# **Indoor Unit Operation & Installation Manual**

MVAL009MV2AA MVAL012MV2AA MVAL018MV2AA MVAL024MV2AA MVAL030MV2AA MVAL036MV2AA MVAL042MV2AA MVAL048MV2AA

No. 0150524546

- Please read this manual carefully before using.
- Keep this operation manual for future reference.

**Original instructions** 

# User Manual

# Contents

Parts and Functions	1
Safety	2
/aintenance	4
ault Checkup	6
nstallation Procedures	7
Electrical Wiring	12
est Run & Fault Code	17

Your air conditioner may be subject to any change owing to the improvement of Haier products.

MRV series multiple air conditioning systems adopt the consistent running mode, by which, all indoor units can only be heating or refrigerating operation at the same time.

To protect the compressor, the air conditioning unit should be powered on for over 12 hours before using it.

All indoor units of the same refrigerating system should use the unified power switch to ensure that all indoor units are in the state of being powered on at the same time during the operation of air conditioner.

#### Product Features:

1.Hanging-style installation to save space;

2. Automatic display of faults;

3. Central control function; (optional from our company).

4.If there is a power outage while the system is operating, the system will resume the last mode and settings it was set to run in.

5. This indoor unit ships with wireless controller. It is compatible with both YR-E17 and YR-E16 wired controllers.

# Warning

- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- This equipment should not be used or serviced by personnel who have not been properly trained in its operation and maintenance.
- Children should be supervised to ensure that they do not play with the appliance.
- The appliances are not intended to be operated by means of an external timer or separate remote-control system.
- Keep the appliance and its cord out of reach of children.

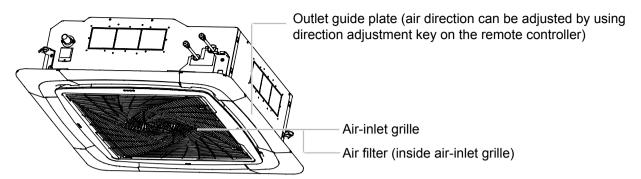
# **Operation condition:**

To use the air conditioner normally, please perform as to the below conditions.

	Operating Range of Air Conditioner									
	Indoor	Max.	DB: 90°F(32°C)	WB: 74°F(23°C)						
Cooling		Min.	DB: 64°F(18°C)	WB: 57°F(14°C)						
dry		Max.	DB: 115°F(46°C)	WB: 79°F(26°C)						
	Outdoor	Min.	DB: 23°F(-5°C)							
	Indoor	Max.	DB: 80°F(27°C)							
Hoating		Min.	DB: 59°F(15°C)							
Heating	Outdoor	Max.	DB: 75°F(24°C)	WB: 59°F(15°C)						
	Outdoor	Min.	DB: -4°F(-20°C)							

# Parts and Functions

# Indoor unit



# Safety

- This manual should be saved and stored close to this air conditioning equipment.
- There are two types if indications. Both are related to safety and should be strictly followed. "A Warning" highlights issues that pose a risk of major injury or death. "A Caution" highlights issues that pose a risk of equipment or bodily injury.
- After installation and start-up commissioning, please give the manual to the user. The manual should be kept in safe place and close to the unit.

#### **AWARNING**

- Installation and maintenance should be performed by an authorized agency. The wrong operation of this air condition equipment may cause water damage, electric shock or fire.
- Please install the unit on the top of a solid foundation or structure which is strong enough to support the unit.
- The installation of this condition equipment should follow local building codes.
- Use the right cable size, secure the terminal firmly, organize the cables well and make sure no tension is added on cables. Cable insulation should not be damaged. Improper wire installation may lead to fire.
- This unit is only compatible with R-410A refrigerant. If any other gas enters the system, it may lead to abnormal high pressure which may cause damage or injury.
- · Only use branches supplied by Haier. Use of any other branches will void warranty.
- Keep the condensate drain pipe away from toxic gas vents to prevent possible pollution of indoor environment.
- Care should be taken to ensure that there are no refrigerant leaks. R-410A is a heavy gas and will displace oxygen. Ventilate the area if a leak if found.
- · The unit is not explosion-proof. Please keep it away from flammable gases.
- The drain pipe should be installed per this manual to ensure proper drainage. The pipe should be well insulated to avoid condensation. Wrong installation may lead to water damage.
- Both liquid pipe and the vapor pipe should be also well insulated. Not enough insulation may lead to system performance deterioration or condensate formation.
- This equipment should not be used or serviced by personnel who have not been properly trained in its operation and maintenance.
- · Children should be supervised to ensure that they do not play on or near the equipment.
- Keep the appliance and its cord out of reach of children.
- The appliances are not intended to be operated by means of an external timer or separate remote-control system.

