

# Flexible Multi System

**5. CONTROL SYSTEM** 

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## **1. CONTROL SYSTEM**

## **1-1. LINE UP OF CONTROLLERS**

## FEATURES OF CONTROL SYSTEM

#### **Air Conditioning Central Control**

Central controller specially designs for centralized control.



# **Central Remote**

Control of indoor units with simple operation and weekly timer.

#### **Air Conditioning Individual Control**

A range of remote controllers suitable for range of individual control situations, using various built-in timers.



The room temperature can be controlled and detected accurately with built-in thermo sensor.



#### Simple Remote Controller

UTY-RSN\*M

Compact remote controller concentrates on the basic functions such as Start/Stop, Fan Control, Temperature Setting and Operation mode.



## **IR Receiver Unit** UTY-LRH\*M | • (-) • (-) • o/I**©** Wireless remote controller for duct type

## **1-2. CONTROL SYSTEM DESIGN**

ADVANCED INTEGRATED CONTROL SYSTEM



## **1-3. SYSTEM CONFIGURATION EXAMPLES**

#### INDIVIDUAL CONTROL

#### Wired Remote Controller

- Wired, simple, and wireless remote controllers can be used jointly.
- Two remote controllers can be connected with single indoor unit.



#### **Simple Remote Controller**

- Enables easy control of basic functions by the hotel or office guest.
- Two remote controller can be connected with single indoor unit.



#### Wireless Remote Controller

• Wired, simple, and wireless remote controllers can be used jointly.



## CENTRAL CONTROL

#### **Central Remote Controller**

- Up to 8 indoor units can be controlled with one central remote controller.
- The central remote controller can be used simultaneously with wired, simple, and wireless remote controller.
- Only one can be used for one system.



#### ■ INDOOR UNIT TYPE AND THE APPLICABLE CONTROL METHOD

	Model	Indoor units						
Туре		Compact Cassette	Slim Duct	Compact Wall mounted		Wall mounted	Floor / Ceiling	Floor
				LJ	LU		e eg	
Central Remote Controller	UTY-DMM*M	O *1	O *1	O *1	O *1	O *1	O *1	O *1
Wired Remote Controller	UTY-RNN*M	0	•	O *2	O *3	0	0	0
	AR-RAH2E	-	-	-	-	•	•	-
Wireless Remote	AR-RAH1E		-		-	-	-	
	AR-REA2E	-	-	-	•	-	-	-
IR Receiver Unit	UTY-LRH*M	-	0	-	-	-	-	-
Simple Remote Controller	UTY-RSN*M	0	0	O *2	O *3	0	0	0

- •: Accessory,  $\bigcirc$ : Optional, –: It is not possible to connect it.
- \*1: Central remote controller is connected with Branch box.
- \*2: Optional Communication kit (UTY-XCBXEZ1) is necessary for the installation.
- \*3: Optional Communication kit (UTY-TWBXF) is necessary for the installation.

## **1-4. CONTROL EQUIPMENT DESIGN LIMITATION**

			Model	The number that can be connected
	Central Controller	Central Remote Controller	UTY-DMM*M	1 / Multi system
			AR-RAH2E	
	Individual Controller	Wireless Remote Controller	AR-RAH1E	-
Controller			AR-REA2E	
		Wired Remote Controller	UTY-RNN*M	
		Simple Remote Controller	UTY-RSN*M	2 / Indoor unit
		IR Receiver Unit	UTY-LRH*M	1 / Indoor unit

CONTROL SYSTEM

## **2. CONTROL UNITS**

- Central Remote Controller
- Wired Remote Controller
- Simple Remote Controller
- Wireless Remote Controller
- IR Receiver Unit

CONTROL

## **Central Control**



## **Individual Control**



## 2-1. CENTRAL REMOTE CONTROLLER

■ MODEL : UTY - DMM\*M



- Large and full-dot liquid crystal screen
- Screen with backlight can be seen even in the dark
- Wide and large keys easy to press, user-intuitive arrow key

#### FEATURES

#### Central & Individual Control

Batched control of up to 8 indoor units. The temperature, airflow volume, and remote control prohibition settings of all indoor units can be batched.

