

For commercial use

Central remote controller

TU2C-LINK / TCC-LINK compatible

Model name

TCB-SC640U-UL



Multilingual installation manuals and owner's manual



[English] Installation manual and Owner's manual Download / [Español] Descarga del Manual de instalación y del Manual del propietario / [Français] Téléchargement du manuel d'installation et du manuel du propriétaire

<https://www.toshiba-carrier.co.jp/global/manual/tcb-sc640u.htm>


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1 Safety Precautions


- Read these "Safety Precautions" carefully before installation.
- The precautions described below include important items regarding safety. Observe them without fail. Understand the following details (indications and symbols) before reading the body text, and follow the instructions.
- After the installation work has been completed, perform a trial operation to check for any problems. Explain how to use and maintain the unit to the customer.
- Ask customer to keep this Manual at accessible place for future reference.


Display Description

 **WARNING** Indicates "Content that is expected to result in death or serious injury (*1) to the user in the case of incorrect handling".

 **CAUTION** Indicates "Content that is expected to result in minor injury (*2) to the user or damage to property (*3) in the case of incorrect handling".

Symbol Description

 indicates prohibited actions. Specifically prohibited contents are indicated with a picture and/or text in or near the symbol.



 indicates instructions which must be followed. The actual contents of the instructions are indicated with a picture and/or text in or near the symbol.


*1: Serious injury refers to lasting after effects such as blindness, injury, burns (high temperature / low temperature), electric shock, bone fracture, or poisoning, etc. and injuries that require hospitalization/long-term outpatient treatment.

*2: Minor injury refers to injuries, burns, or electric shocks, etc. that do not require hospitalization or long-term outpatient treatment.


*3: Damage to property refers to extended damage related to houses, household goods, livestock, or pets, etc.


WARNING

 Prohibited	Do not modify the unit. A fire or an electric shock may occur.
 Compulsory	Always connect to ground Improper grounding may result in an electric shock. Before connecting the power, carry out Class D grounding according to the "Engineering Standard for Electric Work" and the "Internal Wiring Regulations".

 Compulsory	<ul style="list-style-type: none"> • Ask an authorized dealer or qualified installation professional to install or reinstall this unit. Inappropriate installation may result in electric shock or fire. • Electrical work must be performed by a qualified electrician in accordance with this installation manual. The work must satisfy all local, national and international regulations. Inappropriate work may result in electric shock or fire. • Be sure to turn off all main power supply switches before starting any electrical work. Failure to do so may result in electric shock.
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CAUTION

 Prohibited	Do not install in the following locations <ul style="list-style-type: none"> • Locations where combustible gas may leak • Locations with high humidity or water • Dusty locations • Locations in direct sunlight and locations subject to high temperatures • Locations within 1 m from televisions or radios • Outdoors, under awnings, or other locations exposed to rain and dew • Locations exposed to outside air containing corrosive gases or salinity • Locations with frequent vibrations
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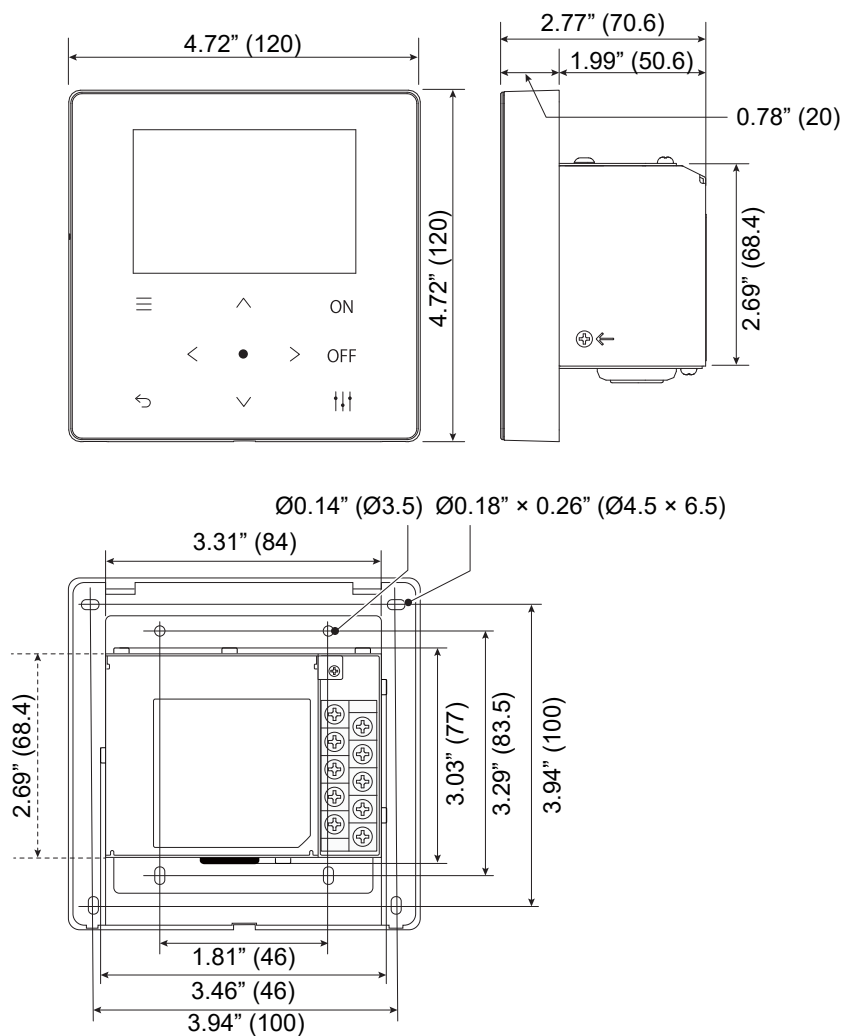
 Compulsory	<ul style="list-style-type: none"> • In installation work, use wiring with the correct ampacity. Failure to do so may result in excessive heat or fire. • Use specified cables and connect them securely, and do not subject connecting terminals to external force. Doing so may result in broken cables, excessive heat or fire. • Always install a circuit breaker on the primary side of the power supply. • When attaching to a metal lath, wire lath or wooden structure with metal boards, attach it to the control panel, etc. without attaching it to the wall.
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2 Specifications

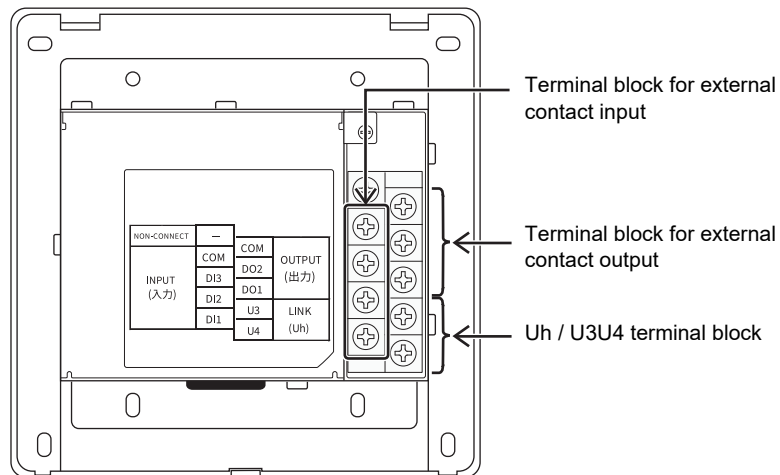
Product name	Central remote controller
Model Name	TCB-SC640U-UL
Power supply	120 V AC 60 Hz
Consumed current	0.1 A
Number of connected units	Up to 64 units
External contact inputs	3
External contact outputs	2
Operating temperature/humidity range	32°F to 104°F (0°C to 40°C), 10% to 90% RH (no condensation)
Dimensions	H4.72" (120 mm) × W4.72" (120 mm) × D0.78" (20 mm) + 1.99" (+50.6 mm) (Embedded dimensions shown in parenthesis)
Mass	1.21 lb (550 g)

