VRF SYSTEM NETWORK CONVERTOR UTY-VGGX

For authorized service personnel only.





Contents

1.	SAFETY PRECAUTIONS	2
2.	ACCESSORIES	2
3.	ELECTRICAL REQUIREMENT	2
4.	SELECTING AN INSTALLATION LOCATION	
	4.1. Dimensions	3
5.	USING THE NETWORK CONVERTOR	3
-		
• 5	SETTING METHOD WHEN CONNECTING A GROUP)
■ \$ F	SETTING METHOD WHEN CONNECTING A GROUF REMOTE CONTROLLER	
■ \$ F 6.	SETTING METHOD WHEN CONNECTING A GROUP REMOTE CONTROLLER WIRING	•
■ S F 6.	SETTING METHOD WHEN CONNECTING A GROUP REMOTE CONTROLLER WIRING 6.1. Wiring method	4
■ S F 6. 7.	SETTING METHOD WHEN CONNECTING A GROUP REMOTE CONTROLLER WIRING 6.1. Wiring method INSTALLING THE NETWORK CONVERTOR	4
■ S 6. 7.	SETTING METHOD WHEN CONNECTING A GROUP REMOTE CONTROLLER WIRING 6.1. Wiring method INSTALLING THE NETWORK CONVERTOR 7.1. Installation	• 4 5

9. TURNING ON THE POWER	6					
10. ERROR CODE DISPLAY	6					
SETTING METHOD WHEN CONNECTING A SINGLE						
SPLIT TYPE INDOOR UNIT						
11. WIRING						
11.1. Wiring method	7					
12. INSTALLING THE NETWORK CONVERTOR						
12.1. Installation	8					
12.2. Connection of remote controller cable	9					
13. CIRCUIT BOARD SETTING	10					
14. TURNING ON THE POWER	11					
15. ERROR CODE DISPLAY	12					

1. SAFETY PRECAUTIONS

- The "SAFETY PRECAUTIONS" indicated in the manual contain important information pertaining to your safety. Be sure to observe them.
- Request the user to keep the manual on hand for future use, such as for relocating or repairing the unit.

WARNING This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.

- Perform electrical work by an authorized service personnel in accordance with the installation manual and the electrical wiring regulations or implementation regulations of the country. Also do not install this unit by yourself. Improper electric work will cause electric shock or a fire.
- Perform installation work in accordance with the installation manual. Request an authorized service personnel to perform installation work. Do not install this unit by yourself. Improper installation will cause injury, electric shock, fire, etc.
- In the event of a malfunction (burning smell, etc.), immediately stop operation, turn off the electrical breaker, and consult authorized service personnel.
- Install a leakage circuit breaker to power supply cable in accordance with the related laws and regulations and electric company standards.
- Use a power source exclusively for this unit. Never share the power source with other electrical equipment. Doing so will cause fire and electric shock.

Do not install the unit in the following areas:

- Do not install the unit near a source of heat, steam, or flammable gas.
- Area filled with mineral oil or containing a large amount of splashed oil or steam, such as a kitchen. It will deteriorate plastic parts, causing the parts to fall or the unit to leak water.
- Area that generates substances that adversely affect the equipment, such as sulfuric gas, chlorine gas, acid, or alkali. It will cause the copper pipes and brazed joints to corrode, which can cause refrigerant leakage.
- Area containing equipment that generates electromagnetic interference. It will cause the control system to malfunction, preventing the unit from operating normally.
- Area that can cause combustible gas to leak, contains suspended carbon fibers or flammable dust, or volatile inflammables such as paint thinner or gasoline. If gas leaks and settles around the unit, it can cause a fire.
- Do not use the unit for special purposes, such as storing food, raising animals, growing plants, or preserving precision devices or art objects. It can degrade the quality of the preserved or stored objects.
- Install the unit in a well-ventilated place avoiding rains and direct sunlight.
- Do not operate this unit when your hands are wet. Touching the unit with wet hands will cause an electric shock.
- If children may approach the unit, take preventive measures so that they cannot reach the unit.

This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user or damage to property.

