OPTION PARTS

Wireless kit



- Fasten the wiring to the terminal securely and hold the cable securely so as not to apply unexpected stress on the terminal.
 - Loose connection or hold will cause abnormal heat generation or fire.
- Make sure the power supply is turned off when electric wiring work. Otherwise, electric shock, malfunction and improper running may occur.

- DO NOT install the wireless kit at the following places in order to avoid malfunction.
 - (1) Places exposed to direct sunlight
 - (2) Places near heat devices
 - (3) High humidity places
 - (4) Hot surface or cold surface enough to generate condensation
 - (5) Places exposed to oil mist or steam directly(6) Uneven surface
 - (7) Places affected by the direct airflow of the AC unit.
- (8) Places where the receiver is influenced by the fluorescent lamp (especially inverter type) or sunlight.

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- (9) Places where the receiver is affected by infrared rays of any other communication devices
- (10) Places where some object may obstruct the communication with the remote controller
- DO NOT leave the wireless kit without the cover.
 In case the cover needs to be detached, protect the receiver with a packaging box or bag in order to keep it away from water and dust.

Note

Instruct the customer how to operate it correctly referring to the instruction manual.

• For the installation method of the air conditioner itself, refer to the installation manual enclosed in the package.

FDK Series

- · RCN-K-E (Models : FDK22~56)
- · RCN-K71-E (Model : FDK71)

WIRELESS KIT INSTALLATION MANUAI

PHA012D038

 Use specified wire for electrical wiring, fasten the wiring to the unexpected stress on the terminal. Loose connections or hold could result in abnormal heat generation 	terminal securely, and hold the cable securely in order not to apply on or fire.
• Turn off the power source during servicing or inspection work. If the power is supplied during servicing or inspection work, it could	cause electric shock and injury by the operating fan.
• Shut off the power before electrical wiring work. It could cause electric shock, unit failure and improper running.	
<u>∧</u> C	AUTION
 DO NOT install it on the following places. (1) Places exposed to direct sunlight (2) Places near heat devices (3) High humidity places (4) Hot surface or cold surface enough to generate condensation (5) Places exposed to oil mist or steam directly 	 (6) Places where the receiver is influenced by the fluorescent lamp (especially inverter type) or sunlight. (7) Places where the receiver is affected by infrared rays of any other communication devices (8) Places where some object may obstruct the communication with the remote controller
DO NOT leave the wireless kit without the cover. In case the cover needs to be detached, protect the receiver with a	packaging box or bag in order to keep it away from water and dust.
DO NOT leave the wireless kit without the cover. In case the cover needs to be detached, protect the receiver with a Attention Instruct the customer how to operate it correctly referr For the installation method of the air conditioner itself	packaging box or bag in order to keep it away from water and dust.

(1)	1) Accessories									
PI	Please make sure that you have all of the following accessories.									
	Control ASSY	Wiring ASSY (A)	Wiring ASSY (B)	Display label	Rubber insulation	Tie	Remote controller holder	AAA dry cell battery(RO3)	Wood screw for holder	Wireless remote controller
00		Right side refrigerant	piping draw out only	① RÚN TIMER/CHECK ② CHECK1 CHECK2				۵	(X)	
	1	1	1	1	1	3	1	2	2	1

2 Preparation before installation

Setting on site

Interface PCB has the following switches to set the function.

Default setting is shown with mark.

SW1-1	Prevents interference during plural setting	ON : Normal (1ch) OFF : Customized (2ch)		
SW1-2	Receiver master/slave setting	ON : Master OFF : Slave		
SW1-3	Buzzer valid/invalid	ON : Valid OFF : Invalid		
SW1-4	Auto restart	ON : Valid OFF : Invalid		
SW1-5	Indication for error	ON : Valid OFF : Invalid		
SW1-6	Not in use	ON : OFF :		

To change setting

1. Remove the upper case of interface PCB assy.

2. Change the switch setting on PCB.



NOTE

When SW1-1 is turned to off position, change the wireless remote controller setting.

For the method of changing the setting, refer to Setting to avoid mixed communication on page 363.







④How to install the wireless remote controller

$\underline{\wedge}$ CAUTION DO NOT install it in the following places.

- 1. Places exposed to direct sunlight
- 3. Places near heat devices
- 5. High humidity places

- 2. Hot surface or cold surface enough to generate condensation
- 4. Places directly exposed to oil mist or steam
- 6. Uneven surface

Installation tips for the remote controller holder

- Adjust and keep the holder up right.
- Tighten the screw to the end to avoid scratching the remote controller.
- DO NOT attach the holder on plaster wall.