■ Outline Drawing

(Unit: inch (mm))



■ Component Names



Name	Functions
Terminal block for external contact output	Connect the external contact output
Terminal block for external contact input	Connect the external contact input
Uh / U3U4 terminal block	Connect the central control wiring

■ Before Installation

Confirm that all the parts listed below are included in the package.

Included items

No.	Component name	Q'ty	Remark
1	Central remote controller main unit	1	
2	Owner's Manual	1	
3	Installation Manual	1	
4	Fixing screw	4	0.16" × 0.79" (M4 × 20 mm)
5	Fixing screw	4	0.15" × 0.63" (M3.8 × 16 mm)

Wiring specifications

Use the following wiring material to connect signal wires and power supply wires. (Locally procured)

No.	Wiring	Wire type / wire diameter / wire length
1	For Uh / U3U4 terminal	Refer to "Design of Control Wiring" (P.8~P.11).
2	For power supply / Ground wire	AWG14, up to 164 ft (50 m) Use wiring that complies with UL and CSA standards.
3	For digital I/O	2-core cable AWG22 (0.3 mm ²), up to 328 ft (100 m)

3 Installation

3-1. Power, Signal, and Ground Connections

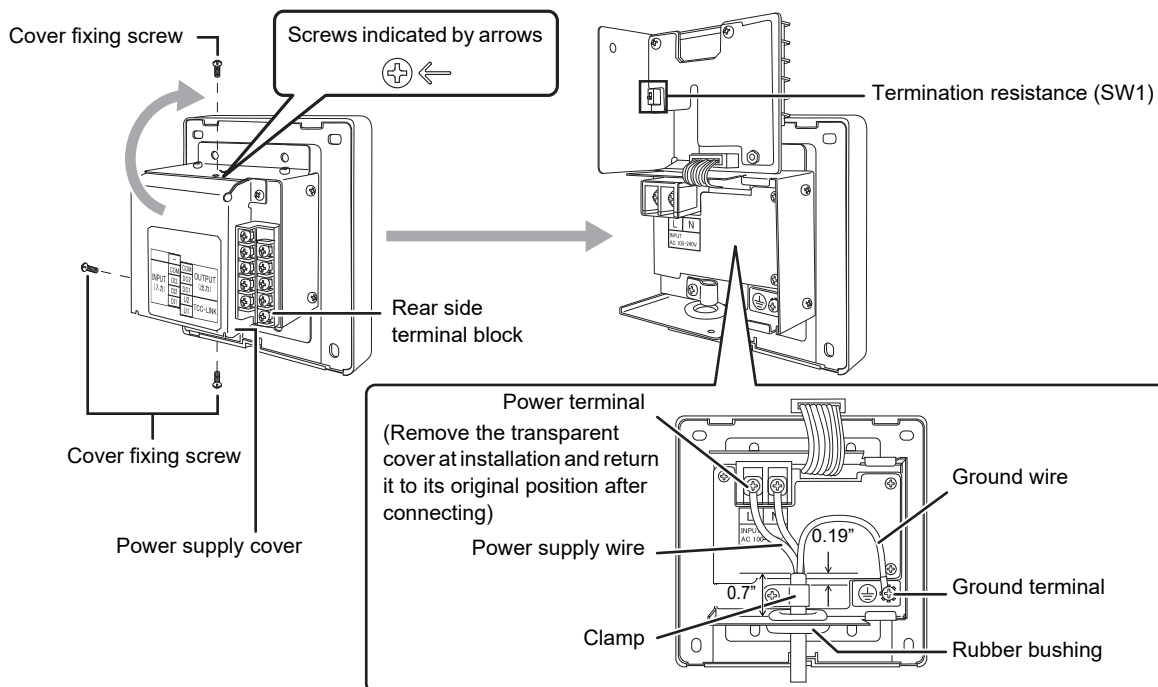
Connect the power, signal and ground to the specified terminal blocks.

REQUIREMENT

Attach round crimp terminals to all TU2C-LINK / TCC-LINK wiring and tighten the screws securely. After tightening, check that the wiring cannot come out.

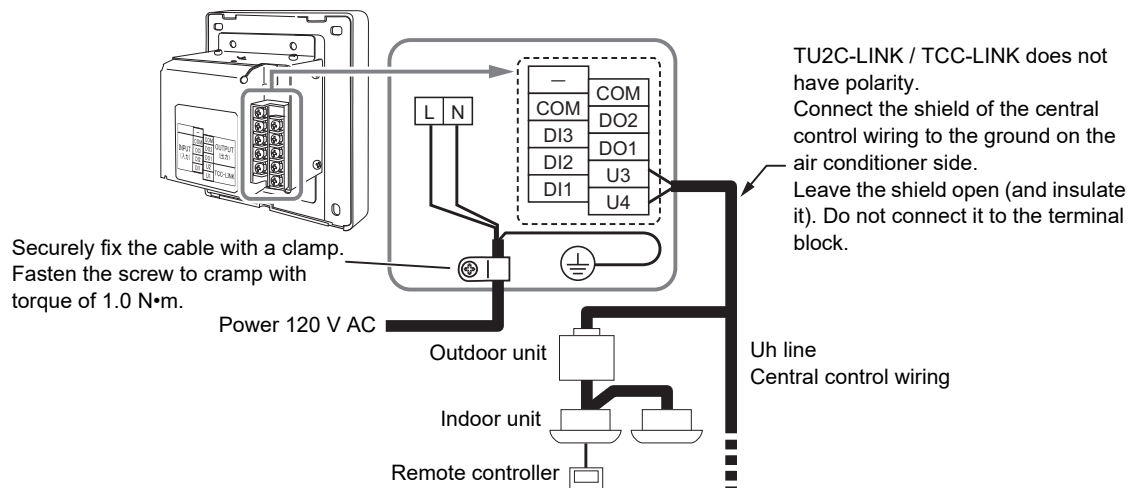
Connect the power supply wire and the ground wire

- (1) Remove 3 cover fixing screws pointed to by arrows and open the cover
- (2) Insert cross notches in the rubber bushing in order to pass the power supply cable
- (3) Pass the power supply cable through the rubber bushing and the clamp, and connect the power supply wire and the ground wire to the specified terminal block
- (4) Close the cover and secure with 3 cover fixing screws



Connect the signal wires

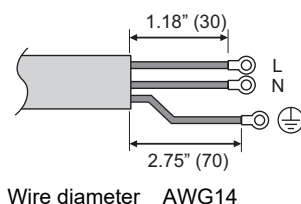
Connect the TU2C-LINK / TCC-LINK signal wire (Uh / U3U4) to the terminal block



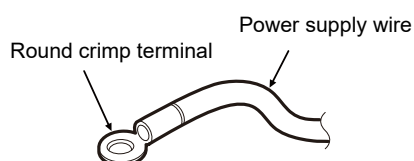
■ About Stripping Length

(Unit: inch (mm))

Power supply wire stripping length

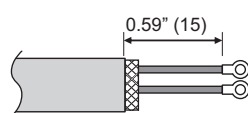


Attach a round crimp terminal to each wire of the power supply / Central control wire.