- Pay abundant care when transporting this unit because it is a precision device. Improper transportation will cause trouble.
- Do not touch the switches with sharp objects. Doing so will cause injury, trouble, or electric shock.
- Do not expose this unit directly to water. Doing so will cause trouble, electric shock, or heating.
- Do not set vessels containing a liquid on this unit. Doing so will cause heating, fire, or electric shock.
- Dispose of the packing materials safely. Tear and dispose of the plastic packing bags so that children cannot play with them. There is the danger of suffocation if children play with the original plastic bags.
- Do not insert articles into the slit parts of this unit. Doing so will cause trouble, heating, or electric shock.

2. ACCESSORIES

The following installation parts are supplied. Use them as required.

Name and Shape	Q'ty	Application
Installation manual	1	This manual
Binder	4	For mounting the power supply cable, remote controller cable and transmission cable.
Screw (M4 x 20 mm)	4	For mounting the network convertor.

3. ELECTRICAL REQUIREMENT

Use	Size		Wire type	Remarks
Power	Maximum	1.25 mm ²	245 IEC 57 or	1 ø AC220 - 240 V 50/60Hz, 2 Cable
cable	Minimum	0.5 mm ²	equivalent	+ ground (Always ground the unit)
Transmis- sion cable	0.33 mm ²		22AWG LEVEL4 (NEMA) nonpolar 2 core, twisted pair solid core Shielded	LONWORKS [®] compatible cable
Remote controller cable	0.33 mm ²		22AWG Polar 3core, Twisted pair	Use shield cable
Fuse capacity	3 A	\		

* We recommend that you purchase our service parts for the remote controller cable. Contact service personnel to purchase this.

4. SELECTING AN INSTALLATION LOCATION

4.1. Dimensions

The network convertor is comprised of a main body and cover.



Power supply		1ø AC220 - 240V 50/60 Hz		
Power consumption	on (W)	6.5		
Tomporatura (°C)	Operating	0 - 46		
remperature (C)	Packaged	-10 - 60		
Humidity (%)	Packagod	0-95 (RH);		
numuny (70)	Fackageu	No condensation		
Dimensions (H × V	V × D) (mm)	67× 288 × 211		
Weight (g)		1500		

5. USING THE NETWORK CONVERTOR

The network convertor has 2 uses. Since the setting method is different depending on how the network convertor is used, refer to the following information to make the settings.



SETTING METHOD WHEN CONNECTING A GROUP REMOTE CONTROLLER

6. WIRING

- Before starting installation work, turn off the power of this unit and the connection destination. Do not turn on the power again until installation is completed. Otherwise, it will cause electric shock or fire.
- Use the accessories or specified power cable and connection cables. Do not modify power cable and connection cables other than those specified, do not use extension cables, and do not use independent branch wiring. The allowable current will be exceeded and cause electric shock or fire.
- Install the connection cables securely to the terminal block. Confirm that external force is not applied to the cable. Use connection cables made of the specified cable. If intermediate connection or insertion fixing are imperfect, it will cause electric shock, fire, etc.
- When connecting the power cable and transmission cable, layout the wiring so that the cover of this unit is securely fixed. If the cover is imperfectly fixed, it may cause fire or overheating of the terminals.
- Perform ground work positively. Do not connect the ground cable to a telephone ground cable, water pipe, or conductor rod.
- Always fasten the outside covering of the connection cable with the cable clamp. (If the insulator is chafed, electric leakage may occur.)
- When performing cable wiring work, be sure that it does not touch the user. Doing so will cause injury or electric shock.
- If any cable is damaged, do not repair or modify it yourself. Improper work will cause electric shock or fire.

- Do not bind the remote controller cable and the transmission cable together with or parallel to the power supply cable of the indoor and outdoor units. It may cause erroneous operation.
- When performing wiring work, be careful not to damage the cable or injure yourself. Also, connect the connectors securely. Loose connectors will cause trouble, heating, fire, or electric shock.
- Install the indoor and outdoor units, power cable, signal cable and remote control cable 1 m away from television and radio to avoid distorted images and noise.
- Perform wiring so that water does not enter this unit along the external wiring. Always install a trap to the wiring or take other countermeasures. Otherwise it will cause trouble or electric shock or fire.
- Confirm the name of each unit and name of each terminal block of the unit and connect the wiring in accordance with the directions given in the manual so that there is no incorrect wiring. Incorrect wiring will damage the electric parts and cause smoke and fire.

- When installing the connection cables near a source of electromagnetic waves, use shielded cable. Otherwise, a breakdown or malfunction could result.
- The terminal screws and ground screws have different shapes. Be sure to install the screws in the correct locations. If the screws are installed in the wrong locations, the circuit board could be damaged.

