

INSTALLATION MANUAL

WIRED REMOTE CONTROLLER For authorized service personnel only. English

Deutsch

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INSTALLATIONSANLEITUNG

KABEL-FERNBEDIENUNG Nur für autorisiertes Fachpersonal.

MANUEL D'INSTALLATION

TÉLÉCOMMANDE FILAIRE Pour le personnel d'entretien autorisé uniquement.

MANUAL DE INSTALACIÓN

MANDO A DISTANCIA CON CABLE Únicamente para personal de servicio autorizado.

MANUALE DI INSTALLAZIONE

UNITÀ DI CONTROLLO A FILO A uso esclusivo del personale tecnico autorizzato.

ΕΓΧΕΙΡΙΔΙΟ ΕΓΚΑΤΑΣΤΑΣΗΣ

ΕΝΣΥΡΜΑΤΟ ΤΗΛΕΧΕΙΡΙΣΤΗΡΙΟ Μόνο για εξουσιοδοτημένο τεχνικό προσωπικό.

MANUAL DE INSTALAÇÃO

CONTROLO REMOTO COM FIOS Apenas para pessoal de assistência autorizado.

РУКОВОДСТВО ПО УСТАНОВКЕ

ПРОВОДНОЙ ПУЛЬТ ДИСТАНЦИОННОГО УПРАВЛЕНИЯ Только для авторизованного обслуживающего персонала.

KURULUM KILAVUZU

KABLOLU UZAKTAN KUMANDA Yalnızca yetkili servis personeli için.



有线遥控器 仅针对授权的专业维修人员。



UTY-RNKY UTY-RNKG UTY-RNKYT

PART NO. 9373328070-08

FUJITSU GENERAL LIMITED

INSTALLATION MANUAL

PART NO. 9373328070-08 WIRED REMOTE CONTROLLER

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1. SAFETY PRECAUTIONS

- The "SAFETY PRECAUTION" indicated in this manual contain important information pertaining to your safety. Be sure to observe them.
- Request the user to keep this 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 installation work in accordance with this manual. Request an authorized service personnel to perform installation work. Improper installation work will cause injury, electric shock, fire, etc.

Perform electrical work by an authorized service personnel in accordance with this manual and the electrical wiring regulations or implementation regulations of the country. Improper electric work will cause electric shock or a fire.

In the event of a malfunction (burning smell, etc.), immediately stop operation, turn off the electrical breaker, and consult authorized service personnel. Improper electric work will cause electric shock or a fire.

Do not install this unit in the following areas:

- Do not install the unit near a source of heat, steam, or flammable gas. Otherwise, fire could result.
- Area containing equipment that generates electromagnetic interference. It will cause the control system to malfunction, preventing the unit from operating normally.
- 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.

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.

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

When detecting the room temperature using the remote controller, please set up the remote controller according to the following conditions. If the remote controller is not well set, the correct room temperature will not be detected, and thus the abnormal conditions like "not cool" or "not heat" will occur even if the air-conditioner is running normally. :

- A location with an average temperature for the room being air conditioned.
- · Not directly exposed to the outlet air from the air-conditioner.
- · Out of direct sunlight.
- · Away from the influence of other heat sources.

Do not touch the switches with sharp objects. It will cause injury, trouble, or electrical shock.

Do not expose this unit directly to water. It will cause trouble, electrical shock, or heating.

Do not set vessels containing a liquid on this unit. It will cause heating, fire, or electrical shock.

Do not insert articles into the slit parts of this unit. It will cause trouble, electrical shock, or heating.

2. MAIN UNIT AND ACCESSORIES

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



(*) UTY-RNKYT does not contain cables.

3. ELECTRICAL REQUIREMENT

When connecting the remote controller use the following wiring.

Use	Size	Length	Wire type	Remarks
Remote con- troller cable	0.33 mm ² (22AWG)	500 m max.	Polar 3 core, Twisted pair	Use shield cable in accordance with local rules for cable.