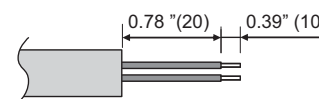
Central control wiring stripping length

Shielded wire



Cut the shield and perform insulation processing.

Digital I/O cable stripping length



Termination resistance setting

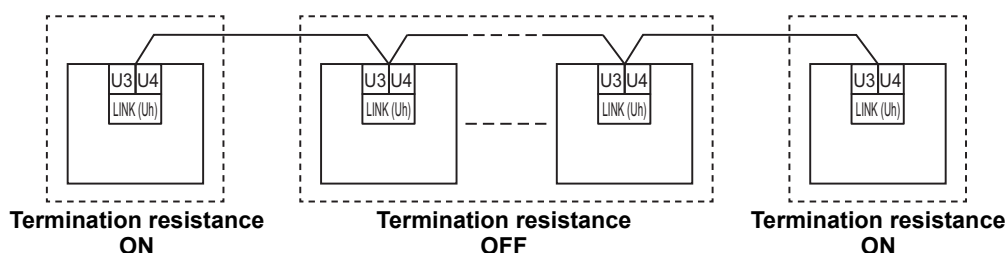
- TU2C-LINK / TCC-LINK termination resistance setting<For TCC-LINK>

Leave just 1 line of the termination resistance in the interface board of the outdoor unit (centre unit) ON, and turn all the others OFF. (Refer to the wiring diagram attached to the outdoor unit for the position of SW.)

<For TU2C-LINK>

For the central control wiring (Uh line), set the termination resistance that is farthest away on the wiring between this central controller and the other unit (VRF, light commercial, general purpose control interface) to ON.

Refer to the manual of each model for the termination resistance setting method.



Shield grounding process

- Central control wiring shielded wireWhen using the Central remote controller with one unit, open the shielded wire of the central control wiring and perform insulation processing.
When using the Central remote controller with multiple units, connect the shield of the central control wiring to the closed end and open the shield at the final end of the Central remote controller to perform insulation processing. Perform the central control wiring shield grounding on the air conditioner side.

REQUIREMENT

- Be sure to install a circuit breaker or all-pole isolating switch (with a contact breaking distance of at least 0.12" (3 mm)) on the primary side of the power supply.
- Fasten the screws to the terminal block with torque of 0.37 lbf • ft (0.5 N•m).

■ Design of Control Wiring

Communication method and model name

The TU2C-LINK model (U series) can be used together with previous models (other than U series).

For details of the model and communication method, see the following table.

Communication method	TU2C-LINK (U series)	TCC-LINK (other than U series)
Outdoor unit	MMY-MUP*** ↑ _____ U series model	Other than on the left (MMY-MAP***, MCY-MAP***, etc.)
Indoor unit	MM*-UP*** ↑ _____ U series model	Other than on the left (MM*-AP***, etc.)
Wired remote controller	RBC-AMSU** ↑ _____ U series model	Other than on the left
Wireless remote controller receiver	RBC-AXRU** ↑ _____ U series model TCB-AXRU** ↑ _____ U series model	Other than on the left
Central control device	***_***U** ↑ _____ U series model	Other than on the left

When the connected outdoor unit is Super Multi u series (U series)

Follow the wiring specifications in the table below even when there is a mix of U series and non-U series in the connected indoor units or remote controllers.

Wiring specifications

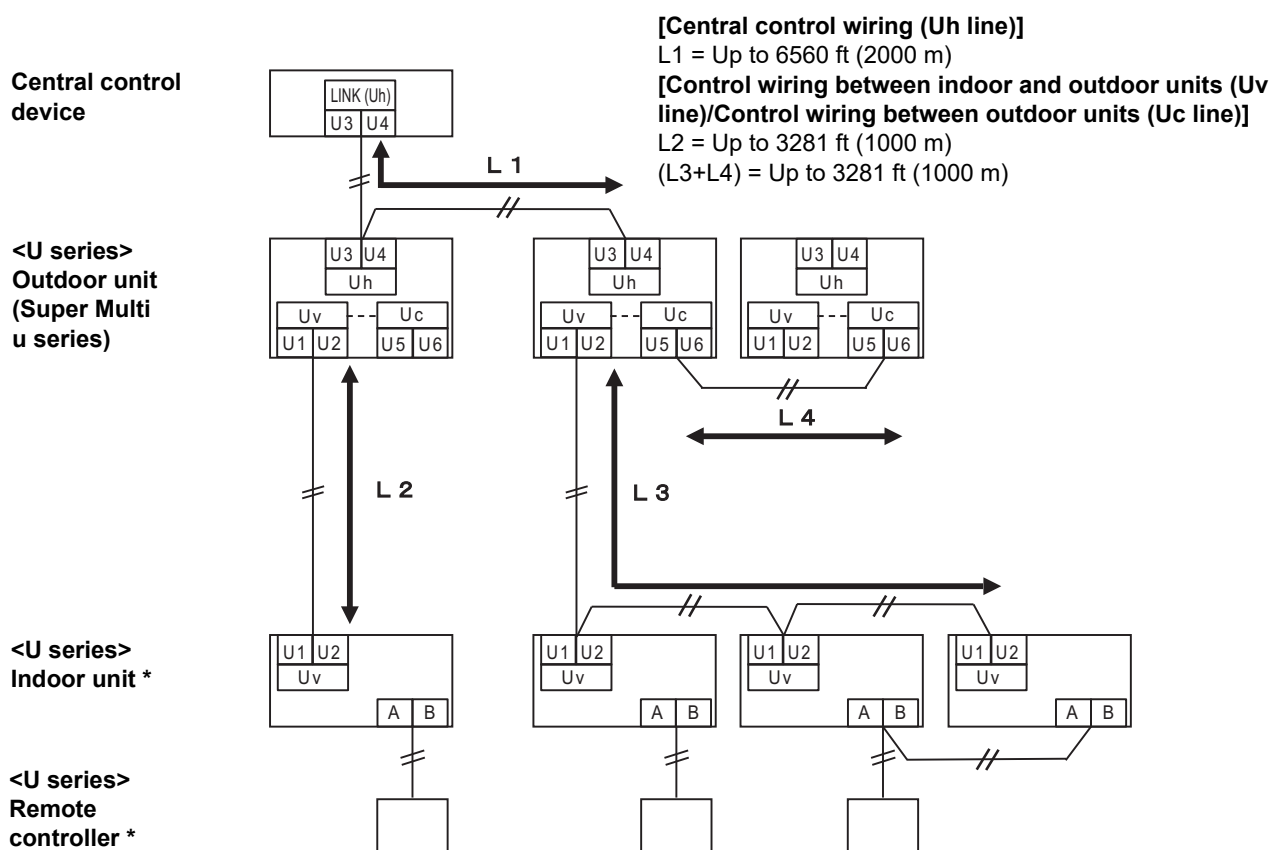
Item	Communication line
	Central control wiring (Uh line)
Wire diameter	AWG16: Up to 3281 ft (1000 m)
	AWG14: Up to 6560 ft (2000 m)
Wire type	2-core, non-polar
Wire types that can be used	Shielded wire