6.1. Wiring method

Number of connected network convertors

- Up to a total of 16 network convertors (UTY-VGGX) and touch panel controllers can be connected in the VRF system.
- Up to 4 group remote controllers can be connected to one network convertor (UTY-VGGX).
- Total remote controller cable length when connected to one converter \leq 100m



[Example of connecting group remote controllers in a parallel arrangement]





[Example of connecting group remote controllers in series]



 $L1 + L2 + L3 + L4 + L5 + L6 + L7 \leq 100m$

- Use of a terminal box is recommended when a junction is made in the wiring.
- Do not bind the power cable, remote controller cable and transmission cable to avoid an erroneous operation.
- · Use ground cable to ground the network convertor.
- Use shield cable for transmission cable and remote controller cable. The shield metal should be grounded.

7. INSTALLING THE NETWORK CONVERTOR

- Always use the accessories and specified installation work parts. Check the state of the installation parts. Not using the specified parts will cause units to fall off, water leakage, electric shock, fire, etc.
- Install at a place that can withstand the weight of the unit and install positively so that the unit will not topple or fall.
- When installing this unit, make sure that there are no children nearby.
- Otherwise, injury or electric shock could result.
- Install a circuit breaker.
 Otherwise, electric shock or fire could result.

- Do not set the DIP switch or rotary switch of this unit except as specified in this installation manual or the instruction manual supplied with the air conditioner. Setting the switches other than specified will cause an accident or trouble.
- Use an insulated screwdriver to set the DIP switches.
- Before opening the case of this unit, completely discharge static electricity charged on your body. Not doing so will cause trouble.
- Do not touch the circuit board and circuit board parts directly with your hands.
 - Otherwise, injury or electric shock could result.
- Tightening the mounting screws too tight will damage the case of this unit.
- Be careful so that the front cover does not fall after the front cover screws are removed.
 Otherwise, injury could result.

7.1. Installation

- (1) Remove the four screws (M4 x 6 mm), and then remove the cover.
- (2) Pass the power supply cable, remote controller cables and transmission cables through the bushing and pull it into the network convertor.
- (3) Form the binder (push mount) provided into a ring shape and pass each of the cables - the power supply cable, remote controller cables, transmission cables - through it.
- (4) Route the power supply cable, remote controller cables and transmission cables to their respective terminal block and ground properly.
- (5) After the wiring of the cables, press the binder (push mount) that had been shaped into a ring and insert it in the hole in the box for securing the binder (push mount).
- (6) Securely tighten the binder (push mount) and then confirm that the cable will not come out.
- (7) Once the wiring of the cables has been completed, mount of the cover to the network convertor. Use the screws (M4 x 6 mm) to mount the cover.
- (8) Use the four screws (M4 x 20 mm) provided to mount the network convertor to the behind ceiling, wall, floor or other suitable location.



Tightening torque for installing cables to terminal block

0.8 to 1.2 N • m (8 to 12 kgf • cm)

8. CIRCUIT BOARD SETTING

Set network convertor rotary switch SW110, SW111 and Dip switch SW103, SW107, SW108, SW109.



[Rotary switch-SW110, SW111] Convertor address settings

Set the convertor address in accordance with the following table for each network convertor.

- * Be sure to set the convertor address different from the touch panel controller address (refer to the setting manual for the touch panel controller).
- * Each convertor address can be selected freely but the same address cannot be used more than once.
- * Example: When SW110 is set to "1" and SW111 is set to "4", the convertor address will be "14".

Convertor address		0	1	2	3	4	5	6	7
Potony owitch	SW110	★ 0	0	0	0	0	0	0	0
Rolary Switch	SW111	★0	1	2	3	4	5	6	7

Convertor address		8	9	10	11	12	13	14	15
Deterry ewitch	SW110	0	0	1	1	1	1	1	1
Rotary Switch	SW111	8	9	0	1	2	3	4	5

(★: Factory setting)

[DIP switch - SW103] Group remote controller convertor setting

Set the switches as follows.

DIP switch - SW103									
1 2 3 4 5 6 7									
Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed		
at ON	at ON	at ON	at ON	at OFF	at OFF	at OFF	at OFF		

[DIP switch - SW107, SW108, SW109]

Set the switches as follows.