#### **∆**CAUTION

- Grounding wire should be connected to the grounding bar. The grounding wire cannot be connected to the gas pipe, water pipe, lightening rod or the telephone grounding wire. Improper grounding may cause electric shock.
- A circuit breaker should be installed. If not, it may cause electric shocks or accidents.
- After installation, the air condition equipment should be powered on and passed the electric leakage current lest.
- If the ambient humidity is more than 80%, if the water discharge hole is blocked or the filter becomes dirty or the airflow speed changes, this may lead to condensate water leaks. There may also be some drops of water spraying out.

# Safety

	∆ Atter	ition
	<ul> <li>Do not put any heating apparatus under the indoor units. The heat may cause distortion of the units.</li> </ul>	<ul> <li>3-minutes protection To protect the unit, there is a 3-minute time-out after the unit stops or after power is applied.</li> </ul>
	Pay attention to the ventilation to avoid anoxic injury.	Close the window to avoid outdoor air getting in. Curtains or window shutters can be put down to avoid the sunshine.
	• Do not place an open flame in the path of blowing air.	<ul> <li>Do not touch the power switch with the wet hand to avoid power shock.</li> </ul>
eration	<ul> <li>Do not install in a corrosive environment. If the base collapses, the unit may fall and cause damage, product failure, personal injury or death.</li> </ul>	Turn off the system and remove power when servicing the unit.
Notices during Operation	• Do not use the unit for special purposes such as preserving foods, works of art etc. It is an air conditioner for comfort cooling / heating, not a precision refrigeration system.	Don't remove power while system is running.
No	Use the correctly rated breaker or fuse. Improper breaker or fuse may lead to fire, electric shock, explosion, personal injury or death.	Do not clean the unit with water spray. There is risk of unit failure, fire, electric shock, personal injury or death.
	Do not permit water or steam to enter the unit and the wired controller. There is risk of unit failure, fire, electric shock, personal injury or death.	Keep flammable gas or combustibles away from the unit. There is risk of product failure, fire, personal injury or death.
	<ul> <li>Turn off the power to save energy if the unit will be not used for a long period. If the unit is not powered off, it will consume power.</li> </ul>	<ul> <li>Please keep children away from this air condition equipment.</li> </ul>

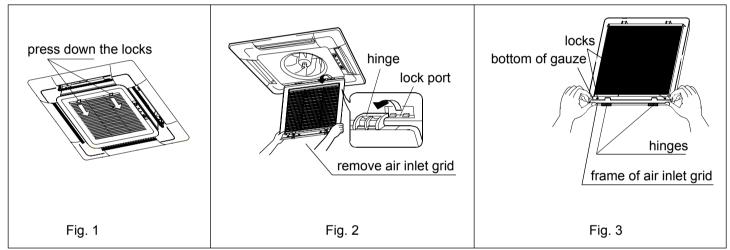
### ▲ Attention

- Repair can only be performed by licensed service technicians.
- Before touching the electrical connections, all power supplies should be turned off. Only after switching off the power supply can the operator clean the air conditioner otherwise there is a risk of electric shock or injury.
- When cleaning the air cleaner, make sure to use a stable platform; don't flush the air conditioner with water, or electric shock might occur.

### Filter Maintenance:

Clean the air filter & air inlet grid.

- Don't remove the air filter except for cleaning, or faults may occur.
- When the air conditioner operates in the environment with too much dust, clean the air conditioner more times (generally once every two weeks).
- 1. Remove the air inlet grid as shown below: press on the two locks on the grid (as shown in Fig. 1), gently lift it at a 45 degree angle (as shown in Fig. 2), and then remove the air inlet grid.
- 2. Dismantle the filter: press the outer frame of the air inlet grid, and draw the base angle of the filter pull it out as to disengage the locks, and remove the filter (as shown in Fig. 3).



# **Cleaning Air Cleaner**

Clean the air filter with a vacuum or water to remove dust.

For heavy dust, use the vacuum or directly spray mild soap on the air inlet grid, and then clean it with water after soaking for ~10 minutes.

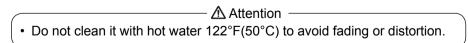
(A) remove dust with dust collector.





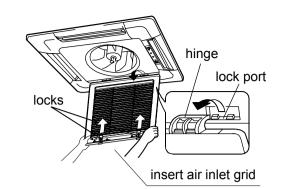
(B) for heavy dust, use a soft brush and mild detergent to clean.

(C) rinse off water/soap and dry in a cool place.



# Installing air cleaner and air inlet grid:

- 1. Mounting the filter: opposite of dismantling the filter (as shown in Fig. 3 above).
- 2.Mounting the air inlet grid: as shown in the right figure, clip the locks on the grid as directed by the arrows, put the side with the hinges into the lock port, and then put the side with locks into the panel frame. Release the locks to position the grid after determining that the grid is flush with the bottom of the panel frame.