4. SELECTING AN INSTALLATION LOCATION

4.1. Dimensions



4.2. Name of parts

• With cover open



- ① " & SET TEMP. V", " SET TEMP. A" (Set Temperature Button)
- ② " (TIMER MODE / CLOCK ADJUST" (Timer Mode/Clock Adjust Button)
- ③ "DAY / DAY OFF" (Day/Day OFF Button)
- (4) "(3) SET BACK" (Set Back Button)
- (5) "≪ (-)", "(-) ≫" (Set Time Button)
- 6 "TIMER DELETE" (Timer Delete Button)
- "TIMER SET" (Timer Set Button)
- START/STOP" (Start/Stop Button)
- ③ "⊗*○ MODE" (Mode Button)
- 10 "X FAN" (Fan Control Button)
- (f) "4 (Horizontal airflow direction and swing Button)
- (2) " $\frac{1}{2}$ " (Vertical airflow direction and swing Button)
- (3) "ECONOMY / " THERMO SENSOR" (Economy/Thermo Sensor Button)
- (ﷺ) MAINTENANCE / FILTER RESET" (Maintenance/Filter Reset Button)
- (5) Operation Indicator
- Operation Lock Indicator
- ⑦ Temperature Indicator
- (8) Operation Mode Indicator

5. INSTALLING THE REMOTE CONTROLLER

Always use the accessories and specified installation work parts. Not using the specified parts will cause units to fall off, 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.

During installation work, do not permit children or users to approach. It will cause injury or electric shock.

Before starting installation work, turn off the power of indoor unit power supply. Do not turn on the power again until installation is completed. Otherwise, it will cause electric shock or fire.

Use the attached cable. If extending or branching, implement suitable measures. When connecting the cables to the terminal, make sure to connect securely. Improper installation work may cause electric shock, fire, or heat.

Install the remote controller cables securely to the terminal block. Confirm that external force is not applied to the cable.

If intermediate connection or insertion fixing are imperfect, it will cause electric shock, or fire, etc.

Perform functional earthing work positively. Do not connect the functional earthing wire to a telephone functional earthing wire, water pipe, or conductor rod.

Always fasten the outside covering of the connection cable with the cable tie. (If the insulator is loose, short circuit may occur.)

Do not set the DIP switch of this unit except as specified in this manual or the operating 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 you body. Not doing so will cause trouble.

Do not touch the PC board and PC 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 case does not fall after the front case screws are removed. Otherwise, injuly could result.

Install the remote controller cables 1 m away from television and radio to avoid distorted images and noise.

Make sure water and insects do not enter the unit. Use putty, etc., as a countermeasure to gaps that may provide a route of ingress. Water and insects may cause malfunction, electric shock, or fire.

Confirm the 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. Improper wiring work will damage the electric parts and cause smoke and fire.

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.

5.1. Installation

Open the operation panel on the front of the remote controller, remove the 2 screws indicated in the following figure, and then remove the front case of the remote controller.

When open the remote controller, remove the connector from the front case. The cables may break if the connector is not removed and the front case hangs down.

When installing the front case, connect the connector to the front case. When removing and connecting the connector, be careful not to break the cables.



Be careful to avoid breaking the cable by over-tightening the cable tie.

When connecting the remote controller cables, do not overtighten the screws.

- Pass the remote controller cable through the hole in the rear case and connect the remote controller cable to the remote controller terminal block specified in Fig.1.
- (2) Clamp the remote controller cable sheath with the cable tie as shown in Fig. 1.

Fig. 1





*Tighten the cable tie firmly so that pulling force does not propagate to the terminal connection even if force of 30N is applied to the cable.

- (3) Cut off the excess cable tie.
- (4) Install the rear case to the wall, box, etc., with 2 screws (Fig. 2).

Fig. 2



Insert the upper case firmly. If improperly attached, it will cause the upper case to fall off.

When installing remote control cables, cover the remote control cables using an isolation tube or cover at least 1mm thick minimum to prevent direct contact with the cables.





5.2. Setting the DIP switch







ſ		NO	Switch state		Deteil
		NO.	OFF	ON	Detail
	DIP switch 1 (DS 1)	2	★ Master	Slave	Refer to 6. INSTALLA- TION METHODS.
		6	★ Disable	Enable	Memory backup setting *1
		1,3 to 5	★ Fixed at OFF		Cannot be used

(★ Factory setting)

*1. Memory backup setting : Set to ON to use batteries for the memory backup. If batteries are not used, all of the settings stored in memory will be deleted if there is a power failure.

5.3. Connecting to the indoor unit

When connecting the remote controller cable to the indoor unit, do not connect it to outdoor unit, power supply cable, or transmission cable terminal blocks. It may cause a failure.

When switching the DIP switch (SW1), be sure to turn off the power supply to the indoor unit. Otherwise, the PC board of the indoor unit may be damaged.