DIP swite	h-SW107	DIP swite	h-SW108	DIP switch-SW109		
1	2	1	2	1	2	
Fixed at OFF	Fixed at OFF	Fixed at OFF	Fixed at OFF	Fixed at OFF	Fixed at OFF	

9. TURNING ON THE POWER

- Before turning on the power, check that the voltage is within the rated range. If operated outside the rated range, erroneous operation cannot be prevented and cannot be compensated.
- (1) Check the network convertor wiring and switch settings on the circuit board.
- (2) Check the wiring and switch settings for the VRF system. For the wiring and switch settings method, refer to the installation instruction sheet of each unit.
- (3) Turn on the power for the VRF system.
- (4) Turn on the power for the network convertor.
 - The network convertor is initialized for a period of approximately ten seconds after turned on the power.

BB is displayed on D129 during this period.

- After initial setting completely the operation mode will be started.
- * Network convertor does not operate during initialization. Do not attempt control from the units.
- * An error code will appear on D129 in the event of a malfunction.

10. ERROR CODE DISPLAY

Error code	Contents
_	No error (operation mode)
88	Initial setting
[]	Main PCB error
12	Remote controller communication error
14	Network communication error
EA	EEPROM error
26	Address setting error

SETTING METHOD WHEN CONNECTING A SINGLE SPLIT TYPE INDOOR UNIT

11. WIRING

- Before starting installation work, turn off the power of this unit and the connection destination. Do not turn on the power again until installation is completed. Otherwise, it will cause electric shock or fire.
- Use the accessories or specified power cable and connection cables. Do not modify power cable and connection cables other than those specified, do not use extension cables, and do not use independent branch wiring. The allowable current will be exceeded and cause electric shock or fire.
- Install the connection cables securely to the terminal block. Confirm that external force is not applied to the cable. Use connection cables made of the specified cable. If intermediate connection or insertion fixing are imperfect, it will cause electric shock, fire, etc.
- When connecting the power cable and transmission cable, layout the wiring so that the cover of this unit is securely fixed. If the cover is imperfectly fixed, it may cause fire or overheating of the terminals.
- Perform ground work positively. Do not connect the ground cable to a telephone ground cable, water pipe, or conductor rod.
- Always fasten the outside covering of the connection cable with the cable clamp. (If the insulator is chafed, electric leakage may occur.)
- When performing cable wiring work, be sure that it does not touch the user. Doing so will cause injury or electric shock.
- If any cable is damaged, do not repair or modify it yourself. Improper work will cause electric shock or fire.

- Do not bind the remote controller cable and the transmission cable together with or parallel to the power supply cable of the indoor and outdoor units. It may cause erroneous operation.
- When performing wiring work, be careful not to damage the cable or injure yourself. Also, connect the connectors securely. Loose connectors will cause trouble, heating, fire, or electric shock.
- Install the indoor and outdoor units, power cable, signal cable and remote control cable 1 m away from television and radio to avoid distorted images and noise.
- Perform wiring so that water does not enter this unit along the external wiring. Always install a trap to the wiring or take other countermeasures. Otherwise it will cause trouble or electric shock or fire.
- Confirm the name of each unit and name of each terminal block of the unit and connect the wiring in accordance with the directions given in the manual so that there is no incorrect wiring. Incorrect wiring will damage the electric parts and cause smoke and fire.

- When installing the connection cables near a source of electromagnetic waves, use shielded cable.
 Otherwise, a breakdown or malfunction could result.
- The terminal screws and ground screws have different shapes. Be sure to install the screws in the correct locations. If the screws are installed in the wrong locations, the circuit board could be damaged.

11.1. Wiring method



[Example of connecting single split type indoor unit in a parallel arrangement]



- *1 Up to 16 indoor units may be controlled with a single network convertor, however multiple indoor units connected to the network convertor are generally required to have the same setting.
- *2 Always use indoor units with the same RC model or the same system type when connecting multiple indoor units. Refer to "[DIP switch - SW103 <1, 2, 3, 4>] RC model or system type setting" in "13 CIRCUIT BOARD SETTING" for information about RC models.

*3 Connect a single big multi system to a single network convertor. Do not connect two big multi systems, or a big multi system and a single model system.