REQUIREMENT

When wiring the control wiring between indoor and outdoor units (Uv line)/control wiring between outdoor units (Uc line) and the central control wiring (Uh line), use the same wire type and diameter for each line.

Using a mixture of different wire types and diameters may cause a communication error.

System diagram



* The wiring specifications in the system diagram above are the same even when the indoor unit or remote controller are other than the U series.

When the connected outdoor units are other than Super Multi u series (U series)

Wiring specifications

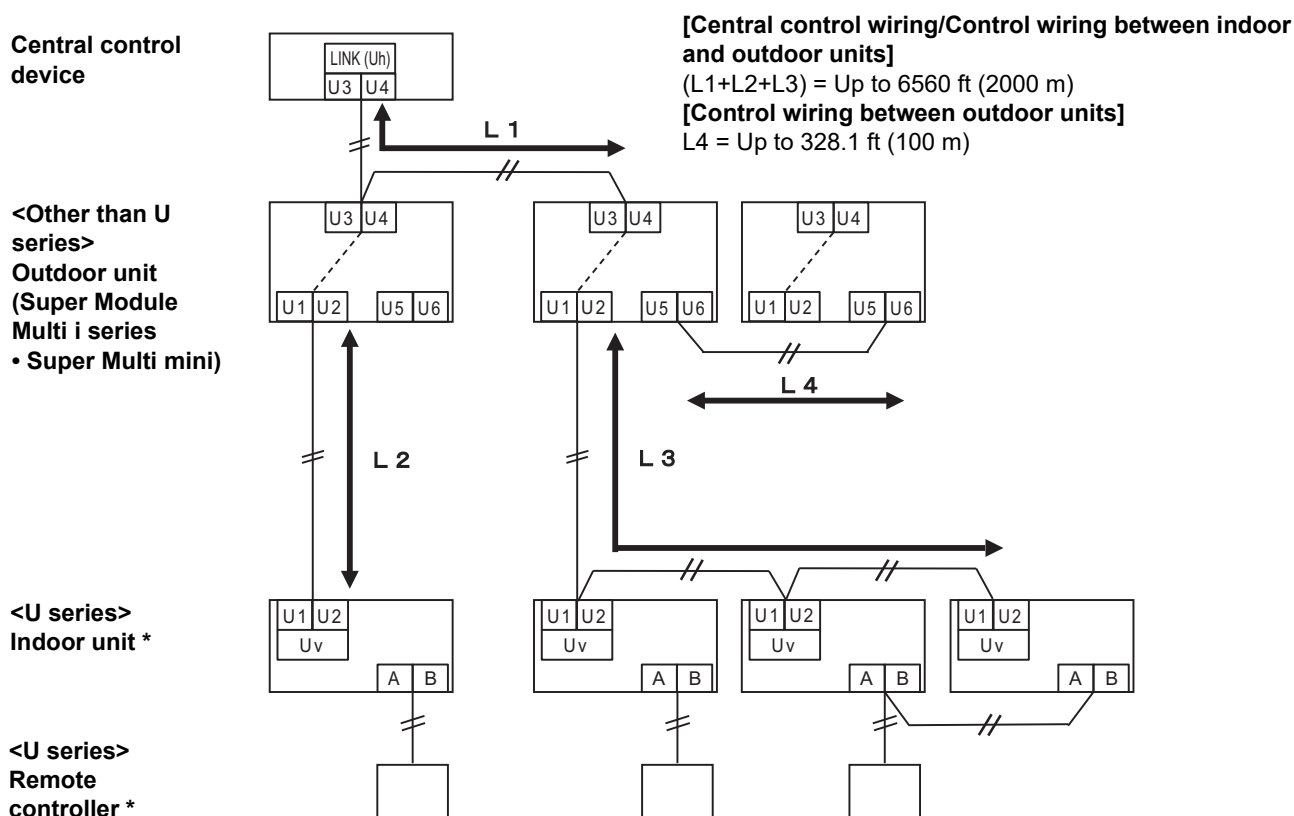
Item	Communication line
	Control wiring between indoor and outdoor units and central control wiring
Wire diameter	AWG16: Up to 3281 ft (1000 m)
	AWG14: Up to 6560 ft (2000 m)
Wire type	2-core, non-polar
Wire types that can be used	Shielded wire

REQUIREMENT

When wiring the control wiring between indoor and outdoor units/central control wiring and the control wiring between outdoor units, use the same wire type and diameter for each line.

Using a mixture of different wire types and diameters may cause a communication error.

System diagram



* The wiring specifications in the system diagram above are the same even when the indoor unit or remote controller are other than the U series.

When connecting to a previous model light commercial, or general purpose equipment control interface

Follow the wiring specifications in the table below even when there is a mix of U series and non-U series in the connected indoor units or remote controllers.

