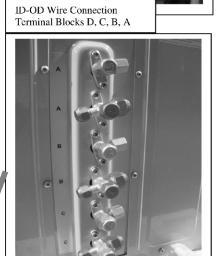
Wires to Go Between Each Indoor Unit and the Outdoor Unit, Connects at N(1)/2/3, One-onone Match: A-A, B-B, C-C, D-D, Whichever available

Piping: Need to ensure the liquid/gas lines from indoor unit A are connected to the valves on outdoor unit marked A/A, respectively.

Also, make sure liquid/gas lines from indoor unit B are connected to the valves on outdoor unit marked B/B, respectively.

INSTALLATION INSTUCTIONS

Same matching on C-C, Whichever D-D, Available



Warning: Since there are multiple electronic expansion valves built inside the outdoor unit, with one (1) for each indoor unit, wiring and piping for each indoor unit, need to match with the corresponding wiring terminals and valves for that specific indoor unit. NOT to Cross Pipe, Not to Cross Wire, between any two indoor units.

All manufacturer warranty will be voided in case of any cross-piping or crosswiring installation. Manufacturer or Distributor(s) WILL NOT be responsible for any direct or indirect damage/loss caused by such prohibited installation.

Negative Consequences of Cross-Wiring/Piping between Any Two Zones:

- 1. The other compressor may work to pump refrigerant into another connected indoor unit, when one indoor unit is called for either cooling or heating.
- 2. Will not have any conditioned air blown out of the indoor unit you are calling for either cooling or heating.
- 3. May freeze (at cooling) or heat up (at heating) the other indoor unit;
- 4. May damage compressors or other refrigeration components;
- 5. May cause electrical surge;
- 6. May damage the whole unit:
- 7. May cause other consequential damages;
- 8. Will void manufacturer warranty;
- 9. The installers MUST take full responsibilities by doing so.





This 3/8"-1/4" reducer, may be needed to connect ceiling ID, or 18K wall mount ID units

This white fitting can be connected to the bottom of outdoor unit base pan, of heat pump models, if you would like to drain the condensate, which will be generated during heat pump defrost cycle, to somewhere you designate to. (Attention: Must install the Heat Pump outdoor unit onto a foot riser (RIST) or bracket (BRKT), so that the base pan can be at least 4 inches above the ground level, and is clear from any blockage, and can keep from possible ice to build up, in cold days.





Black for 2, Brown for 3 Green goes to metal ground screw

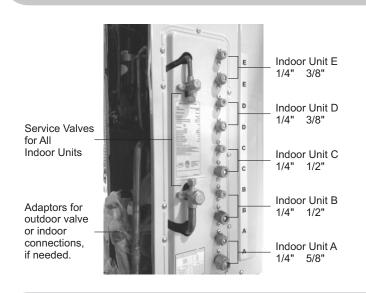
Factory Wiring Kit: Blue for N(1) May put these wire grommet onto the knock-out on the cabinet.

Important: Must follow the piping length suggestion listed on the product specification sheet, and/or installation manual. Must thoroughly check all functions at each system first, before putting any two systems, three systems, four systems, and so on, together to run.





NOT TO CROSS-WIRE & NOT TO CROSS PIPE



A WARNING

DO NOT cross any wiring or any refrigerant piping between any 2+ zones.

CONNECT REFRIGERANT PIPES Seal Copper Line Set/Wire Cable/Drain **Hose Line Combination:**

- * Use factory-recommended components, as briefly illustrated below.
- * Cover line set in a sequence, either from indoor to outdoor, or the other way.
- * Secure line set covers onto the wall using factoryrecommended accessories.

INSTALLATION OF ACCESSORIES

LINE SET COVERS

A CAUTION Not to damage line sets.



INSTALLATION INSTUCTIONS





COUP



COUP-H





OFST



ELBF90°





ELBF45°









OUTDOOR UNIT FOOT RISER OR BRACKETS BRKT-XXXX-SC1

- * Made of steel.
- * Coated with weatherproof polyester powder.

Model	Size	e(Inch)	Capacity			
Wodei	Α	В	LBs	Btu/h		
BRKT-0918-SC1	17.7	15.4	320	09K-18K		
BRKT-1860-SC1	21.7	18.3	360	18K-60K		

BRKT-XXXX-ST1

* Made of stainless steel

Model	Size(Inch)	Capacity				
Wodei	Α	В	LBs	Btu/h			
BRKT-0918-ST1	17.7	15.4	320	09K-18K			
BRKT-1860-ST1	21.7	18.3	360	18K-60K			

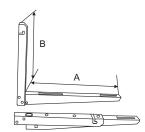
RIST-XXXX-PVC Foot Riser

Accessories: End Caps (Optional)

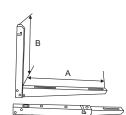
- * Shock-proof PVC, Weatherproof & UV resistant.
- * Supplied with fastening screws and anchor bolts.
- * Easy to install.
- * The "honeycomb" structure acts as an anti-vibration & humming absorption for a quite operation.