- *4 Network convertor is necessary for each indoor unit.
- *5 For using J series heat pump system, "AUTO" and "FAN" mode should not be used.
- *6 When connecting the J-series heat pump model, the set operation conditions will be displayed on the control unit. Therefore, the indoor unit may enter the operation standby condition as described below.
 - Ex. 1) If FAN setting is selected from the control unit, the LED on the indoor unit will flash and the unit will enter the operation standby condition. Select another operation mode to clear the standby condition.
 - Ex. 2) If an operation mode that is different from a currently operating indoor unit is selected from the control unit, the LED on the indoor unit will flash and the unit will enter the operation standby condition. Select the operation mode of the other indoor unit to clear the standby condition. In addition, if operation becomes possible, such as by stopping the other indoor unit, the standby condition will be cleared and the indoor unit will automatically start operating with the selected mode.

Number of connected network convertors

- Up to 100 network convertors may be connected in the VRF system.
- * A single network convertor is considered as a single refrigerant system, irrespective of the number of connected single models.

Compatible indoor units

J-series		0
	Wireless RC model	×
Big multi	Simultaneous model	0
	Individual model	0
Single split type		0
	Wired RC model	0
	Wireless RC model	×
Window type		×

* The following indoor unit models may be controlled from a network convertor. However, the indoor unit cannot be controlled if a wired remote controller cannot be connected to it. 1) When 4th letter is an alphabet, indoor unit models using the "N" or "U" SERIES NAME.



2) When 4th letter is a figure, indoor units models using the "L", "U" or "F" CONTROL METHOD.

Α	U	<u>Y</u>	2	5	<u>T</u>	L	<u>A</u>	М	Α
TYP	E	MARKET REGION	MODEL	CODE	FUNCTION TYPE	CONTROL METHOD (REMOTE CONTROL)	MODEL CHANGE CODE	SPE	CIAL HOD

- * When connecting an indoor unit that has an "L" control method, connect the remote controller for VRF (UTB-*U*, UTB-*R* and UTB-*P*) to control from a wired remote controller. Do not connect the wired remote controller included with the indoor unit.
- * For indoor units that have an "L" control method, only included remote controllers with RC numbers indicated in the RC number/RC model table in "13 CIRCUIT BOARD SETTING" can be used.
- * As the network convertor is not compatible with "Flow direction setting" (except for wired remote controllers), "Anti-freeze", "Filter sign", "Set temperature 10-15°C" (except for models using the "U" control method), 'Room temperature detection location' (except for models using the "U" control method), 'Model name display', and 'Electricity charge calculation', control and display are not possible with the controller units.

Wired remote controller that can be connected with network convertor

Model name	UTB- * UB
RC Number	AR-3TA**

(* arbitrary character)

* RC Number is displayed on the back of the remote controller.

* Only this model is available.

12. INSTALLING THE NETWORK CONVERTOR

- Always use the accessories and specified installation work parts. Check the state of the installation parts. Not using the specified parts will cause units to fall off, water leakage, electric shock, fire, etc.
- Install at a place that can withstand the weight of the unit and install positively so that the unit will not topple or fall.
- When installing this unit, make sure that there are no children nearby.
- Otherwise, injury or electric shock could result.
- Install a circuit breaker. Otherwise, electric shock or fire could result.

- Do not set the DIP switch or rotary switch of this unit except as specified in this installation manual or the instruction manual supplied with the air conditioner. Setting the switches other than specified will cause an accident or trouble.
- · Use an insulated screwdriver to set the DIP switches.
- Before opening the case of this unit, completely discharge static electricity charged on your body. Not doing so will cause trouble.
- Do not touch the circuit board and circuit board parts directly with your hands.
 - Otherwise, injury or electric shock could result.
- Tightening the mounting screws too tight will damage the case of this unit.
- Be careful so that the front cover does not fall after the front cover screws are removed.
 Otherwise, injury could result.

12.1. Installation

- (1) Remove the four screws (M4 x 6 mm), and then remove the cover.
- (2) Pass the power supply cable, remote controller cables and transmission cables through the bushing and pull it into the network convertor.
- (3) Form the binder (push mount) provided into a ring shape and pass each of the cables - the power supply cable, remote controller cables, transmission cables through it.
- (4) Route the power supply cable, remote controller cables and transmission cables to their respective terminal block and ground properly.
- (5) After the wiring of the cables, press the binder (push mount) that had been shaped into a ring and insert it in the hole in the box for securing the binder (push mount).
- (6) Securely tighten the binder (push mount) and then confirm that the cable will not come out.
- (7) Once the wiring of the cables has been completed, mount of the cover to the network convertor. Use the screws (M4 x 6 mm) to mount the cover.
- (8) Use the four screws (M4 x 20 mm) provided to mount the network convertor to the behind ceiling, wall, floor or other suitable location.