Wiring specifications

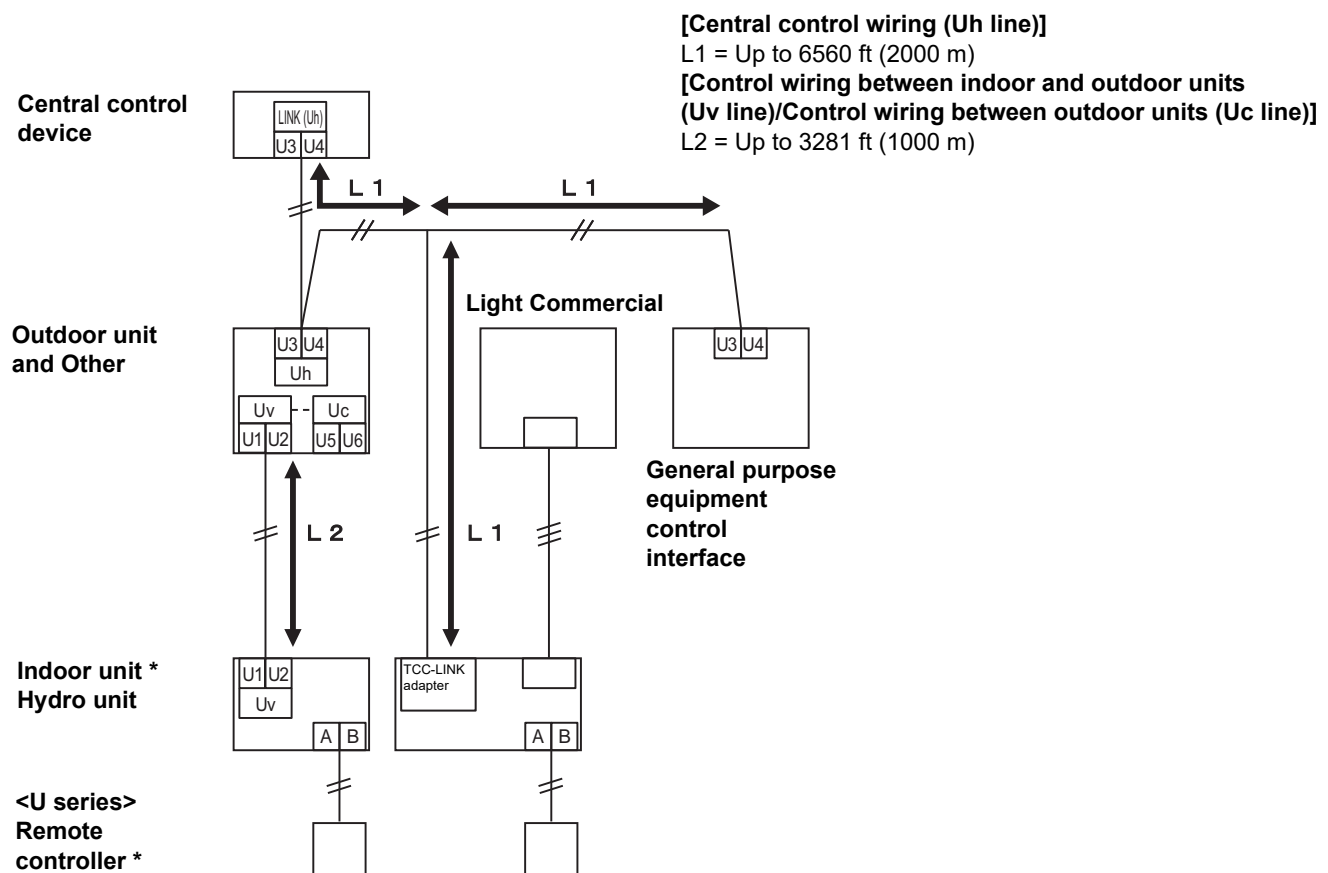
Item	Communication line
	Central control wiring (Uh line)
Wire diameter	AWG16: Up to 3281 ft (1000 m)
	AWG14: Up to 6560 ft (2000 m)
Wire type	2-core, non-polar
Wire types that can be used	Shielded wire

REQUIREMENT

When wiring the control wiring between indoor and outdoor units (Uv line)/control wiring between outdoor units (Uc line) and the central control wiring (Uh line), use the same wire type and diameter for each line.

Using a mixture of different wire types and diameters may cause a communication error.

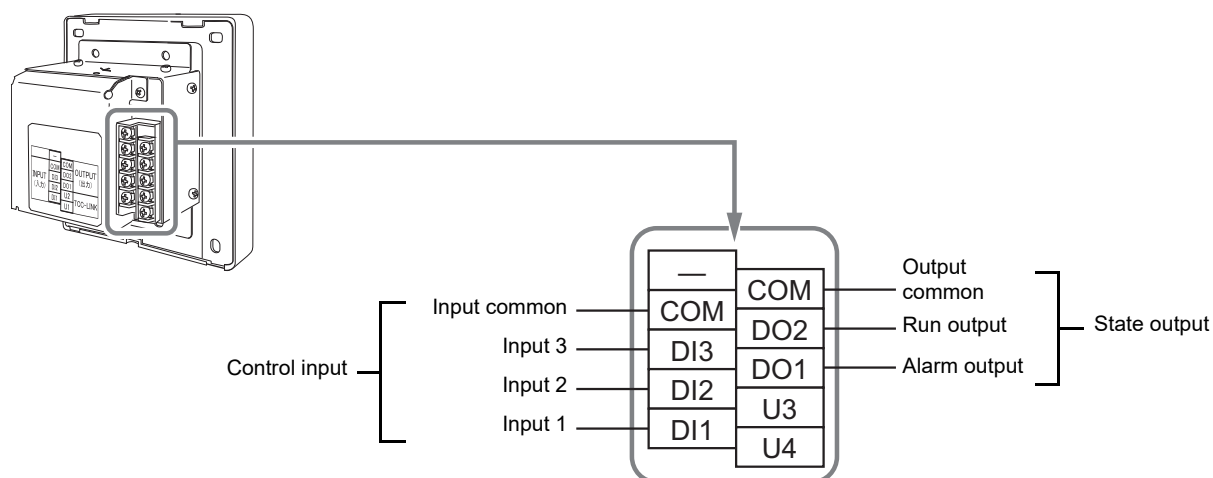
System diagram



* The wiring specifications in the system diagram above are the same even when the indoor unit or remote controller are other than the U series.

■ Connection to External Equipment

Connect to external equipment (digital I/O signal wire)



*Functions can be assigned to inputs 1 to 3 using "Changing the External Input Function (External Input Settings) (P.27)".

Name	I/O Item	This unit side			Equipment side	
		I/O conditions	Circuit	Terminal name	Circuit example	I/O conditions
Digital I/O terminal	State output	Alarm output Run output Transistor open collector output Permissible voltage/ current between terminal and common DC24 V / 35 mA or less		Alarm Run Output common		* When using a relay, refer to P.13.
	Control input			Input 1 Input 2 Input 3 Input common COM		Wiring length: Within 328.1 ft (100 m) Pulse width: 300 ms or more No-voltage contact A/B Pulse or static (Make) No-voltage contact compatible with a very small current (3 mA or less) DC5 V

* Wire the cables so that the user does not touch the power supply directly.

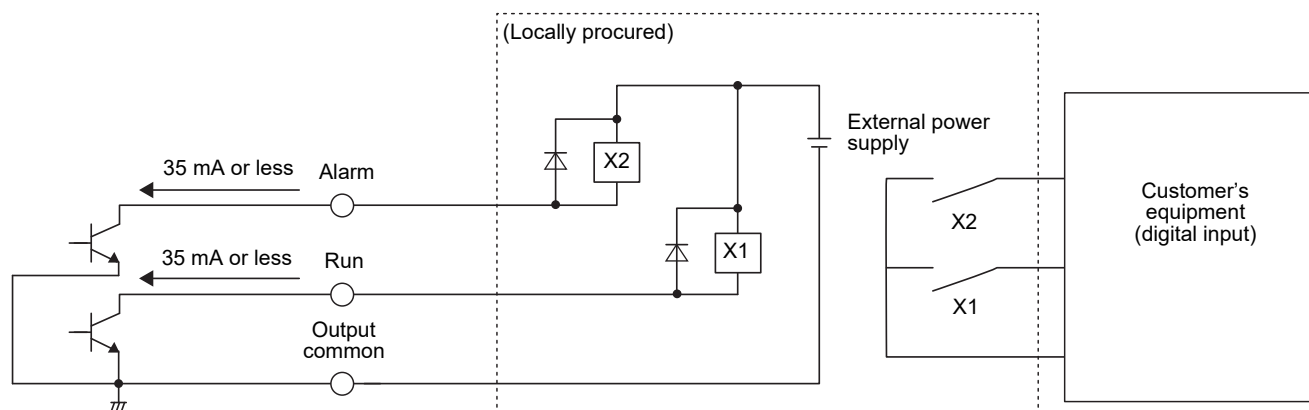
* On the equipment side, use a basically insulated power circuit and place it in a location that where the user cannot touch it.