#### User-friendly operation

- Large backlight LED screen
- Large easy-to-see operation panel

#### Easy installation

- Central remote controller is connected directly to the branch box, making the installation process easier.
- Once the controller is connected, it can automatic register and display all the indoor units.



MAIN FUNCTIONS

The remote controller operation of all indoor units comes with a lock function to prevent unapproved operations in the various rooms. The central remote controller also has a key lock function to prevent children from playing with it, etc

#### ■ FUNCTIONS

ONTROL



#### ELECTRICAL WIRING

Example: Wiring diagram when 3 units of branch boxes are connected



Central remote controller

#### ■ INSTALLATION

1) Remove the insulation of the remote controller cable.



2) Insert the flat-blade screwdriver and remove the front case and rear case by twisting it slightly.



3) Install the rear case to the wall, box, etc. with 2 screws (M4 × 16 mm). Fix the 2 screws in either horizontal or vertical position.

#### A. When mounting on the box:

• Attach the case after leading the cable.



#### B. When the cable is along the wall:

- Mount the rear case on the wall.
- Cut off a hole for cabling in the front case.





4) Setting up the DIP switch. Refer to "6. SYSTEM DESIGN".

5) Connect the cable to the terminals on the front case. Fix the cable together with the sheath with the binder. Cut off the excess binder.



#### ▲ CAUTION

- Be careful to avoid breaking the cable by over-tightening the binder.
- When connecting the remote controller cables, do not over-tighten the screws.
- 6) Attach the front case.
- Insert after adjusting upper part of front case.
- When insert the front case, do not pinch the cable.



#### 

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

#### DIMENSIONS





#### ■ PACKING LIST

ONTROL

Name and	shape	Quantity	Application
Remote controller cable		1	For connecting the remote controller
Screw (M4 x 16mm)	(f) Junna	2	For installing the remote controller
Binder		1	For remote controller and remote controller cable binding
Installation manual		1	
Operating manual		1	

#### ■ WIRING SPECIFICATIONS

Use	Cable size	Wire type	Remarks
Remote controller cable	0.33 mm <sup>2</sup> (22AWG)	Polar 3 core	Use sheathed PVC cable

## ■ SPECIFICATIONS

Dimensions [H x W x D]: (mm)	120 x 120 x 21.3	
Weight: (g)	220	

## 2-2. WIRED REMOTE CONTROLLER

#### ■ MODEL : UTY - RNN\*M

FEATURES



- Various timer setup (ON / OFF / WEEKLY) are possible.
- Equipped with weekly timer as standard function. (Start / Stop function is twice per day for a week)
- When setting up a timer, start / stop and a temperature setup can be changed.
- When a failure occurs, the error code is displayed.
- Error history.(Last 16 error codes can be accessed.)
- The room temperature can be controlled by being detective the temperature accurately with Built-in thermo sensor.

#### • Powerful features and compact size



#### • Accurate and comfortable

Indoor temperature can be detected accurately by the inclusion of a thermo sensor in the body of the wired controller.

Our system can correspond to various scenes.

This wired remote controller and the optional remote sensor allows flexibility in sensor location, and suitable for all requirements.



# CONTROL

#### Built-in timers

Weekly timer	Setback timer
Possible to set ON/OFF time to operate twice each day of the week.	Possible to set temperature for two time spans and for each day of the week.
Example : setup screen (Set to Wednesday: 8:00 to 20:00.) 24°C 0 3 6 9 12 15 18 21 Time	Example : setup screen (Set from Sunday to Saturday: 12:00 to 15:00, 28 °C.) 0 3 6 9 12 15 18 21 Time
At "Weekly timer" + "Set back timer" setup	
$24^{\circ}C \rightarrow 28^{\circ}C \rightarrow 24^{\circ}C$	9 12 15 18 21 Time





#### [Variable timer control]

The operation/display sections are zoned according to time and operation, enabling variable programming to match application.

#### Simple installation

Components are compatible with standard switch boxes. Flat back surface allows equipment to be installed wherever it is needed.