Tightening torque for installing cables to terminal block 0.8 to 1.2 N • m (8 to 12 kgf • cm)

12.2. Connection of remote controller cable

• When connecting the remote controller cable (cord) to the indoor unit, do not connect it to the outdoor unit or the power terminal block. It may cause a failure.

When connecting Indoor unit and Network convertor with the Remote controller cable, the following items should be considered.



There are 2 methods to connect the remote controller cable (cord) to the indoor unit. One is the connection using contained connecting cable (cord), and the other is the connection the remote controller cable (cord) is connected to the exclusive terminal block of the indoor unit.

Exclusive terminal block for remote controller connection method is different depending on each model. Modify the remote controller cable (cord) as per below description and connect it.

(For the details, refer to the installation manual of the indoor unit to be used.)

(1) WHEN CONNECTING TO THE CONNECTOR

Connect the remote controller cable (cord) to the connecting cable (cord), and insert it to the connector.



Modify the cable as per below methods.

- ① Use a tool to cut off the terminal on the end of the remote controller cable (cord), and then remove the insulation from the cut end of the cable as shown in Fig. 1.
- ② Connect the remote controller cable (cord) and connecting cable (cord) as shown in Fig. 2.
- ③ Be sure to insulate the connection between the cables.



(2) WHEN CONNECTING TO THE EXCLUSIVE TERMINAL BLOCK

Connect the end of remote controller cable (cord) directly to the exclusive terminal block.



X It may be failed if it is connected to the outdoor unit or the terminal block for power supply.

13. CIRCUIT BOARD SETTING

Set network convertor rotary switch SW110, SW111 and Dip switch SW103, SW107, SW108, SW109.



(1) [Rotary switch-SW110, SW111] set the refrigerant circuit address

A single network convertor is considered as a single refrigerant system, irrespective of the number of connected single models.

In the case of multiple refrigerant system, set SW110 and SW111 as shown in the following table for each Network convertor.

Example: When SW110 is set to "3" and SW111 is set to "0", the refrigerant circuit address will be "30".

Refrigerant circuit	nt Rotary Switch Setting		Refrigerant circuit	Rot Switch	ary Setting
address	SW110	SW111	address	SW110	SW111
0	★ 0	★ 0	31	3	1
1	0	1	32	3	2
2	0	2	33	3	3
3	0	3	34	3	4
4	0	4	35	3	5
5	0	5	36	3	6
6	0	6	37	3	7
7	0	7	38	3	8
8	0	8	39	3	9
9	0	9	40	4	0
10	1	0	41	4	1
11	1	1	42	4	2
12	1	2	43	4	3
13	1	3	44	4	4
14	1	4	45	4	5
15	1	5	46	4	6
16	1	6	47	4	7
17	1	7	48	4	8
18	1	8	49	4	9
19	1	9	50	5	0
20	2	0	51	5	1
21	2	1	52	5	2
22	2	2	53	5	3
23	2	3	54	5	4
24	2	4	55	5	5
25	2	5	56	5	6
26	2	6	57	5	7
27	2	7			
28	2	8			
29	2	9	98	9	8
30	3	0	99	9	9

^{(★:} Factory setting)

(2) [DIP switch-SW103 <1, 2, 3, 4>] Signal conversion type setting

Use the pattern A or pattern B setting method according to the model name.

(2) - 1. Selecting the pattern

1) When 4th letter is an alphabet,



Indoor unit model (1)



2) When 4th letter is a figure,

Control method "F" or "U" 🖒 Pattern A

Control method "L" C Pattern B

Indoor unit model (2)



(2) - 2. Setting methods

(1) Setting method for Pattern A

Set the system type in accordance with the table to the right.

Outdoor unit System	DIP switch-SW103			
type	1	2	3	4
Heat pump model	OFF	ON	OFF	OFF
Cooling only model	ON	ON	OFF	ON
Factory setting	ON	ON	ON	ON

(2) Setting method for Pattern B

Set the remote controller model compatible with the number on the back of the wired remote controller packaged with the single model or big multi model as shown in the following table.

