GROUP CONTROLLER
INSTALLATION AND OPERATION MANUAL

MODEL: KJR-150A/M-E (KCC-150)

MDV13IU-004CW
202055100991

Thank you very much for purchasing our product.
Before using your unit, please read this manual carefully and keep it for future reference.

1. SAFETY PRECAUTION

- **Read the safety precautions carefully before installing the unit.**
- **Stated below are important safety issues that must be obeyed.**
- **Conform there is no abnormal phenomena during test operation after complete, then hand the manual to the user.**
- **Meaning of marks:**

WARNING	Means improper handling may lead to personal death or severe injury.
CAUTION	Means improper handling may lead to personal injury or property loss.

WARNING

Please entrust the distributor or professionals to install the unit.
Installation by other persons may lead to imperfect installation, electric shock or fire.

Strictly follow this manual.
Imporper installation may lead to electric shock or fire.

Reinstallation must be performed by professionals.
improper installation may lead to electric shock or fire.

Do not disassemble your air conditioner at will.
A random disassembly may cause abnormal operation or heating, which may result in fire.

CAUTION

Do not install the unit in a place vulnerable to leakage of flammable gases.
Once flammable gases are leaked and left around the group controller, fire may occure.

The wiring should adapt to the group controller current.
Otherwise, electric leakage or heating may occur and result in fire.

The specified cables shall be applied in the wiring. No external force may be applied to the terminal.
Otherwise, wire cut and heating may occur and result in fire.

2. OTHER PRECAUTIONS

■ **Installation Location**

Do not install the unit in a place with much oil, steam, sulfide gas. Otherwise, the product may deform and fail.

2.1 Preparation before installation

2.1.1 Check whether the following assemblies are complete.

NO.	Name	Qty.	Remarks
1	Group Controller	1	KJR-150A/M-E (KCC-150)
2	Cross recess head self-tapping screw	4	ST3.9×25(For Mounting the cover and base)
3	Cross recess round head wood screw	4	M4×20(For Mounting on the wall)
4	Plastic expanded tube	4	(For Mounting on the wall)
5	Group controller Installation and operation manul	1	————
6	Matching resistance	2	

2.2.2 Prepare the following assemblies on the site.

NO.	Name	Qty	Specification (Only for reference)	Remark
1	Power line	1	AC220V 2*1.5mm²	Input power AC220V
2	Electrical appliance used for group controller	1	Sepcification AC220V	Max.current ＜3.15A
3	Wiring conduit	1	Insulated sleeve	Pre-embed into wall
4	Shielded 3-core PE cable	2	RVVP Series	One for network connector module communication the other for computer communication
5	Big cross Screwdriver	1	————	Use for installing cross recess head screw
6	Small slotted screw driver	1	————	Use for installing the signal wire

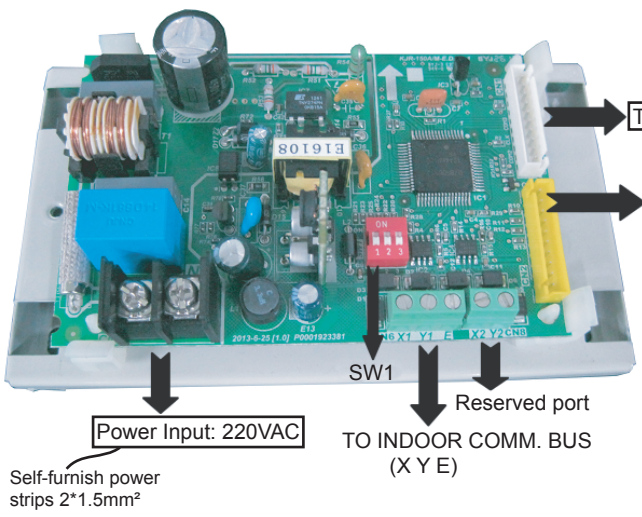
Installation Notice

1) Do not connect the RS485 communication wire with the strong electric circuit, and also can not place in the same wiring conduct; the distance between the communication wiring conduct and the strong electric circuit should be over 300～500mm.
2) Ground the connecting shielding wire of the Group controller reliably.
3) Do not make transition connection or lengthening connection among the connecting wire of Group controller.
4) After finishing connection, do not use Megger to have the insulation check to the signal wire.