#### **FUNCTIONS**



#### Display panel



START/STOP button 1 Pressed to start and stop operation. SET TEMP. button 2 Selects the setting temperature. 3 MODE button Selects the operating mode (AUTO (A), COOL \*, DRYO, FAN 🎘, HEAT 🗘). 4 FAN button Selects the fan speed (AUTO 🐯, HIGH F, MED F, LOW #\*, QUIET .\*). 5 Vertical air flow direction and swing button Press for two seconds to change the swing mode 6 Horizontal air flow direction and swing button Press for two seconds to change the swing mode. 7 Built-in thermo sensor Detect room temperature. 8 TIMER MODE (CLOCK ADJUST) button Selects the timer mode (OFF TIMER, ON TIMER, WEEKLY TIMER) Set the current time. DAY (DAY OFF) button 9 Temporarily cancels of one day timer. 10 SET BACK button Pressed select the set back timer. 11 SET TIME button Pressed to select the set back timer. 12 TIMER DELETE button The schedule of a weekly timer is deleted. 13 TIME SET button Sets the date, hour, minute and on-off time. 14 ECONOMY (THERMO SENSOR) button 15 FILTER RESET button 16 Operation lamp Lights during operation and when the timer is on. 17 Timer and clock display 18 Operation mode display 19 Fan speed display 20 Operation lock display 21 Temperature display Displayed temperature is set temperature. 22 Defrost display Indicates during the oil recovery and defrosting operation. 23 Vertical swing display 24 Horizontal swing display 25 Economy display 26 Thermo sensor display 27 Filter display Note: Functions will be different due to type of indoor unit. For details, please see operation manual.



## INSTALLATION

#### Connection Pattern

Note: Connection pattern is different according to type of Indoor unit.

Indoor unit types	Connection Pattern	
Compact Cassette t		
Slim Duct type		Pattern A
Floor / Ceiling typ		
Compact Wall Mounted LJ		Dottorn P
type	LU	Fallelli D
Wall Mounted typ	Dottorn C	
Floor type		Pattern C

#### Pattern A

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



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

#### Pattern B

1) Modify the remote controller cable as per below methods.

- Use a tool to cut off the 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.
- Connect the remote controller cable and connecting cable as shown in Fig.
- Be sure to insulate the connection between the cables.



- 2) Method of connecting remote controller cable
- Connecting cable made by above-mentioned 1) is connected with terminal A of optional communication kit .
- Cable connected with terminal B of communication kit is connected with PCB of Indoor unit.



## CONTROL SYSTEM

#### Pattern C

- 1) Modify the remote controller cable as per below methods.
- Use a tool to cut off the 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.
- Connect the remote controller cable and connecting cable as shown in Fig.
- Be sure to insulate the connection between the cables.



- 2) Method of connecting remote controller cable
- Connecting cable made by above-mentioned 1) is connected with PCB of Indoor unit.



Name and shape		Quantity	Application
Remote controller cable (10m)		1	For connecting the remote controller
Screw (M4 x 16mm)	(f)	2	For installing the remote controller
Binder		1	For remote controller and remote controller cable binding
Connecting cable *1		1	For connecting the remote controller cable to the Compact wall mounted type and Wall mounted type indoor unit
Screw *1 (M4 x 14mm)		1	For installing the remote controller cable to the indoor unit
Cable clamper *1		1	For installing the remote controller cable to the indoor unit
Installation manual		1	
Operating manual		1	

\*1: Use only if the remote controller cable must be modified for the indoor unit model.

#### ■ WIRING SPECIFICATIONS

Use	Cable size	Wire type	Remarks
Remote controller cable	0.33 mm <sup>2</sup> (22AWG)	Polar 3 core	Use sheathed PVC cable

#### ■ SPECIFICATIONS

NTROL

Dimensions [H x W x D]: (mm)	120 x 120 x 18	
Weight: (g)	160	

#### ■ PART(OPTIONAL)

	Compact w	all mounted
Model name	LJ:UTY-XCBXZ1	LU:UTY-TWBXF

\* The communication kit (LJ:UTY-XCBXZ1 / LU:UTY-TWBXF) is needed for connecting the wired remote controller to the compact wall mounted type.