Cleaning the air outlet port and the shell:

▲ Attention

• Do not use gasoline, benzene, diluents, polishing powder or liquid insecticide to clean them.

- Do not clean them with hot water of over 122°F(50°C) to avoid fading or distorting.
- Wipe them with a soft dry cloth.
- Water or neutral dry cleaner is recommended if the dust cannot be removed.

# Cleaning Louvers:

• To avoid damage to the louvers care should be taken when cleaning. Use damp cloth and mild detergent.

# Fault Checkup

Please check the following when consigning repair service:

	Symptoms	Reasons			
	Water flow sound	Water flow sound can be heard during starting operation, during operation or immediately after stopping operation. When it starts for 2-3 minutes, the sound may become louder, which is the flowing sound of refrigerant or the draining sound of condensate water.			
ms	Cracking sound	During operation, the air conditioner may make a crackling sound, which is caused from the temperature changes of the heat exchanger.			
proble	Terrible smell in outlet air	The terrible smell may be caused from walls, carpet, furniture, clothing, cigarette and cosmetics, that attach to the air conditioner.			
are not problems	Flashing operating indicator	When switching it on again after power failure, turning on the manual power switch will show the operating indicator flashes.			
All these a	Awaiting indication	It displays the waiting indication as it fails to perform refrigerating operation while other indoor units are in heating operation. When the operator set it to the cooing or heating mode and the operation is opposite to the setting, it displays the waiting indication.			
	Idle indoor unit still has sound of refrigerant flowing and radiating temperatures.	To prevent oil and refrigerant from blocking the valve of idle units (off or satisfied) while other indoor units are operating, some refrigerant flow is allowed to pass through. This may result in some radiating temperature and flow noise.			
	Clicking sound when unit comes on.	When the conditioner is powered on, the sound is made due to the expansion valve resetting.			
	Start or stop working automatically	Check if it is set to Timer-ON and Timer-OFF.			
Please make another check.	Failure to work	Check if there is a power failure. Check if the supply fuse and breaker are disconnected. Check if the unit is displaying any faults. Check if wait symbol is displayed. This is due to other indoor units connected to the same outdoor unit are running in the opposite mode. System cannot heat and cool simultaneously.			
	Bad cooling & heating effects	Check if air intake port and air outlet port of outdoor units are blocked. Check if the door and windows are open. Check if the air filter is blocked with sludge or dust. Check if the setting of fan speed is set to low speed. Check if the setting in in Fan Operation state. Check if the temperature setting is correct.			

Under the following circumstances, immediately stop the operation, disconnect the manual supply switch and contact the after-service personnel.

- When buttons are inflexible actuated;
- · When fuse and breaker have been burnt over and over;
- When there are foreign objects or ice in the unit.;
- When system won't run after resetting power and waiting for 3-minute time out;
- When other abnormal conditions occur.

### Caution:

Choose a suitable installation location.

Avoid places with high salinity (salt water) and high sulfur gas. Unit will corrode and damage will not be covered by warranty.

Avoid excess oil (including mechanical oil) and steam. This can reduce efficiencies and product performance. Avoid areas where machines generate high frequency electromagnetic waves. They can cause control issues.

#### Warning:

protect the machine from winds or earthquake, install according to regulations. Improper installation will cause accidents due to unit coming loose and falling.

# Select the following places to install indoor units.

- (1) where there is enough room for the machine above the ceiling;
- (2) where the drainpipes can be well positioned;
- (3) where the distance between the air outlet port of the machine and the floor is not more than 8.86ft(2.7m);
- (4) where air inlet & outlet of the indoor units are not blocked;
- (5) where it is sturdy enough to bear the weight of the unit;
- (6) where there are no televisions, pianos or other valuables under the indoor units as to avoid condensate dropping down, causing damage.
- (7) Where it is over 3.28ft(1m) away from the television and radio as to avoid the interference from television and radio.

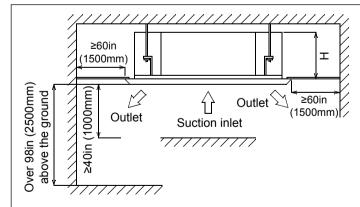
#### **Required Tools for Installation**

- Brazing torch
- 15% silver phosphorous copper brazing alloy
- Wire stripper
- · Soap-and-water solution or gas leakage detector
- Torque wrench
- 17mm, 22mm, 26mm
- Tubing cutter
- Reaming tool
- Flaring tool
- Razor knife
- Measuring tape
- Level
- Vacuum pump
- Micron gauge
- Nitrogen
- Mini-Split AD-87 Adapter (1/4" to 5/16")
- Non-adhesive Tape
- Adhesive Tape
- Electrical wiring

### Installation Space

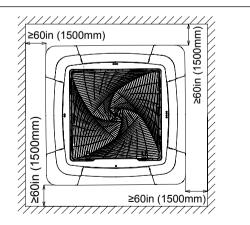
Ensure the required space for installation and maintenance (refer to the following drawings). The installation height should be kept within 8.86ft(2.7m).