3. INSTALLATION METHOD

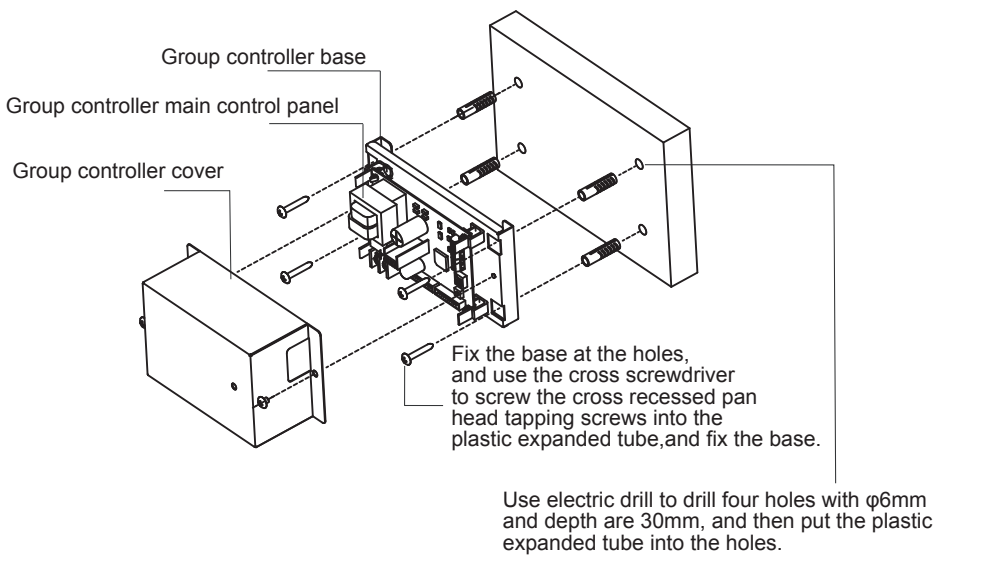
NOTE

1. When selecting Old Display Board, please dial the first bit of SW1 to ON;
   When selecting New Display Board, please dial the first bit of SW1 to OFF.
2. In the group, anti-cold air switches of all the indoor units have to be the same with the group controller's, or some displays about this will be wrong.
3. One Group controller is only allowed to connect most of 16 indoor units.
4. When the Centralized controller is needed, you have to connect the centralized controller from the X,Y,E port of outdoor unit.
5. Only with the corresponding units Group controller could work.
6. Power part and the communication ports (as follow display):



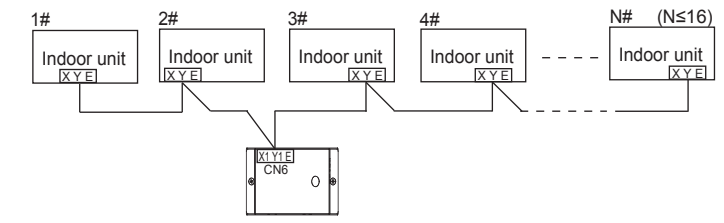
SW1 Function

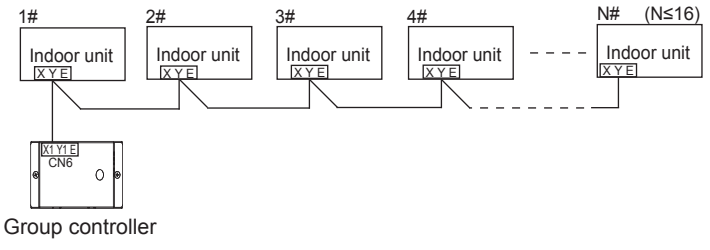
SW1 ON 1 2 3	1-ON:means old display board 1-OFF:means new display board
SW1 ON 1 2 3	2-OFF & 3-OFF :means shutting down the unit to "stop cold air" at 15℃.
SW1 ON 1 2 3	2-OFF & 3-ON :means shutting down the unit to "stop cold air" at 20℃.
SW1 ON 1 2 3	2-ON & 3-OFF :means shutting down the unit to "stop cold air" at 24℃.
SW1 ON 1 2 3	2-ON & 3-ON :means shutting down the unit to "stop cold air" at 26℃.