NOTE

- Do not connect the device directly to the primary side of the power supply.
Be sure to install a circuit breaker or all-pole isolating switch (with a contact breaking distance of at least 0.12" (3 mm)) on the primary side of the power supply.
- Fasten the screws to the terminal with torque of 0.37 lbf • ft (0.5 N•m).

When using a relay for the circuit on the equipment side of the state output**IMPORTANT**

Be sure to connect freewheeling diodes to both ends of the relay coil. (A relay with a built-in diode is recommended.)



3-2. How to Install

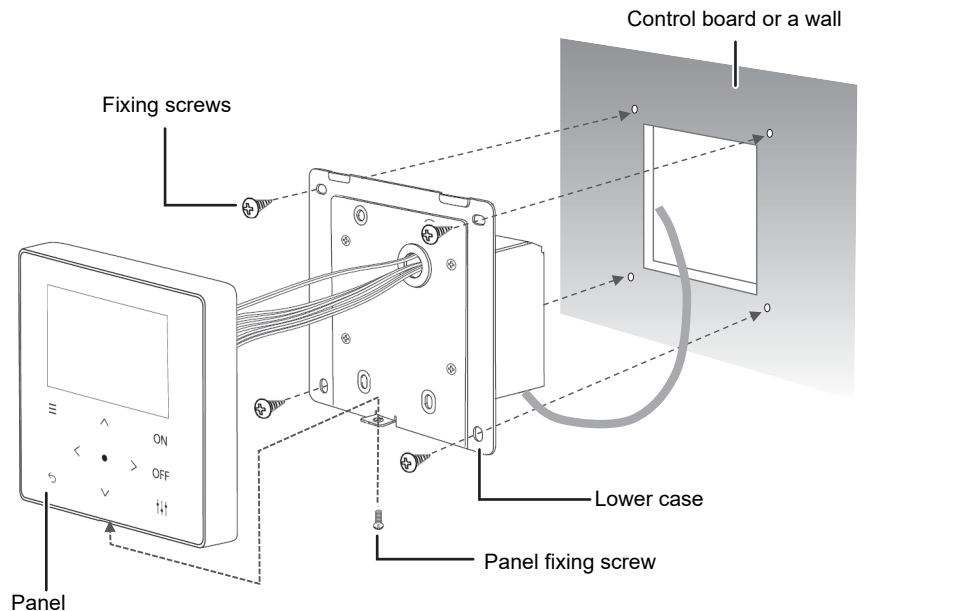
⚠ CAUTION

- Do not wire communication lines (control wiring between indoor and outdoor units, central control wiring) or input/output wiring next to power supply wiring, etc., or house them in the same metal pipe. Doing so may result in failure.
- Install the Central remote controller away from noise sources.

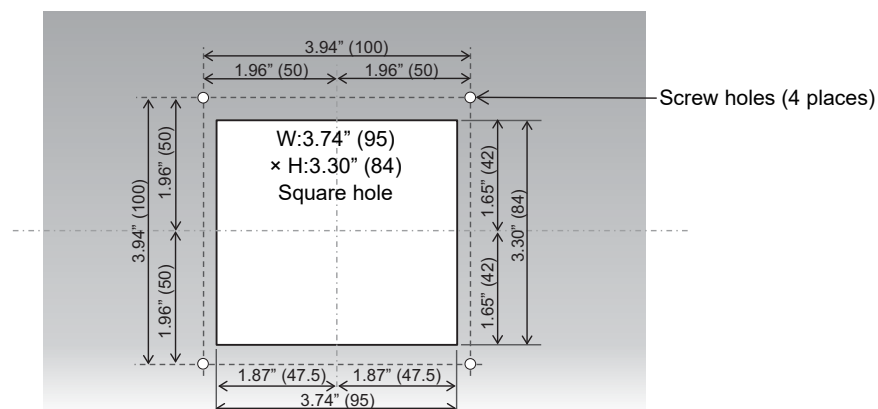
■ When installing to control board (control panel) or to a wall

The thickness of the board or wall must be 0.06" to 0.39" (1.6 mm to 10 mm).

- Prepare the holes for installation beforehand, following the the diagram below (Panel cut dimensions diagram).
- Remove 1 panel fixing screw and open the panel.
- Attach the lower case with the four included fixing screws.
- Close the panel and attach it with 1 panel fixing screw.



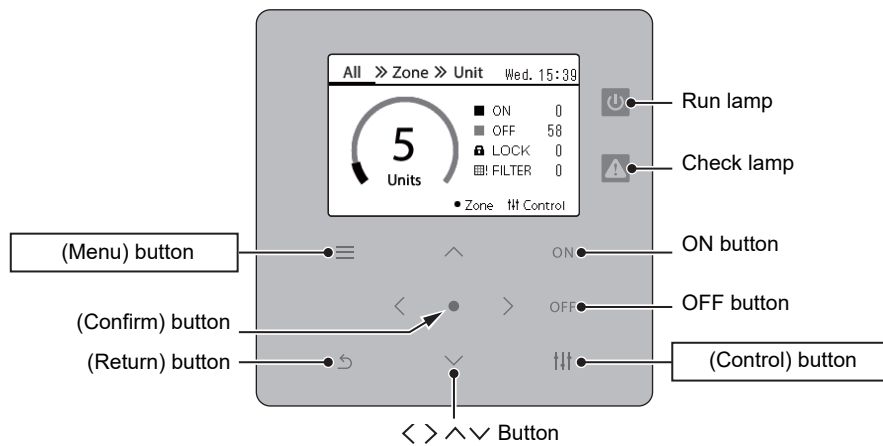
< Panel cut dimensions diagram >



4 Central remote controller Test Run

- Set according to the following procedure before use.
This allows the unit to monitor and operate the air conditioners.

Example of All screen



1 Turn on all connected equipment

- Indoor unit, outdoor unit, general purpose equipment control interface, etc.

2 Turn on the power of the Central remote controller

- A Central control address must be assigned to the indoor units to be controlled.
<Preparation for Central control address settings>
- A Central remote controller or wired remote control is required to set the Central control address.
- Set the Central control address after finishing the test run of the indoor unit.
- * If you wish to configure the settings with the Central remote controller, you must first complete initial communication with all connected indoor units and outdoor units. Wait at least 10 minutes after turning on the power to the air conditioner before configuring the settings.

NOTE

- If you configure the Central control address settings before initial communication with the outdoor units is fully completed, the address may not be set for some units.
- For the TCC-LINK model, perform the following settings.
Connect the U3 and U4 terminals in the outdoor unit (centre unit) to the relay connectors.