## 2-3. SIMPLE REMOTE CONTROLLER

#### ■ MODEL : UTY - RSN\*M





- Easy operation.
- Built-in background light function.
- Easy installation with a slim shape with no bulge in the back.
- Error history.(Last 16 error codes can be accessed.)
- Can be installed onto SW-BOX. (applies to European and other country's standard)

#### User-friendly operation

- Provides access to basic operations, such as Start / Stop, Fan speed, operation mode and room temperature setting.
- A large Start / Stop button is provided in the centre of the remote controller unit for easy operation.
- Following an error display, diagnostics can be carried out on the controller.

#### Background light

- Background light enables easy operation in a darkened room.
- Background light activates during all button operations, and lasts 10 seconds in operating mode and 5 seconds in stop mode after a button is pressed.



#### • Simple installation

Can be mounted on the European switch Box (installation dimension: 60mm) or the JIS Built-in Box (installation dimension: 83.5mm)





#### FUNCTIONS



- \*1: during Error code history display mode.
- \*2: during address display mode.
- \*3: during self Diagnosis mode.

## SYSTEM DIAGRAM





A, B, C: Remote controller cable.  $A \leq 500m$ ; B+C  $\leq 500m$ 

#### 2 remote controllers



## ELECTRICAL WIRING

#### 1 remote controller



#### • 2 remote controllers



Remote controller

#### DIMENSIONS



Front View

14

Side View

[Unit : mm]



CONTROL SYSTEM

## INSTALLATION

#### Connection Pattern

Note: Connection pattern is different according to type of Indoor unit.

Indoor unit types		Connection Pattern
Compact Cassette type		
Slim Duct type	Pattern A	
Floor / Ceiling typ		
Compact Wall Mounted LJ		Dottorn P
type	LU	Fallelli D
Wall Mounted type		Pattern C
Floor type		

#### Pattern A

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



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

#### Pattern B

1) Modify the remote controller cable as per below methods.

- Use a tool to cut off the 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.
- Connect the remote controller cable and connecting cable as shown in Fig.
- Be sure to insulate the connection between the cables.



- 2) Method of connecting remote controller cable
- Connecting cable made by above-mentioned 1) is connected with terminal A of optional communication kit .
- Cable connected with terminal B of communication kit is connected with PCB of Indoor unit. \*1:(CN305)-(UTY-XCBXZ1) (CNC01)-(UTY-TWBXF)



5. CONTROL SYSTEM

## CONTROL SYSTEM

#### Pattern C

- 1) Modify the remote controller cable as per below methods.
- Use a tool to cut off the 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.
- Connect the remote controller cable and connecting cable as shown in Fig.
- Be sure to insulate the connection between the cables.



- 2) Method of connecting remote controller cable
- Connecting cable made by above-mentioned 1) is connected with PCB of Indoor unit.



CONTROL

Name and	shape	Quantity	Application
Remote controller cable (10m)		1	For connecting the remote controller
Screw (M4 x 16mm)		2	For installing the remote controller
Binder	Part and a state of the state o	1	For remote controller and remote controller cable binding
Connecting cable *1		1	For connecting the remote controller cable to the Compact wall mounted type and Wall mounted type indoor unit
Screw *1 (M4 x 14mm)		1	For installing the remote controller cable to the indoor unit
Cable clamper *1		1	For installing the remote controller cable to the indoor unit
Installation manual		1	
Operating manual		1	

\*1: Use only if the remote controller cable must be modified for the indoor unit model.

#### ■ WIRING SPECIFICATIONS

Use	Cable size	Wire type	Remarks
Remote controller cable	0.33 mm <sup>2</sup> (22AWG)	Polar 3 core	Use sheathed PVC cable

#### ■ SPECIFICATIONS

Dimensions [H x W x D]: (mm)	120 x 75 x 14
Weight: (g)	90

## ■ PART (OPTIONAL)

	Compact wall mounted		
Model name	LJ:UTY-XCBXZ1	LU:UTY-TWBXF	

\* The communication kit (LJ:UTY-XCBXZ1 / LU:UTY-TWBXF) is needed for connecting the simple remote controller to the compact wall mounted type.