Model		Size(Inch)	Capacity			
Wodei	Α	В	С	D	LBs	Btu/h	
RIST-0918-PVC	14.2	3.7	3.1	4.1	220	09K-18K	
RIST-1860-PVC	17.7	3.7	3.1	4.1	260	18K-60K	



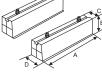
















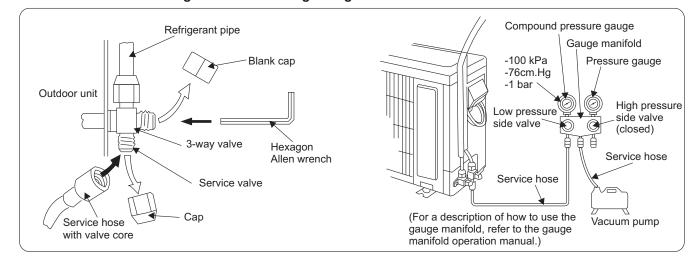


VACUUM AND LEAKAGE CHECK

VACUUM REFRIGERANT PIPES

Evacuate the pipes between indoor and outdoor units, using vacuum pump and manifold/gauge set, to a minimum of 500 microns (service valves remain front seated). Hold for 30 minutes to check if the vacuum level is maintained. Using dry nitrogen or other leakage detection tool for leak checking. Be certain there is no pressure in the system when repairing a leak.

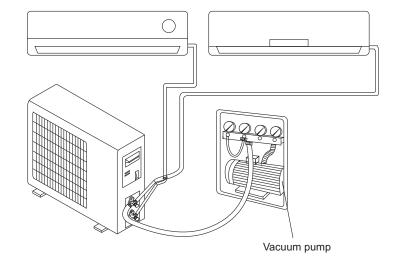
Vacuum and Check Leakage before Releasing Refrigerant from Outdoor Unit to Indoor Unit

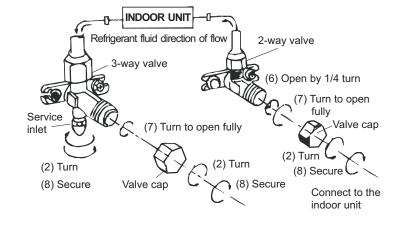


VACUUM

Humid air left inside the refrigerant circuit can cause compressor malfunction and failure. After having connected the indoor and outdoor units, remove the air and humidity from the refrigerant circuit using a vacuum pump.

- 1) Unscrew and remove the caps from the 2-way and 3-way valves.
- 2) Unscrew and remove the cap from the service valve.
- 3) Connect the vacuum pump hose to the service valve.
- 4) Operate the vacuum pump for 10-15 minutes until an absolute vacuum of 500 micron has been reached.
- 5) With the vacuum pump still in operation, close the low-pressure knob on the vacuum pump coupling. Stop the vacuum pump.
- 6) Open the 2-way valve by 1/4 turn and then close it after 10 seconds. Check all the joints for leaks using liquid soap or an electronic leak device.
- 7) Turn the body of the 2-way and 3-way valves. Disconnect the vacuum pump hose.
- 8) Replace and tighten all the caps on the valves.



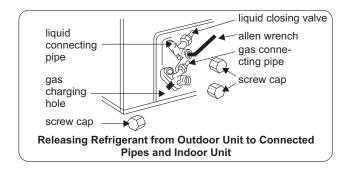






RELEASE REFRIGERANT FROM OUTDOOR TO THE INDOOR UNIT

Unit is pre-charged with refrigerant good for 25' of connection tubes. If vacuum is held for about 30 minutes and no leak is found, first back-seat the liquid (smaller) service valve by Allen Wrench (hex head) slowly to release pre-charged refrigerant from the condensing unit into the connection pipes and indoor unit. If no abnormal things are found, fully open liquid (smaller) and gas (bigger) service valves. Always replace and tighten the caps onto service valves.



SYSTEM INSPECTION AND TRIAL RUNNING

CHECK SYSTEM THOROUGHLY

Check system thoroughly to make sure the unit is ready for trial running: check wires and pipes and air intake and discharge and power and thermostat and others necessary components.

ADJUST REFRIGERANT-GUIDELINE

The right amount of refrigerant is very important. It is one of the basics to ensure the unit a safe operation over time.

Normally single zone outdoor unit is pre-charged with refrigerant for 25ft inter-connecting copper (liquid) line. Multiple zone outdoor unit is pre-charged for various length of copper (liquid) lines of allowed quantity of indoor units, following specs. or engineering submittal

For single zone unit or multiple zone multiple compressor unit, normally the outdoor unit is pre-charged for 25ft line sets. If the copper line is longer or shorter than 25ft, need to add or deduct refrigerant, following general rule of thumb for rough adjustment: 1/4" liquid line unit: 0.3 Oz/ft; 3/8" liquid line unit: 0.4 OZ/ft; 1/2" liquid line unit: 1.2 OZ/ft.

For multiple zone one compressor unit, if the copper line is longer or shorter than the length at which pre-charged refrigerant is good for, as listed in the engineering submittal or related labels or tables, need to add or deduct refrigerant, following 0.23 OZ/ft rule of thumb for rough

In all situations, the minimum copper line (liquid or gas) length for each indoor unit is 15ft.

For a better adjustment, may combine above guideline with the indoor or outdoor (ambient) temperature-refrigerant pressure chart, or generally 8-12F super-heat method.