4. SYSTEM WIRING SPECIFICATION

Wiring diagram between Group controller and Indoor units.
The following two methods are accepted: (N≤16)

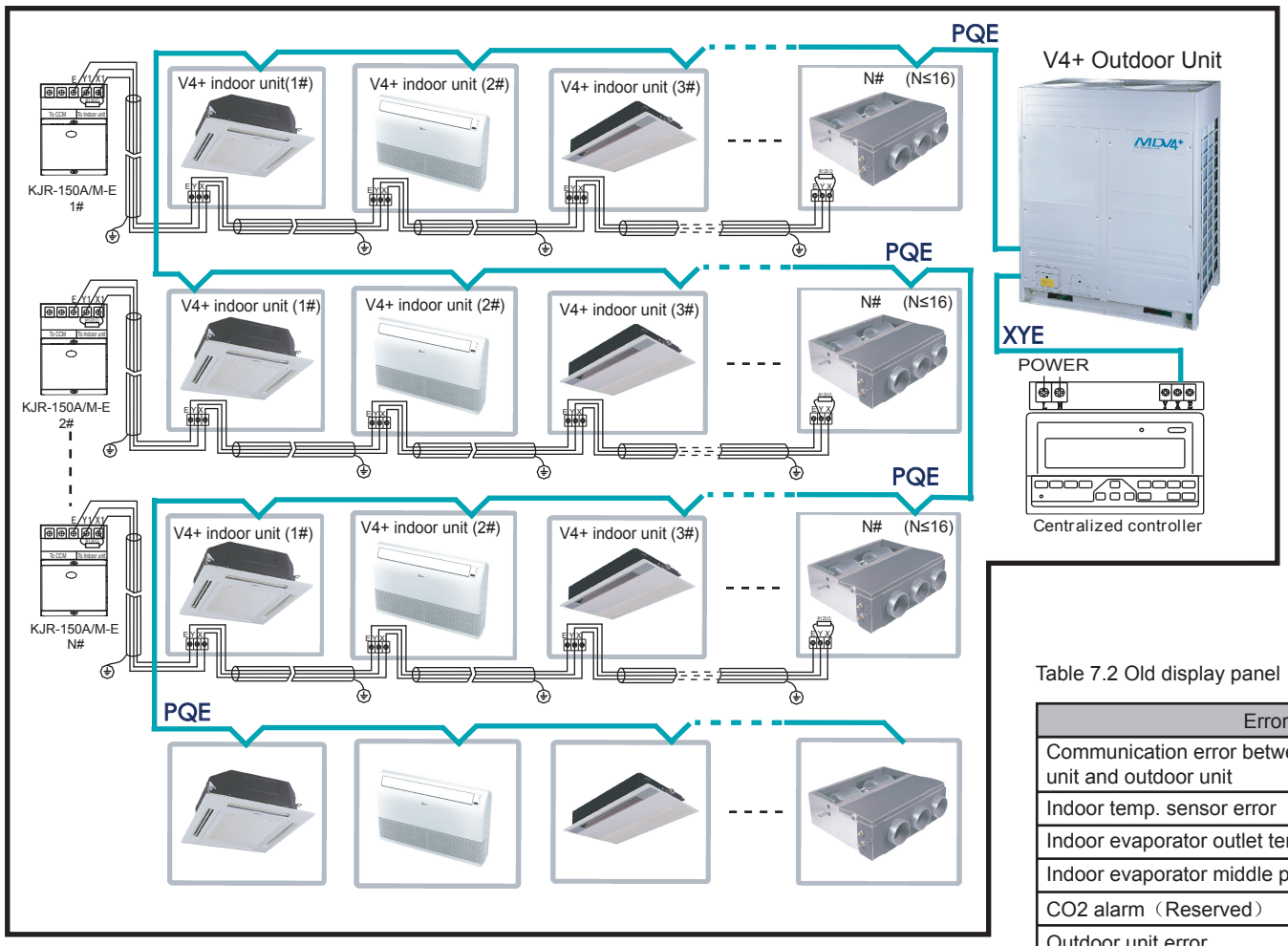




NOTE

One Group controller is only allowed to connect 16 indoor units at most.