- There are 2 methods to connect the remote controller cable to the indoor unit. One is the connection using connecting cable (shipped with the indoor unit), and the other is the connection the remote controller cable is connected to the exclusive terminal block of the indoor unit.
- · This is 3WIRE of remote control cables.
- The factory default setting of the DIP switch (SW1) is "2WIRE". (Indoor unit) Using this setting, however, will disable normal operations.

5.3.1. Check whether or not a DIP switch (SW1) is present.



5.3.2. Check whether the indoor unit terminal block or connectors are either type A or type B as described below.



• Type A (Terminals)

(1) Cut the Y-type remote control cable terminal, and strip the isolation from the tip of the remote control cable. (Fig. 1)

Fig. 1



(2) Connect the remote control cable to the exclusive terminal block.

Functional earthing (U	TY-RNKYT) / ^{Termin}	al block	
Remote controller cable Red : Y1 White : Y2 Black : Y3		PC board	
Tightening torque			
1			

 M3 screw
 0.5 to 0.6 N·m

 (Remote controller / Y1, Y2, Y3)
 (5 to 6 kgf·cm)

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



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





- (UTY-RNKYT) Connecting cable
- Be careful of the following when connecting 2 cables to 1 terminal.

Functional earthing



6. INSTALLATION METHODS

6.1. Group control



A number of indoor units can be operated at the same time using a single remote controller.

- Type A (Terminals) Indoor unit 0 Indoor unit 2 Indoor unit 3 Indoor unit 1 When there + Y1 Y2 Y3 V1 V2 V3 is a functional earthing cable (UTY-RNKYT) Remote controller cable 1 2 3 Remote controller Type B (Connectors) Indoor unit 0 Indoor unit 1 Indoor unit 2 Indoor unit 3 Remote - 1 controller cable When there is a functional Connector earthing cable Connection (UTY-RNKYT) 2 3 Remote controller
- (2) Remote controller address setting
 - Set each remote controller address using the switch of each indoor unit in order from 0. (Refer to the installation manual for the indoor unit.) Up to 16 indoor units can be connected.

6.2. Dual remote control

- · 2 remote controllers can be used to operate the indoor units.
- The timer cannot be used on the slave units
- ADDRESS SETTING and FUNCTION SETTING cannot be used on the slave units.
 The remote controller (UTB- * LA) and remote controller (UTB- * U * ,
- UTB- * P *, UTB- * R *) cannot be connected at the same time.

(1) Wiring method

(Indoor unit to remote controller)

• Type A (Terminals)



Remote controller

Type B (Connectors)



(2) Remote controller DIP Switch 1- No. 2 setting

Set the remote controller DIP switch 1- No. 2 according to the following table.

Number of remote	Master unit	Slave unit	
controllers	DIP switch 1 - No. 2	DIP switch 1 - No. 2	
1 (Single)	OFF	-	
2 (Dual)	OFF	ON	

· Group control and dual remote control can be used together.

 When connecting 2 remote controllers, the remote controller can also be connected together with another type of remote controller.

7. TURNING ON THE POWER

Recheck the wiring. Incorrect wiring will cause trouble

- (1) Check the remote controller wiring and DIP switch settings.
- (2) Install the front case.
- * When installing the front case, connect the connector to the front case (in 5 INSTALLING THE REMOTE CONTROLLER).
- (3) Check the indoor and outdoor unit wiring and circuit board switch settings, and then turn on the power of the indoor and outdoor units.

After " **9** " has flashed on the set temperature display for several seconds, the clock display will appear in the center of the remote controller display.



For the wiring and circuit board switch settings method, refer to the installation manual for the indoor unit and outdoor unit.

8. SETTING THE ROOM TEMPERATURE DETECTION LOCATION

As the temperature sensor of remote controller detects the temperature near the wall, when there is a certain difference between the room temperature and the wall temperature, the sensor will not detect the room temperature correctly sometimes. Especially when the outer side of the wall on which the sensor is positioned is exposed to the open air, it is recommended to use the temperature sensor of the indoor unit to detect the room temperature when the indoor and outdoor temperature difference is significant.

The detection location of the room temperature can be selected from the following 2 methods. Choose the detection location that is best for the installation location.

The temperature sensor of the indoor unit or the remote controller can be used to detect the room temperature.

Press the "ECONOMY / THERMO SENSOR" button for 2 seconds or more to select the temperature sensor of the indoor unit or the remote controller.



NOTES

The remote controller sensor cannot be used if the indoor unit has no temperature setting function. When this function cannot be used, the lock display one will flash when the "ECONOMY / THERMO SENSOR" button is pressed.