3 Register the indoor units to the unit

Press the [≡] and [↑↑] buttons simultaneously for 4 seconds or more on the All screen to move to "How to Display the "Servicing Menu" Screen (P.17-2)". Perform "Obtain Address (◆If you will not change the Central control address (P.18-1-2))" of "Address Settings".

After performing "◆If you will not change the Central control address (P.18-2)", check that there is no error in the displayed number of connected units, line address-indoor address, and Central control address (*1), then perform "◆If you will not change the Central control address (P.18-3)".

*1 If there is an error

- Check the power supply and wiring.
- To change the address, use the local remote controller or the unit ("◆To change the Central control address (P.19-3 to 4)").
- Repeat the setting in this section (3.Register the indoor units to the unit) from the beginning.

4 Assign indoor units to zones 1 to 10

Perform "Change the Zone to which the Indoor Unit Belongs (Zone Settings) (P.21-1 to 4)".

Return to the All screen and check if the displayed number of units matches the number registered in the zone (*2).

*2 Indoor units that are not registered in a zone are not included in the number of units on the All screen.

5 Operation confirmation

Check whether the indoor units can be operated from the Central remote controller.

Also, check whether the operation of the local remote controller is reflected on the Central remote controller.

6 Preparation for delivery

If an inspection code occurs during operation check, perform "Delete check history (P.26)".

This completes the test run for the controller.

For other detailed settings, refer to "Owner's Manual" and "Installation Manual (P17 to P33)".

Example of Obtain Address screen

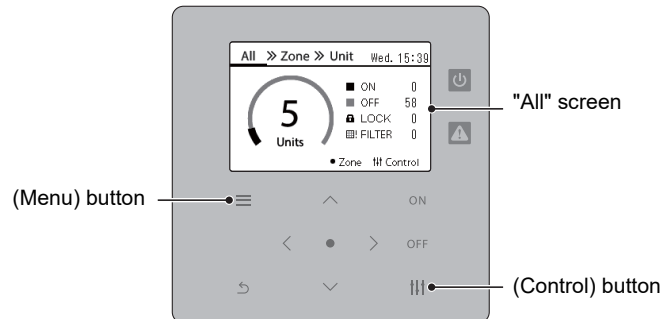
Line address	Indoor address	Central control address	
Obtain Address (1/2) ↑↑ Next			
001-006	006	001-014	014
001-007	007	001-015	015
001-008	008	001-016	016
001-009	009	001-017	017
001-010	010	001-018	018
001-011	011	001-019	019
001-012	012	001-020	020
001-013	013	001-021	021

Example of zone setting (Central control address) screen

Number of units that have been set			
Central control address	Zone No.		
Zone Settings <64> (1/4) ↑↑ Next			
001	1	000	1
002	1	010	1
003	1	011	3
004	1	012	3
005	2	013	10
006	2	014	10
007	2	015	10
008	2	016	10

5 "Servicing Menu" Settings

■ How to Display the "Servicing Menu" Screen



1 Display the "All" screen

2 Press [≡] (Menu) and [↑↑] (Control) together for more than 4 seconds

The "Servicing Menu" screen appears.

Servicing Menu(1/2)
1. Address Settings
2. Zone Settings
3. Display settings
4. Check/Notice Settings
5. External Input Settings

3 Press [^] and [v] to select the item, then press [●] (Confirm)

For details on the setting contents of each item, refer to "■ Servicing Menu Items".

■ Servicing Menu Items

No.	Setting Items		Description	Reference Page
1	Address Settings	Obtain Address	Obtains (register) indoor units and changes the Central control address.	P.18
		Address Display	Displays the registered indoor unit addresses.	P.20
		Address Auto-setting	Sets the Central control address automatically.	P.20
2	Zone Settings	Central control address	Assigns the registered indoor units to zones 1 to 10.	P.21
		Line Address		
		Delete zone setting	Deletes all zone settings.	P.23
3	Display Settings	Daylight-saving	Sets whether to display the daylight-saving time setting in the clock setting.	P.24
		Temperature Display Conf.	Sets the temperature display unit (°C/°F) and interval (1°C/0.5°C).	P.24
		Unit order setting	Changes the display order of indoor units on the Unit screen.	P.25
4	Check/Notice Settings	Delete check history	Deletes the check code history.	P.26
		Notice Settings	Sets the notice code and deletes the history.	P.26
5	External Input Settings		Sets the function to DI1 to DI3.	P.27
6	CRC Mode Change Conf.		Switches between Central control address Control Mode and Local Control Mode.	P.29
7	DN setting		Only service personnel should perform this work.	P.29
8	Communication Conf.		Changes the Communication Conf.	P.30
9	Communication Check	Connection Confir. List	Displays the current operation status of the Central control addresses 1 to 128.	P.32
		Communication Quality	Displays the Communication Quality.	P.32
10	Register Contact Info	Contact information entry	Enter the contact information for when an error occurs.	P.33

Register/Check Indoor Unit (Address Settings)

Address Settings
1. Obtain Address
2. Address Display
3. Address Auto-setting

1 Select "Address Settings" on the "Servicing Menu" screen and press [●] (Confirm)

The "Address Settings" screen appears.

2 Press [▲] and [▼] to select the item, then press [●] (Confirm)

The screen of the selected item appears.

Obtain Address

Register the indoor unit to the unit.

◆ If you will not change the Central control address

Set the Central control address with the local remote controller in advance.

If you will change the Central control address with the central controller, see "To change the Central control address (P.19)".

Obtain Address
Obtain the address?
Yes
No

1 Select "Obtain Address" on the "Address Setting" screen and press [●] (Confirm)

The "Obtain Address" confirmation screen appears.

2 Press [▲] and [▼] to select "Yes", then press [●] (Confirm)

"Obtaining address... ⌚" appears, and after a while, the "Indoor unit list" screen appears.

- This operation will take several minutes.
- On the "Obtain Address" confirmation screen, press [↵] (Return) or select "No" and press [●] (Confirm) to return to the "Address Settings" screen.

Indoor unit list screen

Obtain Address (1/2) ⌚ Next			
001-006	006	001-014	014
001-007	007	001-015	015
001-008	008	001-016	016
001-009	009	001-017	017
001-010	010	001-018	018
001-011	011	001-019	019
001-012	012	001-020	020
001-013	013	001-021	021

3 On the "Indoor unit list" screen, check that there is no error in the number of connected units and the displayed address, then press [↵] (Return)

The "Address Confirm" confirmation screen appears.

- Press [▲] and [▼] or [↑↓] (Control) to switch pages.
- The central control address display is blank for indoor units for which no central control address has been set.

Obtain Address (1/2) ⌚ Next			
Confirm			
this address?			
Yes			
No			
001-012	012	001-020	020
001-013	013	001-021	021

4 Press [▲] and [▼] to select "Yes", then press [●] (Confirm)

After the "Address Settings ⌚" screen, return to the "Servicing Menu" screen.

This completes "Obtain Address".

- Select "No" and press [●] (Confirm) to return to the "Servicing Menu" screen without registering indoor units.