5. GROUP CONTROLLER SYSTEM WIRING DIAGRAM



6. OPERATION METHOD

6.1 Group controller model and main parameters

Model	KJR-150A/M-E (KCC-150)
Input voltage	AC 198V ～ 242V
Environment temperature	-5~43℃
Environment humidity	RH40%~RH90%
Certification requirement	EMC、EMI meet the CCC certification request
Appliance safety standard	GB4706.32-2004

6.2 Group controller function summary

Main functions as following:

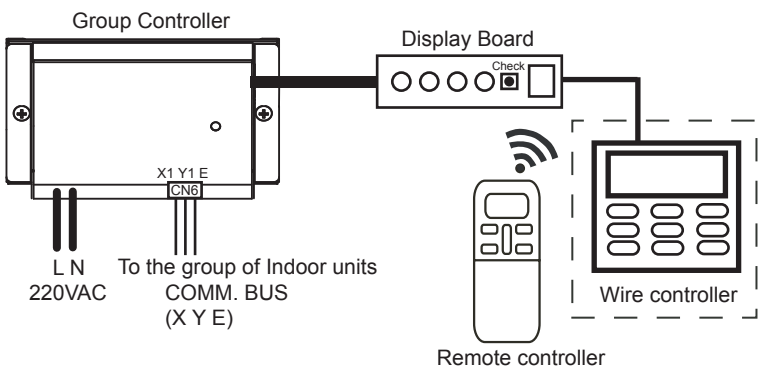
1. Connect the indoor unit through X1 Y1 E three terminals.
2. Group controller could control a group of indoor units by remote or wire controller.
3. With the check switch of display board, Group controller could query the running state of every unit in the group.
4. LED indication function.

6.3 Group controller operation indication

When connected to Group controller as a group, the indoor units could be controlled simultaneously by the remote or wire controller connected with Group controller and enter to unique running state with the group controller. But also,the indoor units could be controlled separately by their standard controller.

6.4 Group controller fault indication

when one or more indoor units in the group have errors, the group controller will alarm the error and other normal indoor units will not be affected.



WARNING

Communication singal in CN6(X1 Y1 E) is Low voltage signal.
Do not apply high voltage, or breakdown will occur and even cause fire.

7. FAILURE DISPLAY

Table 7.1 New display board (with nixie tube) error code definition

Error	Nixie tube display
Communication error between indoor unit and outdoor unit	E1
Indoor temp. sensor error	E2
Indoor evaporator outlet temp. sensor error	E4
Indoor evaporator middle part temp. sensor error	E3
CO2 alarm（Reserved）	E5
Outdoor unit error	Ed
Water level alarm error	EE
EEPROM error（Reserved）	E7
Mode conflict	E0
Communication error between Grouped controller and indoor unit	EH

Table 7.2 Old display panel（without nixie tube ）failure indication

Error	LED display
Communication error between indoor unit and outdoor unit	Timer lamp flashes 5HZ
Indoor temp. sensor error	Running lamp flashes 5HZ
Indoor evaporator outlet temp. sensor error	Running lamp flashes 5HZ
Indoor evaporator middle part temp. sensor error	Running lamp flashes 5HZ
CO2 alarm（Reserved）	Alarm lamp flashes slowly 1HZ
Outdoor unit error	Alarm lamp flashes slowly 1HZ
Water level alarm error	Alarm lamp flashes slowly 5HZ
EEPROM error（Reserved）	Defrosting lamp flashes fast 5HZ
Mode conflict	Defrosting lamp flashes slowly 1HZ
Communication error between Grouped controller and indoor unit	Alarm lamp flashes

■ Check contents

Under normal conditions, display panel will display running status of the first indoor unit being inquired by the grouped controller, long press check button for more than 3s to swift, and will display panel will display the current indoor unit address, at this time, long press check button for more than 3s again, the display board will display the next indoor unit address; if don't press check button in 4s, current display content will swift to the check content when indoor unit check times is 0.

8. NEW DISPLAY BOARD CHECK CONTENTS

Table 8.1 New display panel check contents

Times	Contents
0	2.1 Display contents according to 2.1
1	Communication address between indoor and outdoor unit
2	Indoor unit capacity dial code
3	Qty. of Online indoor units
4	Indoor unit network address
5	Temp. set
6	Indoor unit temp.
7	Indoor unit temp.
8	Indoor evaporator middle part temp.
9	Indoor evaporator outlet temp.
10	Last error (no error display E-)
11	--

9. OLD DISPLAY BOARD CHECK CONTENTS

Table 9.1 Old display panel check contents

Times	Contents
0	2.2 Display contents according to 2.1
1	Communication address between indoor and outdoor unit
2	Qty. of Online indoor unit
3	Capacity of indoor unit

Table 9.2 Instruction table about corresponding LED lamp status of a certain communication address

	Communication address between indoor unit and outdoor unit	LED lamp status
No response of buzzer	00—15	Constantly lights
No response of buzzer	16—31	flashes
buzzer responds	32—47	Constantly lights
buzzer responds	48—63	flashes