## 2-4. WIRELESS REMOTE CONTROLLER

#### MODEL : AR-RAH2E / AR-RAH1E





 Four kinds of timer setup (ON / OFF / PROGRAM / SLEEP) are possible.

- Can be used jointly with wired remote controllers .
- Easy to change signal code (4 patterns).

#### Built-in timers

Select from four different timer programs (On / Off / Program / Sleep).

#### Program timer

The program timer operates the ON and OFF timer once within a 24 hour period.

#### • Sleep timer

The sleep timer function automatically corrects the temperature thermostat setting according to the time setting to prevent excessive cooling and heating while sleeping.

#### Cooling operation / dry operation

When the sleep timer is set, the set temperature automatically rises 1°C every hour. The set temperature can rise up to a maximum of 2°C.



#### Heating operation

When the sleep timer is set, the set temperature automatically drops 1°C every 30 minutes. The set temperature can drop to a maximum of 4°C.



#### • Switching remote controller signal code



 Code selector switch eliminates unit being wrongly switched.
 (Up to 4 codes can be set.)

\*I.U.=Indoor unit

## ■ FUNCTIONS (AR-RAH2E)



#### Display panel



- 1 MODE button Selects the operating mode (AUTO, COOL, DRY, FAN, HEAT). /Start / end R.C. signal code change. (Max 4 types) 2 10°C HEAT button 3 Set temp. button (▲ / ▼ ) Sets the indoor temp./ Sets R.C. signal code. 4 ECONOMY button 5 SLEEP button Pressed to select sleep timer. 6 FAN button Selects the fan speed (AUTO, HIGH, MED, LOW, QUIET). 7 START/STOP button Pressed to start and stop operation. 8 SET button (Vertical) Air flow direction vertical set button. 9 SET button (Horizontal) Air flow direction horizontal set button. 10 SWING button Air flow direction swing button. 11 TIMER MODE button Pressed to select the timer mode. (OFF TIMER, ON TIMER, PROGRAM TIMER, TIMER RESET) 12 TIMER SET (-) button Sets the current time and on-off time. 13 CLOCK ADJUST button Sets the current time. 14 RESET button Used when replacing batteries. **TEST RUN button** 15 Used when testing the air conditioner after installation. 16 Signal transmitter 17 Temperature set display 18 Operating mode display 19 Sleep display 20 Transmit indicator 21 Fan speed display 22 Swing display 23 Timer mode display 24 Clock display
  - Note: Functions will be different due to type of indoor unit. For details, please see operation manual.

## ■ FUNCTIONS (AR-RAH1E)



#### Display panel



1 MODE button Selects the operating mode (AUTO, COOL, DRY, FAN, HEAT). /Start / end R.C. signal code change. (Max 4 types) 2 10°C HEAT button 3 Set temp. button (▲ / ▼ ) Sets the indoor temp./ Sets R.C. signal code. 4 ECONOMY button 5 SLEEP button Pressed to select sleep timer. 6 FAN button Selects the fan speed (AUTO, HIGH, MED, LOW, QUIET). 7 START/STOP button Pressed to start and stop operation. 8 SET button (Vertical) Air flow direction vertical set button. 9 SWING button Air flow direction swing button. 10 TIMER MODE button Pressed to select the timer mode. (OFF TIMER, ON TIMER, PROGRAM TIMER, TIMER RESET) 11 TIMER SET (+ / - ) button Sets the current time and on-off time. 12 **CLOCK ADJUST button** Sets the current time. 13 RESET button Used when replacing batteries. 14 TEST RUN button Used when testing the air conditioner after installation. 15 Signal transmitter 16 Temperature set display 17 Operating mode display 18 Sleep display 19 Transmit indicator Fan speed display 20 21 Swing display 22 Timer mode display 23 Clock display

Note: Functions will be different due to type of indoor unit. For details, please see operation manual.