When the height of the ceiling exceeds 8.86ft(2.7m), the warm air is harder to blow to the ground.

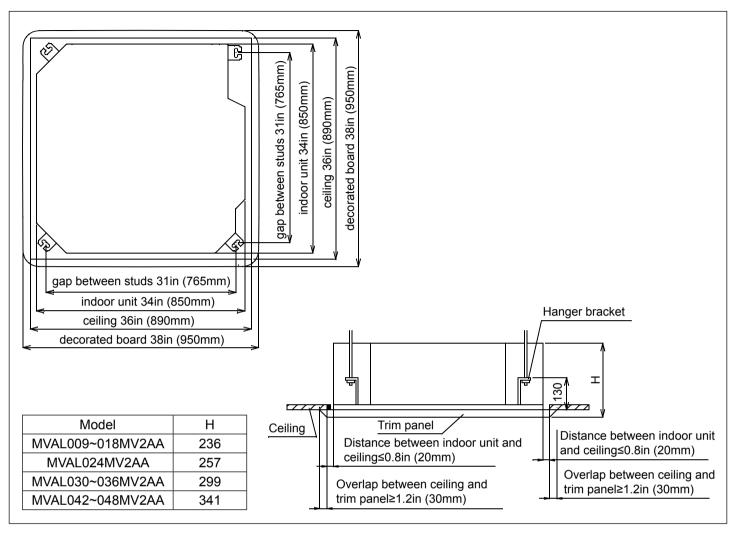


Space required for installation, unit: in (mm)

Model	Н
MVAL009~018MV2AA	8.2 (206)
MVAL024MV2AA	9 (227)
MVAL030~036MV2AA	10.6 (269)
MVAL042~048MV2AA	12.3 (311)



# **Installation Procedures**



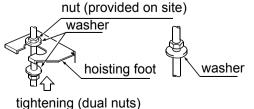
#### Note:

Before suspending the indoor unit, select an installation location according to the piping and wiring in the ceiling, and determine the direction of the piping. Prepare all pipes (refrigeration and drainage) and wiring (power supply, communication and control) to be ready to connect once unit is installed.

# Hanging Unit

- 1. Use cardboard template to locate desired location. Mark the mounting positions of the threaded rods using the guides on the cardboard template.
- 2. Install 3/8in threaded rods to structure using appropriate fasteners.
- 3. Add nuts and washers at approximate height.
- 4. Lift the cassette and position the threaded rods into the 4 mounting clips on each corner of the cassette unit.
- 5. Adjust the height of the unit so that bottom surface is recessed 1 inch from ceiling surface.
- 6. Using a level, adjust the nuts on the threaded rods to obtain a level reading across the bottom of the cassette unit.
- 7. Tighten the top nuts to lock unit into place. An additional nut on top and bottom of bracket may be added to jam against the installation nuts to prevent them from loosening due to unit vibration.

#### Tighten the nut on the washer.



- Check if the indoor unit is level with the water level and that the polythene tube drains with water. Check if the size of the ceiling hole is correct. Remove any water before mounting the decorated board.
- Fasten the screws to make the height difference between the two sides of the indoor unit less than 0.2in(5mm).

[secure hoisting foot]

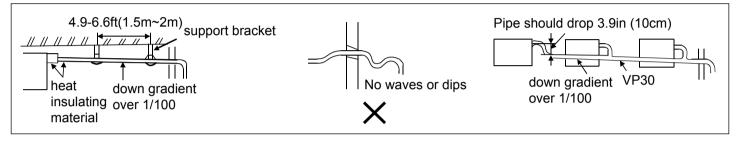
[secure washer foot]

#### Attention -

- For proper drainage, the drainpipes should be connected according to the installation manual.
- Insulate the drainpipes to prevent exterior condensation.
- Follow local plumbing codes when connecting drainpipes.

#### **Requirements:**

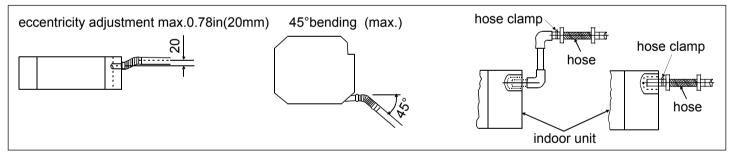
- The drainpipe of the indoor unit should be insulated.
- Maintain a downward slope. Avoid waves or dips.
- The horizon length of the drainpipe should be kept with 65.6ft(20m). Under the condition of long pipes, supports can be provided every 4.9-6.6ft(1.5~2m) as to avoid unevenness.
- The central piping should be connected according the following drawing.
- · Take care not to apply external force on the connection of the drainpipes.



Piping Material	1-1/4 inch sch. 40 PVC
Insulating Material	1/4 inch thick Polyethylene wrap.