		Model	WMMS-21CI WMMS-30CI	H-V2B(59)(2) H-V2B(59)(2)	WMMS- WMMS-	24CH-V2 36CH-V2	B(59)(2) B(59)(2)	WMMS	-42Cl	1-V2B((59)(2)	WMMS	S-48Cl	H-V2B((59)(2)	WI	MMS-6	OCH-V	2B(59)	(2)
Valve sizes at outdoor unit		ln.	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
valve sizes at outdoor unit Gas valve		ln.	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	1/2	1/2	5/8
Max. pipe length (add up length of all liquid lines only), if not upper sizing pipes		Ft.	120		200		230			260		300								
Max. installed indoor and	Max. installed indoor and Outdoor unit is installed below the indoor unit		15			25			3	0		30			30					
outdoor unit elevation difference	outdoor unit elevation difference Outdoor unit is installed above indoor unit		2	25 25 30 30			30													
Max. pipe length, if not adjusting factory pre-charged refrigerant		Ft.	60 (add up length o	60 (add up length of all liquid lines only) 100 (add up length of all liquid lines only) 100 (add up length of all liquid lines only) 130 (add up length of all liquid lines only) 130 (add up length of all liquid lines only)						quid lines	only)									
Minimum pipe length (for each ind	Minimum pipe length (for each indoor unit)									15ft										
Refrigerant charge adjustment, if actual length is different from the number in the line above		+- Oz/Ft								0.23										

- * Adjust refrigerant charge, following instructions, if the actual installation elevation difference is different from 7' and length is different from the listed numbers above.
- * Any indoor unit is 30' or more apart from the outdoor unit, better to adjust refrigerant. If it is 50' or more apart, better to upper size the copper lines and adjust refrigerant.
- * Any run can not be more than 100' apart from the outdoor unit; otherwise, that indoor unit 's capacity may be decreased too much.

SYSTEM INSPECTION AND TRIAL RUNNING

PRESSURE TABLES

System pressure checking should be a must-do job during trial running of initial installation, and compressor/refrigerant-related troubleshooting. It is a more accurate refrigerant adjusting method than rough refrigerant addition or deduction guideline shown above.

In some cases, if the service valve on unit is 5/16" and your service valve connection is 1/4", need to use a 5/16" -1/4" adaptor so that you can connect to your manifold. Need to pay attention to use the right manifold that is rated for the refrigerant in the unit, and pay attention to connect to the right hose (blue hose for low pressure, red hose for high pressure, yellow hose for vacuum or charging or deduction). Not recommended to put the hose onto service valve while compressor is running. Remove hose quickly and carefully to avoid air suck-in, refrigerant leakage, or any refrigerant-freezing burn.

The following curves are only reference for system pressure checking. Actual pressures may vary upon many factors such as inter-connecting pipe length, refrigerant charge / leakage level, elevation difference between indoor unit and outdoor unit, tool calibration, reading error, and so on

Reference Temperature-Pressure Table (Split Condensing Unit-R410A AC) Product Series: YMGI Group-Mini Split Version: 01/11/2010

Outdoor Dry-Bulb (F)	15	25	35	50	55	60	67	75	82	90	95	100	105	110	115
Outdoor Dry-Bulb (C)	-9.4	-3.9	1.7	10.0	12.8	15.6	19.4	23.9	27.8	32.2	35.0	37.8	40.6	43.3	46.1
Outdoor Wet-Bulb (F)	13.6	23.0	30.2	42.8	46.9	51.1	59.5	66.6	64.9	71.2	75.0	79.0	82.9	86.9	90.7
Outdoor Wet-Bulb (C)	-10.2	-5	-1.0	6.0	8.3	10.6	15.3	19.2	18.3	21.8	23.9	26.1	28.3	30.5	32.6
Indoor Dry-Bulb		80F (26.7C)													
Indoor Wet-Bulb		67F (19.4C)													
Discharge-PSI/F	74/21.2	84/27.1	105/35.1	115/38.5	125/42.8	130/45.5	140/48.2	146/51.2	156/54.3	166/57.5	175/61.2	180/62.5	186/63.7	189/64.5	191/64.9
Suction-PSI/F	60/46.2	70/53.5	85/55.2	92/55.7	98/56.1	103/56.7	110/56.9	115/57.1	120/57.5	128/57.8	135/57.9	136/58.6	137/59.1	139/59.3	140/59.5

Suggest to Add on Low Ambient Control, If Stil n Need of AC for Long Time In Cold Weather Closely Check/Watch Refrigerant Charge Level

Warning: R410A refrigerant bears higher pressures than R22. Only handled by Licensed HVAC technician.

INSTALLATION INSTUCTIONS

Reference Temperature-Pressure Table (Split Condensing Unit, R410A-Heat Pump) Product Series: YMGI Group-Mini Split System Version: 01/11/2010

104401 0011001 1		Toronom of the Cyclem Voronom on The Control of the										
Outdoor Dry-Bulb (F)	0	5	10	17	25	30	35	40	45	47	55	62
Outdoor Dry-Bulb (C)	-17.8	-15	-12.2	-8.3	-3.9	-1.1	1.7	4.4	7.2	8.3	12.8	16.7
Outdoor Wet-Bulb (F)	-0.8	4.1	8.8	15	22.8	27.5	28.9	36.3	41.0	43.0	50.4	56.5
Outdoor Wet-Bulb (C)	-18.2	-15.5	-12.9	-9.4	-5.1	-2.5	-1.7	2.4	5	6.1	10.2	13.6
Indoor Dry-Bulb		70F (21.1C)										
Indoor Wet-Bulb		60F (15.6C)										
Discharge-PSI/F	260/84	269/90	284.5/95	290/102	296/111	304/128	304/133	330/138	345/142	354/149	400/149	440/176
Suction-PSI/F	246/72	255/78	270/86	278/89	285/92	290/95	310/98	318/100	330/102	340/104	380/107	425/113