- Control signal might not be recognized in following cases:
  (i) A curtain or a wall, etc. exists between transmitter and receiver.
  (ii) There is an instant-start type (inverter type, etc.) fluorescent lamp in the room.
- Air conditioner might not work correctly when strong light hits the signal receiver window. Shut off the direct sunlight and also make illuminator far away from the receiver window.

[Unit : mm]







Rear View

Holder



#### ■ PACKING LIST

Name and sha	ipe	Quantity	Application
Installation manual		1	
Operating manual		1	
Remote controller holder	e all	1	Use as remote controller holder
Tapping screw		2	For remote controller holder installation
Battery [ 1.5V (R03 / AAA) ]		2	For remote controller

## ■ SPECIFICATIONS

Dimensions [H x W x D]: (mm)	170 x 56 x 19
Weight : (g)	85 [w/o batteries]

#### MODEL : AR-REA2E

#### ■ FEATURES



- \* Three kinds of timer setup
  - (Weekly / Program / Sleep) are possible.
- Easy operation.
- \* Easy to change signal code (4 patterns) by button operation.

#### Simple function setting

Setting of the air conditioner selection function is performed by remote controller.

#### Built-in timers

Select from three different timer programs (Weekly / Program / Sleep).

#### • Weekly timer

Weekly timer can be easily set by wireless remote controller. ON, OFF can be set up to 4 times in 1 day and up to 28 times in 1 week.

#### Program timer

The program timer operates the on and off timer once within a 24 hour period.

#### Sleep timer

The sleep timer function automatically corrects the temperature thermostat setting according to the timer setting to prevent excessive cooling and heating while sleeping.

#### Cooling operation/dry operation

When the sleep timer is set, the set temperature automatically rises 1 °C every hour. The set temperature can rise up to a maximum of 2 °C.



#### Heating operation

When the sleep timer is set, the set temperature automatically drops 1 °C every 30 minutes. The set temperature can drop to a maximum of 4 °C.



#### • Switching remote controller signal code



• Code selector switch eliminates unit being wrongly switched. (Up to 4 codes can be set.)

#### \*I.U.=Indoor unit

#### FUNCTIONS



**Display panel** 



Note: Functions will be different due to type of indoor unit. For details, please see operation manual.

#### SYSTEM DIAGRAM



- Control signal might not be recognized in following cases: (i) A curtain or a wall, etc. exists between transmitter and receiver.
  - (ii) There is an instant-start type (inverter type, etc.) fluorescent lamp in the room.
- Air conditioner might not work correctly when strong light hits the signal receiver window. Shut off the direct sunlight and also make illuminator far away from the receiver window.



#### Controller





[Unit : mm]

000 C

Front View



Holder

#### ■ PACKING LIST

Name and sha	be	Quantity	Application
Installation manual		1	
Operating manual		1	
Remote controller holder		1	Use as remote controller holder
Tapping screw	Dimme	2	For remote controller holder installation
Battery [1.5V (R03 / AAA)]		2	For remote controller

## ■ SPECIFICATIONS

Dimensions [H x W x D]: (mm)	205 x 61 x 17
Weight : (g)	122 [w/o batteries]

## 2-5. IR RECEIVER UNIT

■ MODEL : UTY - LRH\*M

■ FEATURES



Duct type indoor unit can be controlled with wireless remote controller if the IR receiver unit is used.

## ■ FUNCTIONS

IR Receiver



Wireless remote

Refer to 2-4.WIRELESS REMOTE CONTROLLER for details.