### Drain Hose

Attach the soft end of the drain hose to the drain port with clamp. The hard end is 1-1/4 PVC. Use glue to attach condensate drain line.

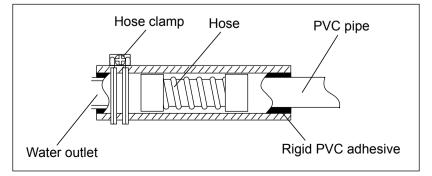


Insulation Wrap:

· All exposed drain pipe needs to be insulated to prevent condensation buildup and possible water damage.

# Lifting Drainpipe

The drainpipe can be maximally lifted 24in (360mm) to provide adequate slope to drain water.

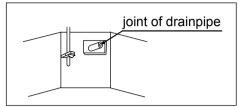


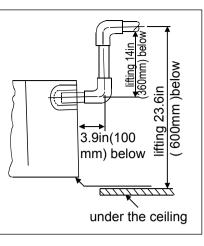
# Installation Procedures

# Drain Test

Test the drainpipe to confirm that there are no leaks or other issues with the drainpipe.

- After system is fully installed and power is applied, turn on cooling operation and add water to check for drainage.
- Confirm sound from the motor of the drainage pump and check for proper drainage.





Flare Torque Spec

# Tubing Permissible Length & Height Difference

Please refer to the Haier MRV selection software.

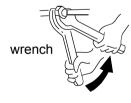
Tubing Materials & Specifications	Model		MVAB009~018MV2AA	MVAL024~048MV2AA
	Tubing Size	Gas pipe	Ø1/2"(Ø12.7)	Ø5/8"(Ø15.88)
Please refer to the manual of the outdoor unit.	in (mm)	Liquid pipe	Ø1/4"(Ø6.35)	Ø3/8"(Ø9.52)
Additional Refrigerant Charge	Tubing Material		R-410a rated coppe	r tubing

Add refrigerant according to the installation manual of outdoor unit. The addition of R410A refrigerant must be performed with a digital scale to ensure the specified amount is added. Not following this can potentially cause efficiency issues or compressor failure.

# Connecting Procedures of Refrigerant Tubing

Connect all the refrigerant tubes via flare connections.

- Dual wrenches must be used in the connection of indoor unit tubing.
- For tightening torgue refer to the right table.



#### Tubing in (mm) lb-in (N-m) ft-lb (N-m) Ø1/4"(Ø6.35) 104.4 (11.8) 13 (18) Ø3/8"(Ø9.52) 216.8 (24.5) 30 (40) Ø1/2"(Ø12.7) 43 (59) 443.7 (49.0) Ø5/8"(Ø15.88) 693.9 (78.4) 76 (103)

Mounting Torque

### Cutting and Enlarging

Outer Diameter of

• Cut the tube to the needed length.

• Ream the cut to remove shoulder. Do this with the tube

facing down to help fillings fall out.

· Add supplied flare nut to tube.

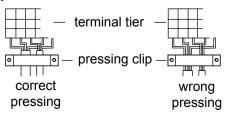
• Use 45° flare tool to create flare.

Wire Connections

1. Connecting using circular crimp terminals:

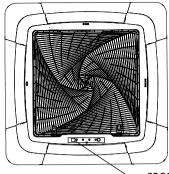
Connecting The method of using circular terminal is shown in the figure. Take off the screw, connect it to the circular terminal after placing it through the ring at the end of the lead and tighten it down. terminals:

- 2. Connecting using straight terminals: The method of using straight terminals is shown as follows: loosen the screw before putting the wire into the terminal block, tighten the screw and confirm it has been tightened by pulling the line gently.
- 3. Clamp the wires: Secure the wires with clips which should press on the insulation of the wires.



# **Installation Procedures**

### Installing the decorated panel on the body of indoor unit:

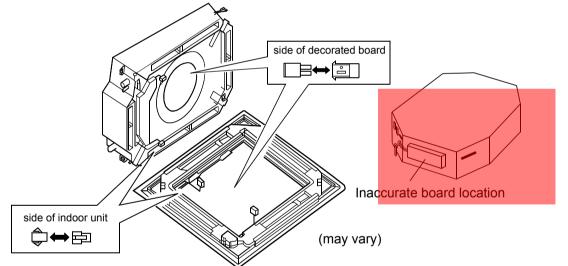


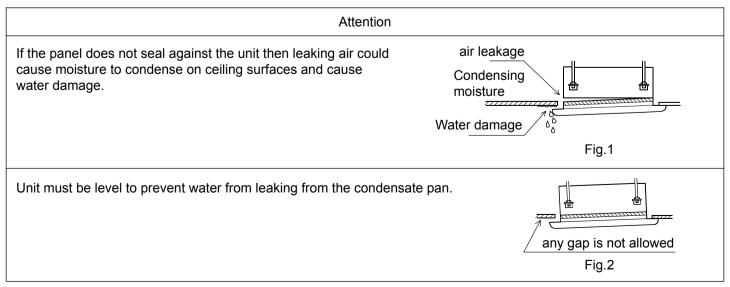
receiving window for remote control

the lamp will not flash when wired controller is used

- Prior to attaching the panel to the unit locate the louver motor connector on the panel and the unit. Orientate the panel so they can connect.
- First temporarily position it with screws.
- Tighten each screw a little at a time to allow the panel to seat flush against the unit.
- If the foam gasket does not seal against the unit then lower the body of the indoor unit.
- Wiring of panel:

Connect both connections for the display and louver motors.



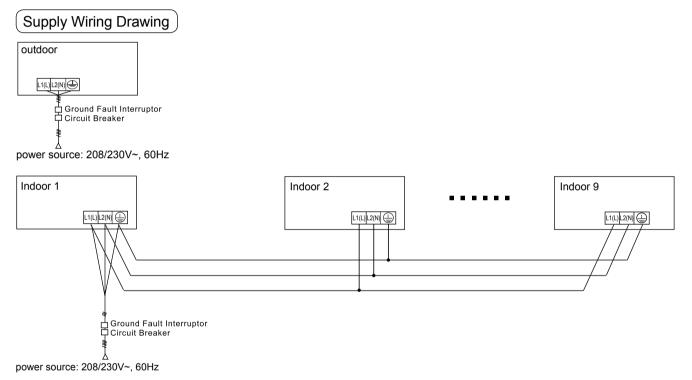


# ∆WARNING

- · Follow local codes when selecting wire gauge and connecting to house power.
- Use the cable strain relief clips and locking conduit clamps to prevent wires from being pulled off terminal posts.
- Unit must be properly grounded. Do not use water or gas piping, phone ground or lightning rod.

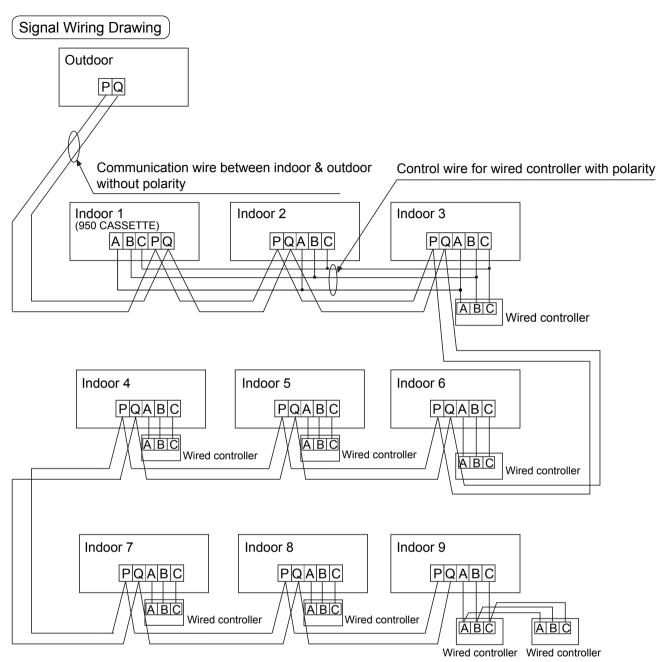
### ▲ Attention

- Only copper wire can be used. A properly sized breaker should be provided, or electric shock may occur.
- Unit requires 208/230VAC 2 voltage wires and a ground. No neutral.
- All indoor units should be wired to the same breaker to prevent some of the units from being powered off while others are energized.
- · Controller wiring and refrigerant tubing can be arranged and ran together.
- Disconnect power from both outdoor and indoor units prior to servicing any component in the system.



- Indoor units and outdoor units should be connected to separate power breakers
- Indoor units must share one single electrical breaker. Circuit breaker specifications should be calculated. It is recommended to have both indoor & outdoor units connected to GFCI and surge devices.

# **Electrical Wiring**



Oudoor unit, central control and all indoor units are of parallel connection via two lines without polarity. There are three ways of connecting the line control and indoor units:

- A. One wired control to control multiple units, i.e. 2-3 indoor units, as shown in the above figure, (1-3 indoor units). The indoor unit 3 is the wire controlled main unit and others are the wired controlled sub units. The remote control and the main unit (directly connected to the indoor unit of wired control) are connected via three wires with polarity. Other indoor units and the main unit are connected via three lines with polarity. SW01 on the main unit of wired control is set to 0 while SW01 on other sub units of wired control are set to 1, 2 and so on in turn. (Please refer to the code setting A at page 15)
- B. One wired control controls one indoor unit, as shown in the above figure (indoor unit 4-8). The indoor units and the wired control are connected via three lines with polarity.
- C. Two wired controls control one indoor unit, as shown in the figure (indoor unit 9). Either of the wired controls can be set to be the master wired control while the other is set to be the auxiliary wired control. The master wired control and indoor units, and the master and auxiliary line controls are connected via three lines with polarity. Note: For DC motor/low ESP duct type, the PCB comes with the terminal blocks. Please be sure to pay attention to do the wiring according to the labels. The power lines and signal lines go through the metal wire hole separately with the protective sleeve of the connecting line.