How to insert batteries

①Detach the back lid. ②Insert the batteries. (two AAA batteries) ③Reattach the back lid.





(5) Function setting of interface PCB and wireless remote controller

Master/Slave setting when using plural remote controllers

Up to two wireless kit or wired remote controller can be installed in one indoor unit group. When two wireless kit or wired remote controller are used, it is necessary to change setting on the PCB to slave.

Switch	Setting	Contents
Wired remote controller: SW1	Master	Master remote controller
Wireless kit: SW1-2	Slave	Slave remote controller

Setting to avoid mixed communication

In case of plural setting, check the operation distance of wireless remote controller, and avoid mixed communication.

Refer to **Wireless remote controller unit operation distance** on page 364 about the operation distance.

It is necessary to change setting of interface PCB and wireless remote controller.

(1) Interface PCB

Set SW1-1 to "OFF" position.

(2) Wireless remote controller

Pressing ACL and AIR FLOW button at the same time or inserting the batteries with pressing AIR FLOW button will customize the signal.

Setting to disable the Auto mode operation

VRF system (except heat recovery 3-pipe system) cannot be operated in Auto mode. Make sure to set the remote controller for the models so as not to be able to choose Auto mode.

Pressing ACL and MODE button at the same time or inserting the batteries with pressing MODE button will make auto mode operation.

ATTENTION

When the batteries are removed, the setting will return to the default setting. Please make sure to reset it when the batteries are replaced.

A Caution

Instruct the customer to set the mentioned above when replacing the batteries. (How to set is also mentioned in the user's manual attached on the air conditioner.)



Auto mode operation setting

6Wiring

Control plural indoor units with one remote controller

Up to 16 indoor units can be connected.

- ① Connect indoor units with each other with 2-core wires. As for size, refer to the following note.
- ② The receiver wires must be connected only with the indoor unit that will be operated by the remote controller directly.
- ③ Use the rotary SW1 and SW2 provided on the indoor unit PCB (Printed circuit board) to set unique remote control communication address avoiding duplication.

Restrictions on the thickness and length of wire (Maximum total extension 600m.)

Standard Within 100m x 0.3mm² Within 200m x 0.5mm² Within 300m x 0.75mm² Within 400m x 1.25mm² Within 600m x 2.0mm²



⑦Wireless remote controller operation distance

① Standard signal receiving range

[Condition]

Illuminance at the receiver area: 360 lux.

(When no lighting fixture is located within 1m of indoor unit in an ordinary office)



② Points for attention in connecting a plural number of indoor units

[Condition]

Illuminance at the receiver area: 360 lux.



(8) Trial operation

Backup switch

The backup switch is provided on the receiver section. It is possible to use the backup switch as shown in the figure below. When operation from the wireless remote controller unit is not possible (due to flat batteries, a mislaid unit, a unit failure), the backup switch can be used as an emergency means. The backup switch is operated manually.

- If pressed while the air conditioner is in a halt, it will cause the air conditioner to start operation in the automatic mode (in the case of cooling only, in the cooling mode).
 Fan speed: Hi fan, Temperature setting: 23°C, Louver: horizontal
- (2) If pressed while the air conditioner is in operation, it will stop the air conditioner.

<FDK22-56>





Cooling test run operation

- After safety confirmation, turn on the power.
- Transmit a cooling operation command with the wireless remote controller, while the backup switch on the receiver is depressed.
- If the backup switch on the receiver is pressed during a test run, it will end the test run.
- If the air conditioner can not operate properly during the test run, check wiring according to the trouble shooting guides.

NOTE

- 1. After over 2 minute from power on, operate the wireless remote controller. The operation is invalid during 2 minute from power on.
- 2. Check indicator lamp "check1" / "check2" shows error code. The number of blinking shows the error code number of tens/ones place and check1/check2 corresponds to tens/ones place.



- Notes (1) Two R03 AAA dry cell batteries for remote controller are enclosed.
 - (2) See spec sheet of "Wireless remote controller" about remote controller.
 - (3) In case of pipe through right, use attached wirings.





Remote controller Remote controller holder

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Installation of remote controller

DO NOT install on the following places.
(1) Places exposed to direct sunlight
(2) Hot surface or cold surface enough to generate condensation
(3) Places near heat devices
(4) Places exposed to oil mist or steam directly
(5) High humidity places
(6) Uneven surface