# SYSTEM DIAGRAM ATTACHMENT RANGE





(i) •

°° •

ம∕∣©

Front View

145

CONIRUL

118.4

72.4

17

θ

Rear View

ଚ୍ଚ

Side View



NTROL

#### ■ PACKING LIST

Name and s	hape	Quantity	Application
Installation manual		1	
Operating manual		1	
Cover		1	For covering receiver unit
Insulation		1	For protecting PCB from dust
Connection cable A (5m)		1	For connecting PCB of indoor unit to receiver unit
Connection cable B (0.2m)		1	For connecting PCB of indoor unit to receiver unit
Bracket (cover)		1	For fixing receiver unit to the wall or ceiling
Screw (M3 x 12mm)		2	For installing remote control unit holder to the wall
Screw (M4 x 20mm)	Comme	2	For installing receiver unit to the wall or ceiling
Battery (R03/LR03)		2	For remote controller
Remote controller holder	e aj	1	Use as remote controller holder

#### ■ SPECIFICATIONS (IR Receiver)

Dimensions [H x W x D]: (mm)	145 x 90 x 30
Weight: (g)	150

#### OPTIONAL SERVICE PARTS

Please use the parts number shown below to order the cable from your sales representative. Select shielded type conncetion cable in accordance with the standard of the country.

Name and shape	Parts No.
Connection cable C (10m)	9707598025

## 2-6. REMOTE SENSOR UNIT

■ MODEL : UTY - XSZX



#### **FEATURES**

New amenity space can be offered by installing the Remote sensor.

#### ELECTRICAL WIRING

- Remove the screws from the remote sensor, and remove the cover.
- Connect the cable to the remote sensor as shown below.
- Ensure that the wires do not contact each other.



#### ■ INSTALLATION

#### • When the cable is attached to the wall

- Remove the material covering the wiring penetration (thin material) in the cover of the sensor unit with a pair of cutters. The cable passes through this hole.
- Now the remote sensor on the wall using the screws.



#### • When the cable is buried in the wall

- Remove the material (thinner than the surrounding material) in the wiring hole in the remote sensor using a pair of cutters.
- Drill a hole in the wall for the cable.
- Seal the area around the cable penetration with putty.



#### Finish

• Fit the cover on the remote sensor and screw it in place.

#### DIMENSIONS



#### PACKING LIST

Name and s	shape	Quantity	Application
Installation manual		1	
Cable (10m)		1	
Screw (M4 x 16mm)		2	
Screw (M4 x 10mm)		2	
Cord clamp		1	

## 2-7. GROUP CONTROL METHOD

## ■ REMOTE CONTROLLER GROUP

Wired, Simple and Wireless Remote Controllers can be used jointly in the following combinations.

Example of combination for "Remote controller group"



## 2-8. COMPARISON TABLE OF CONTROLLERS

## ■ LIST OF CONTROLLER FUNCTION

Item		Central Remote Controller	Wired Remote Controller	Simple Remote Controller	Wireless Remote Controller		
Model		UTY-DMM*M	UTY-RNN*M	UTY-RSN*M	AR-RAH2E AR-RAH1E	AR-REA2E	
Max. controllable indoor units		8	1	1	1	1	
	Start/Stop		•	•	•	•	•
Air conditioning control function	Operation mode setting		•	•	•	•	•
	Fan speed setting		•	•	•	•	•
	Room temp. setting		•	•	•	•	•
	Test operation		-	•	•	•	-
	Up / down air direction flap setting		-	•	-	•	•
	Right / left air direction flap setting		-	•	-	• / - *1	_
	RC prohibition		•	-	-	-	-
	10°C heat setting		•	-	-	•	•
	Economy setting		•	•	-	•	•
	Low noise mode setting for outdoor unit (Outdoor Unit Quiet)		•	-	-	-	-
	Powerful setting		-	-	-	-	•
Display	Failure		•	•	•	_	_
	Defrosting		-	•	•	_	_
	Current time		•	•	_	•	•
	Day of week		•	•	_	_	•
	RC prohibition		•	•	•	-	-
	Address display		-	•	•	-	-
Timer	Weekly timer		•	•	-	_	•
		On / Off per day	2	2	-	-	4
		On / Off per week	14	14	-	_	28
	On / Off timer		-	•	-	•	•
	Sleep timer		-	-	-	•	•
	Program timer		-	-	-	•	•
	Day off		•	•	-	_	_
otrol	Status monitoring system		•	_	_	_	_
Cor	Brror history		-	•	•	_	_

\*1: This function is not provided in AR-RAH1E.

ONTROL