# Electrical Wiring

Wire gauge size and breaker size for total indoor amp draw. Current NEC guidelines and local codes will trump this chart.

Items Total Current of Indoor Units(A)	Cross Section AWG (mm <sup>2</sup> )	Length in.(m)	Rated Current of Overflow Breaker(A)	Rated current of residual Circuit Breaker(A) Ground Fault Interrupter(mA) Response time(S)	Cross Sectional Area of Signal Line
<7	14(2.5)	65.6(20)	10	10 A,30 mA,0.1S or below	
≥7 and <11	12(4)	65.6(20)	15	15 A,30 mA,0.1S or below	
≥11and <16	10(6)	82(25)	20	20 A,30 mA,0.1S or below	16 AWG (1.25mm <sup>2</sup> )
≥16 and <22	8(8)	98.4(30)	30	30 A,30 mA,0.1S or below	
≥22 and <27	6(10)	131(40)	30	30 A,30 mA,0.1S or below	

• The electrical power line and signal lines must be tightened.

• Every indoor unit must have a ground connection.

• The power wire should be size up if it exceeds the permissible length.

• Shielding of the wire of all the indoor and outdoor units should be connected together and grounded at one point.

• Signal lines should not exceed 3280ft(1000m).

#### Wired Controller ABC Chart

Length of Controller Wire ft (m)	Wiring Dimensions AWG (mm <sup>2</sup> )
<328(100)	22(0.3) x 3 core shielding line
≥328(100) and <656(200)	20(0.5) x 3 core shielding line
≥656(200)and <984(300)	18(0.75) x 3 core shielding line
≥984(300) and <1312(400)	16(1.25) x 3 core shielding line
≥1312(400) and <1968(600)	14(2) x 3 core shielding line

• The shielding lay of the controller wire must be grounded at one end.

• The total length of the controller wire shall not be more than 1968ft(600m).

# **Electrical Wiring**

Dip Switch Setting

- The dip switch is set to the "On" position if "1" is indicated in the table. The dip switch is set to the "Off" position if "0" is indicated in the table.
- Dip switches set in the factory to on are marked with red.

#### Definition principles of code switches:

(A) Definition of SW01:

SW01\_1-4 is used to set indoor address when grouping multiple indoor units connected to single wired controller YR-E16B or YR-E17.

SW01\_5-8 set capacity of the indoor unit (factory set). Must only set when replacing board.

	Address	[1]	[2]	[3]	[4]	Address of wire controlled indoor unit (group address)
SW01_1 SW01_2	of wire	0	0	0	0	0# (wire controlled master unit) (default)
	controlled	0	0	0	1	1# (wire controlled slave unit)
		0	0	1	1	2# (wire controlled slave unit)
		0	0	1	1	3# (wire controlled slave unit)
3001_4	(group	(group				
	address)	1	1	1	1	15# (wire controlled slave unit)
		[5]	[6]	[7]	[8]	Capability of indoor unit
		0	0	1	0	9000BTU
0.4/04 5		0	0	1	1	12000BTU
		0	1	1	0	18000BTU
	of indoor	0	1	1	1	24000BTU
_	unit	1	0	0	1	30000BTU
50001_0		1	0	1	0	36000BTU
		1	0	1	1	42000BTU
		1	1	0	0	48000BTU
SW01_3 SW01_4 SW01_5 SW01_6 SW01_6 SW01_7 SW01_8	unit (group address) Capability of indoor	0  1 [5] 0 0 0	0  1 [6] 0 0 1 1 1 0 0	1 [7] 1 1 1 1 0 1 1	1  [8] 0 1 0 1 1 0 1 1 0 1	3# (wire controlled slave unit)  15# (wire controlled slave unit) Capability of indoor unit 9000BTU 12000BTU 12000BTU 18000BTU 24000BTU 30000BTU 36000BTU 42000BTU

#### (B) Definition and description of SW03

SW03\_1-8 is used to set indoor unit address on system. Set address only if using central controller YCZ-A004. Leave default if no central controller is used.