CHECK AFTER INSTALLATION AND TESOPERATIONT

CHECK AFTER INSTALLATION

Items to be checked	Possible Problems or Consequences
Has the been unit positioned firmly?	The unit may drop, shake or emit noise.
Have you done the refrigerant leakage test?	It may cause insufficient cooling(heating) capacity.
Is heat insulation sufficient?	It may cause unexpected condensate and dripping.
Is drainage pipe tested ?	It may cause leakage or unexpected dripping.
Is the voltage in accordance with the rated voltage marked on the nameplate?	It may cause electric malfunction or damage to the part/unit.
Is the electric wiring and piping connection installed correctly and securely?	It may cause electric malfunction or damage to the part/unit.
Has the unit been connected to a secure earth connection?	It may cause electrical leakage.
Is the power cord specified properly per NEC codes ?	It may cause electric malfunction or damage to the part/unit.
Is the air inlet and outlet been cleared?	It may cause insufficient cooling(heating) capacity, and unexpected noise.
Has the refrigerant pressure been checked or refrigerant been adjusted accordingly?	It may generate unexpected noise, freezing pipe, capacissues, compressor or system damage or even worse.
Has the installing technician filled all the fields in the checklist inside the warranty registration card?	If not filed or not filled completely or correctly, your factor warranty may not be qualified.

TEST OPERATION

1. Before test operation

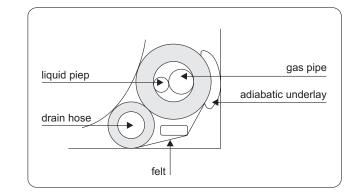
- (1) Do not turn on power before installation is finished completely.
- (2) Electric wires must be connected correctly and securely.
- (3) Cut-off valves of the connection pipes should be back seated/tunned on.
- (4) All the left over installation material scraps must be cleared away from the unit before initial start up.

2. Test operation method

- (1) Switch on power, press "ON/OFF" button on the wireless remote control to start the operation
- (2) Press MODE button, to select the COOL, HEAT (not available for cooling only unit is), FAN and so on to check :
- * All the functions (to make sure the unit functions correctly and poroenty).
- * Refrigerant (pressures/temperatures at sericea values/pipes should be good).
- * Drainage (condensate/water flow should be dripping out of drainage pipe ONLY).
- * Noise (there should be no abnormal symbol)

FINISH INSTALLATION

- 1) Put back all covers, screws removed during installation and start-up.
- 2) Properly note, mark, organize and secure wires.
- 3) Caulk the opening to weatherproof level at opening frame both inside and outside.
- 4) Do a final visual inspection.
- 5) Teach or instruct owner or users how to correctly operate the system and answer their questions.
- 6) Check against all items in Product/Warranty Registration Card and sign it for the owner.



FAULT INDICATION

D101	Meaning	D102	Meaning	D103	Meaning
Blink once	Compressor operates	Blink once	Air exhaust protection frequncy limit	Blink once	Air exhaust protection frequency limit
Twice	Compressor high pressure protection unit stop	Twice	Cooling overload frequncy reducing	Twice	Cooling overload frequncy limit
Three times	Air exhaust protection unit stop	Three times	Over current protection frequency reducing	Three times	Over current protection frequency limit
Four times	Communication malfunction unit stop (Include indoor unit and driver)	Four times	Phase current protection frequncy reducing	Four times	Phase current protection frequncy limit
Five times	IPM modular protection unit stop	Five times	Heating A unit anti-high temperature frequncy reducing	Five times	Heating A unit anti-high temperature frequncy limit
Six times	Over current protection unit stop	Six times	Heating B unit anti-high temperature frequncy reducing	Six times	Heating B unit anti-high temperature frequncy limit
Seven times	Cooling overload unit stop	Seven times	Heating C unit anti-high temperature frequncy reducing	Seven times	Heating C unit anti-high temperature frequncy limit
Eight times	Each indoor unit starts heating at same time anti-high temperature protection unit stop	Eight times	Heating D unit anti-high temperature frequncy reducing	Eight times	Heating D unit anti-high temperature frequncy limit
Nine times	Each indoor unit anti-freezing protection at same time unit stop	Nine times	Defrosting	Nine times	Oil return
Ten times	Outdoor unit temp. sensor malfunction or each indoor unit temp. sensor malfunction unit stop				
Eleven times	Compressor overload protection unit stop				
Twelve times	Compressor low-pressure protection unit stop (preserved)				
Thirteen times	Phase current protection unit stop				
Fourteen times	E2 PROM Error unit stop				
Fifteen times	DC power supply short circuit				
D104	Meaning	D105	Meaning	D106	Meaning
Blink	Outdoor ambient temp. sensor malfunction	Blink once	A unit communication malfunction (cannot receive correct data within 3mins.)	Blink once	B unit communication malfunction (cannot receive correct data within 3mins.)
Twice	Outdoor tube temp. sensor malfunction	Twice	A unit indoor middle temp. sensor malfunction	Twice	B unit indoor middle temp. sensor malfunction
Three times	Outdoor air exhaust temp. sensor malfunction	Three times	A unit indoor outlet pipe temp. sensor malfunction	Three times	B unit indoor outlet pipe temp. sensor malfunction
Four times	Communication malfunction with driver (cannot receive correct data from driver within 10s)	Four times	A unit indoor inlet pipe temp. sensor malfunction	Four times	B unit indoor inlet pipe temp. sensor malfunction
		Five times	A unit indoor ambient temp. sensor malfunction	Five times	B unit indoor ambient temp. sensor malfunction
		Six times	A unit modes conflict	Six times	B unit modes conflict
		Seven times	A unit anti-freezing protection	Seven times	B unit anti-freezing protection
		Eight times	A unit anti-high temp. protection	Eight times	B unit anti-high temp. protection
D107	Meaning	D108	Meaning	D109	Meaning
Blink	C unit communication malfunction (cannot receive correct data within 3mins.)	Blink once	D unit communication malfunction (cannot receive correct data within 3mins.)	Blink	Received communication data proof test correct will flash once
Twice	C unit indoor middle temp. sensor malfunction	Twice	D unit indoor middle temp. sensor malfunction		
Three times	C unit indoor outlet pipe temp. sensor malfunction	Three times	D unit indoor outlet pipe temp. sensor malfunction		
Four times	C unit indoor inlet pipe temp. sensor malfunction	Four times	D unit indoor inlet pipe temp. sensor malfunction		
Five times	C unit indoor ambient temp. sensor malfunction	Five times	D unit indoor ambient temp. sensor malfunction		
	C unit modes conflict	Six times	D unit modes conflict		
	O drift modes commet			1	
Six times Seven times	C unit anti-freezing protection	Seven times	D unit anti-freezing protection		