9. ADDRESS SETTING

Address setting method of indoor unit can be selected from 3 options (outdoor unit, indoor unit and remote controller).

Refer to the installation manual of outdoor unit or indoor unit when set up from the outdoor unit or the indoor unit.

- "Indoor unit address" and "Refrigerant circuit address" can be set using the remote controller.
- This function can be set in all indoor units when the remote controller is connected.
- "Remote controller address" cannot be set in this function.
 Ensure to set with the Rotary switch of PCB of the indoor unit.
- When setting the address of indoor unit, refer to installation manual of indoor unit.

- When setting the address of outdoor unit automatically, refer to installation manual of outdoor unit.
- When setting the address with a remote controller, refer to installation manual of indoor unit for setting details of indoor unit.

Switching selection of address setting mode

(1) Press the " SET TEMP. V" button, " SET TEMP. " button and " FAN" button for more than 5 seconds simultaneously. Then shift to Address setting mode.



Address setting mode initial display

Indoor unit address setting

(2) Press the " O BSET BACK" button and select the Remote controller address (Select the relevant indoor unit).



(3) The Address code "01" blinks when pressing the "< ④" button or "④ >" button.









Ex. When Indoor unit address data "12" is selected.

12-

GOOD

(5) Fix the Indoor unit address data by pressing the "TIMER SET" button. (Data is transferred to the indoor unit).



- When Indoor unit address data is not set in the indoor unit address.
 (-- is displayed).
- When Indoor unit address data is set in the indoor unit properly. (Blinking changes to steady illumination)

12

(-- is displayed). Set the Indoor unit address data again as per procedure (3)-(5) above.

Refrigerant circuit address setting

(6) Press the " (4) & SET BACK" button and select the Remote controller address (Select the relevant indoor unit).

 Constraint
 Remote controller address

 Remote controller address
 Image: Market address

 Image: Market addres
 Image: Market address

 (7) The Address code "02" blinks when pressing the "< ④" button or "④ >" button.

5U MC TI

0 102)



- > : Up button
- (8) Set the Refrigerant circuit address data by pressing the "₲ SET TEMP. ♥" button or "₲ SET TEMP. ▲" button. (Range of setting is 00-99.)





dress data "18" is selected.

When Refrigerant circuit address

Refrigerant circuit address data

00

(9) Fix the Refrigerant circuit address data by pressing the "TIMER SET" button. (Data is transferred to the indoor unit)



 When Refrigerant circuit address data is not set in the indoor unit. (-- is displayed)

door unit. data is set in the indoor unit properly. cuit (Blinking changes to steady illumiper nation)

• Set the Refrigerant circuit address data again as per procedure (8)-(9) above.

Completion of address setting mode

(10) Address setting mode is released and returns to normal display if the "SET TEMP. ♥" button, "SET TEMP. ♠" button and " FAN" button are pressed simultaneously.



* Address setting mode is released automatically if no key is pressed for 60 seconds even the above buttons are not pressed. (Switch to Address setting mode as per procedure (1) above.)

(11) After completing the ADDRESS SETTING, be sure to turn off the power and turn it on again.

10. FUNCTION SETTING

This procedure changes the function settings used to control the indoor unit according to the installation conditions. Incorrect settings can cause the indoor unit to malfunction.

Perform the "FUNCTION SETTING" according to the installation conditions using the remote controller.

- Refer to the indoor unit installation manual for details on the function numbers and setting numbers.
- Prepare for setting of indoor unit referring to installation manual of indoor unit before start of functional setting.
- Press the "₲ SET TEMP. ♥" button, "₲ SET TEMP. ∧" button and "☆ FAN" button simultaneously for more than 5 seconds to enter the function setting mode.



(2) Press the "(1) & SET BACK" button to select the indoor unit number





(3) Press the "< ④" button or "④ ≥" button to select the function number.



(4) Press the "SET TEMP. V" button or "SET TEMP. A" button to select the setting number. The display flashes during setting number selection.



(5) Press the "TIMER SET" button to confirm the setting. Press the "TIMER SET" button for a few seconds until the setting number stops flashing.

If the setting number display changes or if "--" is displayed when the flashing stops, the setting number has not been set correctly. (An invalid setting number may have been selected for the indoor unit.)