The following remote controller cannot be connected with the network convertor. (See En-9)

PC number	DIP switch-SW103				
RC number	1	2	3	4	
EZ-099DHSE-R, EZ-000DHSE-R, EZ-0000HSE-R, EZ-00004HSE-R, EZ-00005HSE-R, EZ-0015HSE-R, EZ-0019HSE-R, EZ-009DHSEFR, EZ-00001HSEFR, EZ-0000HSEFR, EZ-0000HSEFR, EZ-0000HSEFR, EZ-0000HSEFR, EZ-0000HSEFR,	OFF	OFF	OFF	OFF	
EZ-0994HSE-R, EZ-000EHSE-R, EZ-0994HSEFR	OFF	OFF	OFF	ON	
EZ-099CWSE-R, EZ-000AWSE-R, EZ-0001WSE-R, EZ-000FWSE-R, EZ-0012WSE-R, EZ-099CWSEFR, EZ-0001WSEFR, EZ-000AWSEFR	ON	OFF	OFF	OFF	
EZ-09906WSE-R, EZ-000BWSE-R, EZ-09906WSEFR	ON	OFF	OFF	ON	

(3) [DIP switch-SW103 <5, 6, 7, 8>] Setting the number of connected indoor units

Set the number of connected indoor units as shown in the following table.

Number of the		DIP switch-SW103				
connected indoor unit	5	6	7	8		
1	★OFF	★OFF	★OFF	★OFF		
2	OFF	OFF	OFF	ON		
3	OFF	OFF	ON	OFF		
4	OFF	OFF	ON	ON		
5	OFF	ON	OFF	OFF		
6	OFF	ON	OFF	ON		
7	OFF	ON	ON	OFF		
8	OFF	ON	ON	ON		
9	ON	OFF	OFF	OFF		
10	ON	OFF	OFF	ON		
11	ON	OFF	ON	OFF		
12	ON	OFF	ON	ON		
13	ON	ON	OFF	OFF		
14	ON	ON	OFF	ON		
15	ON	ON	ON	OFF		
16	ON	ON	ON	ON		

(★: Factory setting)

(4) [DIP switch-SW107<1,2>,DIP switch-SW108<1,2>, DIP switch-SW109<1,2>] Function setting

Set functions as shown in the following table.

		NO	Switch state		Detail	
		NO.	OFF	ON	Detail	
			★Invalidity	Validity	Auto changeover validity / invalidity setting	
	DIP switch-	1			Set to OFF when connecting the J-series heat pump model	
	300109				* Set to OFF when a remote sensor is not used (duct model).	
		2	★Invalidity	Validity	Auto restart validity / invalidity setting	
	DIP switch- SW107	1	★Fixed at OFF	-	Not used	
-		2	★Invalidity	Validity	Wired RC validity / invalidity setting	
	DIP switch-	1	★Fixed at OFF	_	Not used	
	SW108	2	★Fixed at OFF	_	Not used	

(★: Factory setting)

14. TURNING ON THE POWER

• Before turning on the power, check that the voltage is within the rated range. If operated outside the rated range, erroneous operation cannot be prevented and cannot be compensated.

- Check the network convertor wiring and switch settings on the circuit board.
- (2) Check the wiring and switch settings for the VRF system and big multi system or single model. For the wiring and switch settings method, refer to the installation instruction sheet of each unit.
- (3) Turn on the power for the VRF system and big multi system or single model.
- (4) Turn on the power for the network convertor.
 - The network convertor is initialized for a period of approximately ten seconds after turned on the power.

BB is displayed on D129 during this period.

- After initial setting completely the operation mode will be started. is displayed on D129.
- * Network convertor does not operate during initialization. Do not attempt control from the units.
- * An error code will appear on D129 in the event of a malfunction.

15. ERROR CODE DISPLAY

Error code	Contents	
_	No error (operation mode)	
88	Initial setting	
[]	Main PCB error	
12	Remote controller communication error	
16	16 Peripheral device communication error	
EA	EEPROM error	
26	Address setting error	
58	Indoor unit error	

When error occurs in the remote controller connected to the network converter, please refer to the installation manual of the remote controller and indoor unit.