MAINTENANCE GUIDE



Use proper instruments for the refrigerant R410A.



Do not use any refrigerant other than R410A.



Do not clean the unit using mineral oil.







CUSTOMER AND TECHNICIAN MUST READ

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

- 1) They have the training and experience to accurately and safely install and service your equipment.

 The equipment runs with high-pressure refrigerant and oil and line-voltage. 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 problems occur on the unit that is fully installed by the licensed or certified contractor, they have the training and experience to correct the problem more efficiently. A technician(s) may be unwilling to repair an issue on a unit that they did not install. If you do find a technician willing to perform the service, there is an increased possibility of higher service fees than normal, 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., requiring only licensed or certified professionals can install and service high pressure HVAC equipment.

SUGGESTIONS, TO AID YOU IN HIRING AN HVAC CONTRACTOR:

- 1) Hire a currently, practicing, licensed/ certified HVAC technician/ contractor. Technicians, who are no longer practicing (retired, etc.) in this field, may not have the updated knowledge or may lack experience on the equipment you have purchased.
- 2) Hire a technician/ contractor who services customers in your local area and you are familiar with. Local contractors have a faster response time and will be easier for you to determine if they are reputable.
- 3) Use only reputable licensed/ certified HVAC installation contractors/ technicians to prevent any unexpected charges as a result from unethical business practices.
- 4) Check their references, to verify they are a good service provider to the general customers. N.A.T.E or A.C.C.A certified technicians are strongly recommended.
- 5) Some contractors/ technicians may not feel comfortable about installing the equipment that you purchased for them to install, and they prefer to purchase and install the equipment. You can contact YMGI directly to check and see if there have been any contractors in your area who have installed our products or similar.
- 6) Ask for a detailed quote for the whole installation project. A flat rate quote is the safest contract for both you and the contractor
- 7) Your local HVAC technicians may charge you on a project basis or on an hourly basis. To our general knowledge and experience, <u>a full single head installation may normally cost anywhere from \$800 to</u> \$1500. These costs are estimates and your actual costs may differ due to job nature and location.
- 8) Number of hours can vary depending upon each individual situation, some factors are, but not limited to:
- 9) How difficult or complex the indoor unit is to be securely installed.
- 10) How difficult or how long the inter-connecting pipes and wires are to be installed.

CUSTOMER AND TECHNICIAN MUST READ

- 11) If all the suggestions have been taken and all the necessary steps are followed.
- 12) If the contractor(s)/technician(s) are experienced with the systems/brands you purchase. You might spend less. But remember, many times you get what you pay for.
- 13) Sign a contract with them. The contract should list all the detailed work they will conduct and the standards they will follow. Some contractors are willing to include a 1-year installation/service warranty at no extra charge. Check with them to see if that is available. If available, include that in the contract.
- 14) Verify and confirm the installation is done completely and all the unit functions have been checked and are working properly, all the items in the checklist have been checked and marked well in the warranty registration card/form, prior to paying the contractor in full.

The cost of not having your unit installed properly can be more expensive than spending a little extra money that hiring the right contractor will cost. Protect your investment and warranty eligibility by doing it right first time.

UPON PURCHASING, OPENING PACKING BOXES AND INSTALLATION OF YMGI UNITS/ACCESSORIES, YOU AND TECHNICIANS YOU HIRE TO INSTALL THEM ARE ASSUMED TO HAVE READ ALL MATERIALS AND AGREE TO FOLLOW AND BE BONDED BY ALL WE SAY IN YMGI MANUALS.

- 1) You understand all that is written hereafter in this and other documents that we publish.
- 2) You will follow what is written hereafter in this and other documents that we publish.
- 3) You will be bound by and completely follow all policies, guidelines, instructions, warnings, attentions and other materials, as published by YMGI Group, its subsidiaries or sister companies, in writing.
- 4) Only a successful installation, fully (100%) conducted by a qualified HVAC technician(s), as detailed in the checklist of the **Limited Product Warranty Policy** and **Limited Product Warranty Registration Card/Form**, along with a properly detailed installation invoice, is eligible for the **Limited Product Warranty**.
- 5) Failure to follow what is written hereafter may cause various equipment issues that you will take full responsibility and liability for, including, but not limited to, losing manufacturer's warranty, unit not working properly, unit malfunctions, under-performance, decreased safety, increased potential of various damages to your property, body, home and/or business, etc.
- 6) YMGI documents and policies supersede those made or provided by the sales distributors or installing contractors. YMGI Group maintains the final authority in explaining and resolving any and all discrepancies that might exist between distributors/contractors' documents and ours.