- When Setting Number data is not set in the indoor unit.
 (-- is displayed)
- When Setting Number data is set in the indoor unit properly (Blinking changes to steady illumination)

GOOD

• Set the Setting Number data again as per procedure (4)-(5) above.

(6) Repeat steps 2 to 5 to perform additional settings.

Press the "SET TEMP. V" button, "SET TEMP. " button and "SFAN" button simultaneously again for more than 5 seconds to cancel the function setting mode. In addition, the function setting mode will be automatically canceled after 1 minute if no operation is performed.

(7) After completing the FUNCTION SETTING, be sure to turn off the power and turn it on again.

11. ADMINISTRATIVE INDOOR UNIT SETTING

 If "Priority on Administrative Indoor Unit" is selected in the setting of priority mode by PUSH SWITCH of outdoor unit (refer to installation manual of outdoor unit), an indoor unit selected from the same refrigerant system can be set to "Administrative Indoor Unit".
 "Administrative Indoor Unit" shall be set by the wired remote controller.

<What is Administrative Indoor Unit> An indoor unit which decides the priority mode (cooling or heating) in a

An indoor unit which decides the priority mode (cooling or heating) in a same refrigerant system.

 "Administrative Indoor Unit" can be set to a unit in a same refrigerant system.

<About setting and releasing of Administrative Indoor Unit>

- · Setting and releasing of "Administrative Indoor Unit".
- After the indoor unit stops operation, press the "֎*O MODE" button of wired remote controller for 5 seconds continuously.
 - The operating mode of the wired remote controller display lights on after 5 seconds as follows.

(1)-a) The indication not set as "Administrative Indoor Unit". (1)-b) The indication set as "Administrative Indoor Unit".





Note

In such case, "Administrative Indoor Unit" cannot be set or released.



- "Priority on Administrative Indoor Unit" is not selected in the setting of priority mode of outdoor unit.
- ⇒ Set "Administrative Indoor Unit" in the wired remote controller after selecting "Priority on Administrative Indoor Unit" in setting of priority mode of outdoor unit.
- Another indoor unit was set to "Administrative Indoor Unit" already.
 ⇒ Release the setting "Administrative Indoor Unit" of another indoor unit.
- Set or release "Administrative Indoor Unit".
- (2) Press the "֎≉o≎ MODE" button.
 - Display (1)-b) when setting, and display (1)-a) when releasing.
 - ⇒ The display blinks when the "⊗♣⇔ MODE" button is pressed, and the display of (1)-a) and (1)-b) alters whenever the "⊗♣⇔ MODE" button is pressed.
 - ⇒ The contents set in the wired remote controller are transferred to the indoor unit immediately after the display is selected. It may take 10 seconds depending on communication conditions. While this period, the button operation will be suspended.
 - ⇒ It returns to the normal display after 20 seconds automatically if the operation button is not pressed.
 - ⇒ When setting or releasing is completed, the indication on wired remote controller changes to the normal indication from blinking.

- (3) Complete the setting or releasing of "Administrative Indoor Unit".
 - Press the "③♠心 MODE" button of the wired remote controller again for 5 seconds continuously.
 - ⇒ The indication returns to normal display if the "֎ৈ⇔் MODE" button is pressed for 5 seconds continuously.
 - (It returns to normal indication after 20 seconds even if the " $\otimes \otimes \odot$ MODE" button is not pressed.)

12. TEST RUN

After installing this unit, perform the test run to confirm that this unit is operating properly. Then, explain the operation of this unit to the customer.

- · Test run method of the indoor unit is explained.
- Refer to the indoor unit installation manual for the list of items to check.
- (1) If the operation lamp is on, press the "START/STOP" button to turn it off.



(2) Press the "⊗*☆ MODE" button and " AN" button at the same time for more than 2 seconds to start the test run.







- (3) To stop the test run, press the "START/STOP" button.
 - * The "₲ SET TEMP. ♥" button or "₲ SET TEMP. ▲" button do not function. However, the other buttons can be used to change the settings.
 - * Test run is used for constrained operation of the outdoor unit.
- Note:
- When "םל" is indicated on the temperature display, it means under maintenance.

Indoor unit cannot be operated.

13. ERROR CODE

If an error occurs, the following display will be shown.



Do not used the operation below if an error has occurred.

 When 0-15 is indicated on the Faulty unit No., error has occurred at the indoor unit. Refer to the indoor unit installation manual.

Faulty unit No.	Error code	Contents
[0	12	Indoor unit ↔ remote controller communication error
[]	15	Incompatible indoor unit is connected