	Address setting mode	[1]					ļ	Addres	s setting mode		
SW03_1		0		Automatic setting (default)							
	mode	1		Code-set address							
		[2]	[3]	[4]	[5]	[6]	[7]	[8]	Address of indoor unit	Address of centralized controller	
		0	0	0	0	0	0	0	0# (Default)	0# (Default)	
	Code-set indoor	0	0	0	0	0	0	1	1#	1#	
		0	0	0	0	0	1	0	2#	2#	
SW03_2	unit address										
~ SW03 8	and centralized	0	1	1	1	1	1	1	63#	63#	
3003_0	controller address	1	0	0	0	0	0	0	0#	64#	
		1	0	0	0	0	0	1	1#	65#	
		1	0	0	0	0	1	0	2#	66#	
		1	1	1	1	1	1	1	63#	127#	

Note:

• Set the address by code when connecting the centralized controller or gateway or charge system.

Address of centralized controller=communication address+0 or+64.

SW03\_2=OFF, address of centralized controller=communication address+0=communication address SW03\_2=ON, address of centralized controller=communication address+64 (applies when centralized controller is used and there are more than 64 indoor units)

# Dip Switch Setting of YR-E17 Wired Controller

#### Function switches

DIP switch	On/Off station	Function	Default setting	
Sw/1	On	Slave wired controller	Off	
Sw1	Off	Master wired controller	Off	
Sw2	On	Ambient temp. display on	Off	
	Off	Ambient temp. display off		
Sw2	On	Collect ambient temp. from PCB of indoor	Off	
Sw3	Off	Collect ambient Temp. from wired controller		
C	On	Non-volatile memory invalid	0#	
Sw4 Off		Non-volatile memory valid	- Off	
Sw5	On	Old protocol	0#	
Swo	Off	Self adaption	— Off	
Sw6	On	reserved	Off	
Swo	Off	reserved		
0.w7	On	Model with Up/Down and Left/Right swing	0#	
Sw7	Off	Model with Up/Down swing	Off	
Sw0	On	Fresh Air unit	0#	
Sw8	Off	General unit	Off	

For other wired remote controller settings, please refer to controller manual.

#### The difference between master and slave wired controller

Comparison item	Master wired controller	Slave wired controller	
Function	All lunction	<ul><li>1.ON/OFF, Mode, Fan speed, Temp, Setting, Swing, Energy saving, Clock function, Mode Setting, Screen Saving and Child lock are available.</li><li>2.Cancel the filter cleaning icon.</li><li>3.Look up the detailed parameter and malfunction code.</li></ul>	

### Before Test Run

• Connect it to the power supply of the outdoor units to energize the heater of the compressor. To protect the compressor at startup, power it on 12 hours prior to the operation.

#### Check if the connections of the drainpipe and wire connection lines are correct.

The drainpipe shall be placed at the lower part while the connection line placed at the upper part. Insulating measures should be taken such as winding the drainpipe especially on the indoor units with insulating materials.

The drain pipe should be installed as a slope to avoid protruding from the upper part and concaving at the lower part.

#### Checkup of Installation

□ check if the main voltage is correct

□ check for any leaks at the piping joints

□ check if the connection of the main power for the indoor & outdoor units are correct

□ check if the serial numbers of the terminals are matched properly

□ check if the installation place meets the requirement

 $\Box$  check if there is too much noise

□ check if the connecting line is fastened

Check if the refrigerant and condensation lines are insulated

□ check if the water is drained to the outside

 $\Box$  check if the indoor units are positioned

#### Test Run

Do ask the installation personnel to make a test run. Take the testing procedures according to the manual and check if the temperature regulator works properly.

When the machine fails to start due to the room temperature, the following procedures can be taken to do the compulsive running. The function is not provided for the type with remote control.

 Set the YR-E17 wired controller to cooling/heating mode, press "ON/OFF" button for 10 seconds to enter into the compulsive cooling/heating mode. Press "ON/OFF" button again to quit the compulsive running and stop the operation of the system.

#### Fault Remedies

When any fault appears, consult the fault code of line control or the number of LED flashes on the control panel of the indoor units/health lamp of receiving window of remote control. Refer to the below table lookup fault descriptions. Indoor Unit Faults

Failure code at wired controller	PCB LED5(Indoor Units)/ Receiver Timer Lamp(Remote Controller)	Fault Descriptions
01	1	Fault of indoor unit ambient temp. sensor TA
02	2	Fault of indoor unit pipe temp. sensor TC1
03	3	Fault of indoor unit pipe temp. sensor TC2
04	4	Fault of indoor unit dual heat source temp. sensor
05	5	Fault of indoor unit EEPROM
06	6	Fault of communication between indoor & outdoor units
07	7	Fault of communication between indoor unit and wired control
08	8	Fault of indoor unit water drainage
09	9	Fault of duplicate indoor unit address
0A	10	Reserve
0C	12	Fault of zero crossing
0E	14	Fault of DC fan
Outdoor Unit Code	20	Corresponding faults of outdoor units

Qingdao Haier Air Conditioner Electric Co.,Ltd.

Haier Industrial Park, Qianwangang Road, Eco-Tech Development Zone, Qingdao 266555, Shandong, P.R.C.