YMGI STRONGLY RECOMMENDS:

- * Customer hires a currently licensed/ certified HVAC technician(s) (N.A.T.E. or A.C.C.A certification is strongly recommended) to conduct 100% of the installation, inspection of all unit functions and repair service.
- * Customer signs an installation/service contract with the installation/service technician's company who has good service references and you trust. Installation and service is very important to the life of your investment and provide you a lifetime of comfort and peace of mind.
- * Customer requests the installer to put down a1-year labor warranty coverage in the installation contract.
- * Have the technician check against all the items in the checklist of the **Limited Product Warranty Registration Card/Form**, sign and date it, to help ensure a proper and professional installation.
- * Customer pays in full, only after all the unit functions are inspected, the unit works properly, warranty checklist is fully filled out and signed and you are fully satisfied.
- * If any unit abnormality is found, have your technician check the unit first. Have them call for manufacturer technical assistance, if necessary, from your job site, not his office, so that we can more accurately assist him in diagnosing the cause of the malfunction.

QUESTIONS ABOUT SELF-INSTALLATION VS HIRING LICENSED HVAC TECHNICIANS

Does YMGI allow to do-it-yourself installations (DIY) partially or fully? NO.

Unfortunately no brand or manufacturer can take the responsibility of the equipment if it is not professionally installed by a currently licensed HVAC technician/ contractor.

If unit is installed by non-licensed people, in part or fully, will the factory warranty be void? YES.





MUST READ-2

CUSTOMER AND TECHNICIAN MUST READ

Some DIY installations have been successful, but these are exceptions. Most have resulted in equipment failure, due to lack of knowledge and experience. A few of the problems result from DIY's lack of knowledge in the following areas:

- * Sizing and selecting correct type, size and model of cooling and/or heating equipment.
- * Sizing and installing correct electric circuit breakers and wires.
- * Wiring the units correctly and properly.
- * Taping the ends, connecting to indoor and outdoor units correctly and properly.
- * Vacuuming the inter-connecting refrigerant lines.
- * Checking and/or fixing the refrigerant leaks.
- * Checking and/or fixing the condensate drain leaks.
- * Releasing the refrigerant from outdoor unit to indoor unit.
- * Running the unit to check all the unit functions.
- * Conducting the installation or trouble-shooting with correct tools, experience or professional knowledge to correct the problem.

RECEIVING AND FREIGHT DAMAGE

- * Freight (package/unit) shall be checked thoroughly for damage at receiving before accepting by signing on the carrier's delivery paperwork.
- * Upon shipment being signed for acceptance, it becomes a binding document as to the condition of the products on delivery. We cannot process any shipping damage claim, if you accept the delivery.
- * If damage is found at delivery, both you and the delivery driver must make notes on the delivery receipt or other freight paperwork detailing the damage found by marking position/parts on unit, description of damage, time/ date, your name, contact phone, etc. on the delivery documents. Make a copy of the marked delivery receipt.
- * If the damage is minor or partial, that you choose to accept, you can contact the distributor or YMGI to discuss the possible replacement of the damaged part.
- * If refusal of the shipment is needed due to severe freight damage, DO NOT sign the carrier's delivery receipt document indicating that you accept the products. Mark receipt "REFUSED DUE TO FREIGHT DAMAGE." Sign and date along with the delivery driver's signature and date.
- * Take pictures showing the damage, before the delivery driver leaves.
- * If you accept the delivery or fail to note damage on the driver's delivery receipt, the ability to claim freight damage is lost and YMGI will not replace the unit on this basis.
- * Contact the distributor or YMGI, report the damage by forwarding the marked delivery receipt copy and pictures.
- * Only after YMGI verifies with the carrier the necessary detailed notes of received freight damage, will the damaged products be eligible for replacement.
- * If the returned products are found not damaged, YMGI will treat it as a return and will charge you 25% of product value plus added shipping cost.

RETURN-YMGI GROUP POLICIES & RETURN GOODS AUTHORIZATION (RGA)

All sales are final. If the customer wishes to return a product, the following **Return Policies** apply.

- A. Only those products (units, parts or accessories) under the following conditions, are eligible for return:
- 1) Products are returned within 30 days of their original shipment date from YMGI
- 2) Products have not been installed.
- 3) No damage exists on the products being returned.
- 4) No missing products.
- 5) Products and packages are clean.
- 6) No duct tape or marking on the product or box.
- 7) Products are still their original package, in good shape and in re-sellable condition, as YMGI determines.

B. Preapproval steps for your return request:

- 1) Contact your distributor or YMGI to request a return.
- 2) Photograph your product and box to show details
- 3) YMGI will review your request, along with the pictures and any other details pertaining to your request.
- 4) If YMGI agrees to process your return request, a form called Return Goods Authorization (RGA), along with an assigned RGA # will be forwarded to your distributor or you.
- 5) Any return without YMGI Group approved RGA#, will not be accepted.

CUSTOMER AND TECHNICIAN MUST READ

C. YMGI must verify the following before you can pack your products:

- 1) No products (units, parts, accessories) are missing.
- 2) No damage is found.
- 3) The products are in the original packaging.
- 4) No duct tape on any product or box.
- 5) Pictures have been taken and sent to YMGI to verify the product and boxes are not damaged.
- 6) The RGA has been completed and a copy has been returned to YMGI, via email or fax.
- 7) YMGI has approved the request in writing.

D. Shipping Preparation:

- 1) Package all products in a manner in which no damage can occur to the product and secure to a pallet.
- 2) Take and forward pictures of packed pallets for YMGI to verify proper packaging and no existing damage.
- 3) Include the YMGI approved RGA# in the shipping documents.
- 4) YMGI reserves the right to approve or deny any shipments.
- 5) YMGI can arrange shipping for you, but not at YMGI's cost. If this option is chosen, a packing list and BOL will be issued to you through YMGI.
- 6) If the above option is not chosen, you will be responsible for all freight charges. YMGI will not accept any returned items COD.
- 7) Place the package in an area which is accessible to the shipping company for pickup and limits the possibility of damage to the product. Customer must be present at the time of freight pick up.

After shipping, fax the BOL to YMGI Group at 1-866-377-3355 or email to customerservice@ymgigroup.com, detailing the information of the freight company and their tracking number.

E.Freight Damage:

- 1) YMGI Group will inspect returned items
- 2) Claiming of freight damage from a customer hired carrier will be the customer's responsibility.
- 3) Claiming of freight damage from a YMGI hired carrier will be YMGI's responsibility.

F. Charges for your return:

- 1)A restocking charge of 25% creditable invoice value.
- 2)All return shipping fees.
- 3)Additional fees will be charged, if products are found to be damaged, missing or used.
- 4)YMGI will notify the distributor of the charges only after the inspection and assessment of the returned products has been completed.

Attention:

- 1) Returned products must be shipped within 7 days of YMGI's releasing of RGA #.
- 2) All RGA shipping shall be prepaid by the customer. YMGI will not accept any COD freight.

YMGI GROUP DISCLAIMING-1:

YMGI Group will NOT accept any return, or may not honor 100% credit for any return of Product(s)/Part(s)/ Accessories, in any of the following cases:

- * Return requests made 30 or more days after the date of original sales shipping from YMGI Group warehouse.
- * Return shipment is initiated 8 days or more after the RGA is approved.
- * Returned products received not displaying an YMGI-approved valid RGA #.
- * Returned products received C.O.D.
- * Returned products not received in the original packaging.
- * Returned products received with non-repairable packaging, including duct tape or marks on units or carton boxes.
- * Returned products received with missing units/parts/accessories.
- * Returned products received, are found to be non-functional or damaged.

YMGI GROUP DISCLAIMING-2:

- * YMGI Group will not be responsible for any losses of returned unit(s)/part(s)/accessories in transition to YMGI
- * YMGI Group RGA is valid for seven (7) days from the original issuing date. Returns will not be accepted, if shipping is made 8 or more days after the YMGI Group RGA is issued.

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



MUST READ-2

CUSTOMER AND TECHNICIAN MUST READ

DEFECTIVE UNITS / PARTS / ACCESSORIES-REPAIR OR REPLACEMENT

Out of thousands of units sold every year, there may be an occasional instance your product does not operate properly. Reasons of but are not limited to: manufacturing, installation, operation, maintenance and knowledge of operator.

Equipment failure does not automatically denote a product defect from the factory assembly line. The defects can be caused, during production, transportation, installation, operation, maintenance, or service. Defects may NOT be the responsibility of the manufacturer. Nobody willfully or intentionally produces a defective product. No determination shall be made until the technical issue(s) or the causes of the defect(s) are identified.

The defects might be found before/ during installation or in the operation of the unit. Defects can be in the form of blown fuse(s), defective control board(s), damaged remote control, loose or missing screws, etc. These defective parts can be replaced easily.

Some functions of our units are different from what are typical in traditional split type air conditioning and heat pump systems and similar systems made by other manufacturers. These are not defects. Take some time to learn the functions of your unit. We will be happy to assist you with any questions you may have concerning the functions of your new unit.

If a defect is found, whether at the original installation, or during normal operation, we will gladly help you in the following steps in sequence from 1 to 3:

- 1. Part repair or replacement after trouble-shooting: This is the most common and generally the easiest and most economical way for all the needed parts since the problem and all part needs can be accurately and completely identified.
- * Your technician calls our technical support line, from your job site, after checking your units and getting all the information
- * Our technical support will go through several steps, over the phone or through email, with your technician, in order to help identify and resolve the problems. Normally wiring correction, piping correction, part repair/ replacement will resolve the problems.
- * Your technician will then need to verify and confirm the problem(s) before YMGI can ship out the replacement part(s). Inaccurate or incomplete troubleshooting or part replacement will delay the repair. YMGI technical support will only speak with a licensed/certified technician in regards to the repair of your unit. In our experience this saves time and money for all parties involved.

Your technician is the only person to perform any physical checking, trouble-shooting and replacing of any defective part(s) for your units. Our factory technical support is just a help. YMGI provides no labor warranty on the products.

- 2. Unit/part repair at our workshop(s): Due to the limitations of our technical support not being at your job site, or your technician's limited experience with our product, the problem may not be resolved as quickly as would be desired. If the problem is still not resolved after attempts between your technician and our technical support. you can elect to have the unit repaired at our facility. If this step is chosen:
- 1) YMGI will send to you the Customer Request to Ship Products to YMGI Service Center for Inspection and Repair, and Authorization to Charge form.
- 2) You will review the form and fill all fields appropriately, sign and send back to the YMGI Group.
- 3) Once the form has been completed and sent back to YMGI, remove the units and ship back to YMGI.

Please make a note describing the problem and communication history, if possible. Our technicians will check the units and find the problem(s), repair the issue(s), and ship the unit back to you following the conditions set forth in the signed repair agreement. All unit removal and re-installation is done at your cost and must be done by a currently valid licensed HVAC technician.

3. Unit replacement: Only applies to those defects reported within 30 days of original purchase date and if all necessary warranty paperwork had been received and approved. This option applies only if the above steps cannot resolve the problem(s). Either indoor or outdoor unit replacement is available, based on the actual need, at YMGI's determination. This option shall be the last resort, due to refrigerant and wiring considerations. All unit removal, re-installation and shipping cost are the responsibility of the customer. YMGI maintains the final authority as to unit replacement. Replacement will be made with the same model only. Alternate units will be treated as a new order.

Returning Replaced Defective Units/Parts/Accessories After Unit Repair: (Only applies to steps 1&3 above)

- 1) Repack the replaced unit/ part /accessory in the box which contained the replacement part.
- 2) Parts can be boxed for UPS, FedEx or equivalent ground service. Units shall be secured onto the skid on which the replacement was shipped after placing into the package from the replacement product.
- 3) Ship all replaced products, to YMGI-designated location. You will be charged if YMGI does not receive the replaced parts.

CUSTOMER AND TECHNICIAN MUST READ

Standard factory warranty does not cover the cost of materials and labor that are incurred at your site. There will be no cost for the replacement unit, if YMGI determines the defect is manufacturer related. Replacement will be made with the same model, only. Alternate units will be treated as a new order.

CUSTOMER SERVICE / TECHNICAL SUPPORT FROM YMGI GROUP

For questions or help with your unit, contact the original installer or service provider.

YMGI Group does not install nor physically service your unit. Your installer or service provider must check the unit prior to contacting YMGI Group from your jobsite, in order to be helped in an efficient and timely manner.

- * Factory customer service at customerservice@ymgigroup.com Tel: 1-866-833-3138x704
- * Factory technical support at techsp@ymgigroup.com Tel: 866-833-3138x703
- * Fax: 1-866-377-3355

An "YMGI Group Customer Service/Technical Support Daily Log Sheet" will be filed in writing at our office, for effective communication between you and YMGI Group customer service, your technician and YMGI Group technical support. Before contacting the YMGI Group locate the IP# written at the top of your warranty registration form. Use this IP# whenever you contact the YMGI Group.

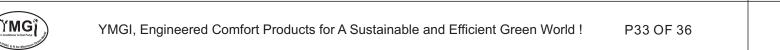
DISTRIBUTOR AND MANUFACTURER POLICIES

- * All questions concerning sales or money will be directed to the sales distributor from which you purchased the
- * Read and follow all policies set forth from the distributor from which you purchased your unit.
- * Upon purchase and installation of the unit(s), you agree to be bounded by all policies published by both distributors and YMGI.
- * YMGI Group has the final authority and supersedes other related parties (distributors, etc.) concerning all policies regarding YMGI products.

YMGI DISCLAIMING-3 (RE: LIMITED PRODUCT WARRANTY)

- 1) The YMGI Limited Product Warranty Policy, details the eligibilities, coverage's and other explanations of the warranty terms between YMGI group and the unit owner.
- 2) The YMGI Limited Product Warranty Policy and the Warranty Registration Card/Form are either included inside the user's manual and/or installation instruction manual, or come separately in the unit packaging box/ envelope. If for any reason they are not included with your shipment, contact our sales or customer service to request a copy (electronic or printed), prior to installation.
- 3) The checklist, in the Warranty Registration Card/Form, is for the currently licensed/certified HVAC technician to fill out completely, while verifying all unit functions are operating correctly. This checklist is for the technician to test and check all details of your unit, to verify and ensure its proper operation.
- 4) The technician must complete all fields in the Warranty Registration Card/Form, especially the unit model and serial numbers and distributor information, and most importantly, the technician checklist.
- 5) Warranty Registration Card/Form shall be mailed, along with the original copy of the currently licensed HVAC contractor's full installation invoice, to YMGI Group, within 7-days after original installation, in order for YMGI to review and process your warranty registration.
- 6) Keep a copy of Warranty Registration Card/Form for your own use in the future, to aid in any possible future warranty claiming, any request of parts, customer service, and/or technical support.
- 7) YMGI reserves the right to approve or deny the warranty status based on the information reviewed.

Mailing address of the Warranty Registration Card/Form: Warranty Department, YMGI Group, POB 1559, O'Fallon, MO 63366, USA.





MUST READ-2

USER NOTES AND INSTALLATION/SERVICE/MAINTENANCE NOTES

USER NOTES

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

No.	Date	Notes	Asked for Your Technician for Help?	Did You Ask YMGI Tech. for Help?

INSTALLATION NOTES

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

No.	Date	Original Installation Company Name, Technician Name, Phone & HVAC License #	Job Not Performed by Technician	Technician Checklist Completed Fully?

SERVICE / MAINTENANCE NOTES

No.	Date	Contents of Service / Maintenance	Technician's Company Name, Technician Name, Phone & HVAC License #		







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