◆ To change the Central control address

Address Settings
1. Obtain Address
2. Address Display
3. Address Auto-setting

Obtain Address
Obtain the address?
Yes
No

Indoor unit list screen

Obtain Address		(1/2)	Hit	Next
001-006	006	001-014	014	
001-007	007	001-015	015	
001-008	008	001-016	016	
001-009	009	001-017	017	
001-010	010	001-018	018	
001-011	011	001-019	019	
001-012	012	001-020	020	
001-013	013	001-021	021	

Central control address list screen

Obtain Address		(1/2)	Hit	Next
001-006	006	001-014	014	
001-007	007	001-015	015	
001-008	008	001-016	016	
001-009	009	001-017	017	
001-010	010	001-018	018	
001-011	011	001-019	019	
001-012	012	001-020	020	
001-013	013	001-021	021	

Obtain Address
Confirm
this address?
Yes
No

1 Select "Obtain Address" on the "Address Settings" screen and press [●] (Confirm)

The "Obtain Address" confirmation screen appears.

2 Press [▲] and [▼] to select "Yes", then press [●] (Confirm)

"Obtaining address... ⌛ " appears, and after a while, the "Indoor unit list" screen appears.

- This operation will take several minutes.
- On the "Obtain Address" confirmation screen, press [↵] (Return) or select "No" and press [●] (Confirm) to return to the "Address Settings" screen.

3 Press [<] [▲] [▼] [>] to select the indoor unit whose Central control address you want to change, then press [●] (Confirm)

The "Central control address list" screen appears.

- In the screen, black is "cursor" and grey is "assigned Central control address".
- The Central control address can be set within the following range.
Models that support TU2C-LINK: 1 to 128
Models that do not support TU2C-LINK: 1 to 64

4 Press [<] [▲] [▼] [>] to select the Central control address, then press [●] (Confirm)

Return to the "Indoor Unit List" screen.

5 After changing the Central control address, press [↵] (Return) on the "Indoor Unit List" screen

The "Address Confirm" confirmation screen appears.

6 Press [▲] and [▼] to select "Yes", then press [●] (Confirm)

"Registering the address... ⌛ " → "Obtaining address... ⌛ " appears and the display returns to the "Indoor Unit List" screen.

- This operation will take several minutes.
- Select "No" and press [●] (Confirm) to return to the "Servicing Menu" screen without registering the changed address.

7 Check that the displayed address is the address changed in steps 3 to 4, and press [↵] (Return)

The "Address Confirm" confirmation screen appears.

8 Press [▲] and [▼] to select "Yes", then press [●] (Confirm)

After the "Address Settings ⌛ " screen, return to the "Servicing Menu" screen.

This completes "Obtain Address".

- This operation will take several minutes.

Address Display

The indoor units registered in the unit are displayed.

Address Settings
1. Obtain Address
2. Address Display
3. Address Auto-setting

1 Select "Address Display" on the "Address Settings" screen and press [●] (Confirm)

The "Address Display" confirmation screen appears.

Address Display (1/4)			
001-001	002	002-004	008
001-002	001	003-001	017
001-003	003	003-002	018
001-004	004	003-003	019
001-010	010	003-004	020
002-001	005	003-005	021
002-002	006	003-006	022
002-003	007	003-007	023

2 Press [Λ] and [V] to select "Yes", then press [●] (Confirm)

The "Address Display" screen appears.

- Press [Λ] and [V] to switch pages.

Address Auto-setting

The Central control address of the connected indoor units is automatically set from 1 in ascending order of the line address-indoor address.

IMPORTANT

All currently set Central control addresses are overwritten.

Address Settings
1. Obtain Address
2. Address Display
3. Address Auto-setting

1 Select "Address Auto-setting" on the "Address Settings" screen and press [●] (Confirm)

The "Address Auto-setting" confirmation screen appears.

Address Auto-setting
Use auto address settings?
Yes
No

2 Press [Λ] and [V] to select "Yes", then press [●] (Confirm)

The display shifts from "Registering the address... ⌂ " to "Address Settings ⌂ ", and the process is complete when the "Servicing Menu" screen appears.

- This operation will take several minutes.

NOTE

- At initial startup or when "Zone Settings" is not set, when "Obtain Address" is performed, the connected indoor units are set to "ZONE-1" up to 64 units in ascending order of line address. The 65th and subsequent units are not set. If you wish to monitor and control 65 or more units, use another Central remote controller to perform "Zone Settings".
- If you change the address from the local remote controller or register the wrong Central control address in the Central remote controller, normal operation will not be possible. Perform "Obtain Address" again.
- Devices that set the Central control address with DIPSW cannot change the Central control address from the Central remote controller. Configure the settings beforehand so that they do not overlap with other devices.

Change the Zone to which the Indoor Unit Belongs (Zone Settings)

Zone Settings
1. Central control Address
2. Line Address
3. Delete zone setting

1 On the "Servicing Menu" screen, select "Zone Settings" and press [●] (Confirm)

The "Zone Settings" screen appears.

- The indoor unit list display can be selected from the Central control address order or the Central control address order.

◆ When Central control address is selected

Address list

Zone Settings <64> (1/4) ↑↓ Next			
001	1	009	1
002	1	010	1
003	1	011	3
004	1	012	3
005	2	013	10
006	2	014	10
007	2	015	10
008	2	016	10

Zone list

Zone Settings <64> (1/4) ↑↓ Next			
001	1	009	1
002	1	010	1
003	1	011	3
004	1	012	3
005	2	013	10
006	2	014	10
007	2	015	10
008	2	016	10

2 Select "Central control address" using [^] and [v] then press [●] (Confirm)

The "Address list" screen appears.

- Press [↑↓] (Control) to go to the next page.

3 Press [<] [^] [v] [>] to select the address, then press [●] (Confirm)

The "Zone list" screen appears.

4 Press [<] [^] [v] [>] to select a zone No., then press [●] (Confirm)

The display returns to the "Address list" screen.

- The selected zone No. appears to the right of the address.
- The number inside < > is the number of units for which the zone No. is set.
- Up to 64 units can be set.

To Change the Group Zone of Multiple Indoor Units

◆ When "Central control Address" is selected

Address list

Zone Settings <64> (1/8) ⏏ Next			
001	1	009	2
002	1	010	2
003	1	011	2
004	1	012	2
005	1	013	2
006	1	014	2
007	1	015	2
008	1	016	2

Zone list

Zone Settings <64> (1/8) ⏏ Next			
001	1	009	2
002	1	010	2
003	1	011	2
004	1	012	2
005	1	013	2
006	1	014	2
007	1	015	2
008	1	016	2

Address list

Zone Settings <64> (1/8) ⏏ Next			
001	5	009	5
002	5	010	2
003	5	011	2
004	5	012	2
005	5	013	2
006	5	014	2
007	5	015	2
008	5	016	2

1 Perform steps 1 to 2 in "Change the Zone to which the Indoor Unit Belongs" (P.21)

The "Address list" screen is displayed.

- You can set either "Central control Address" or "Line Address".

2 Put the cursor on the first address, and then press [≡] (Menu) and [●] (Confirm) at the same time

Multiple units are selected.

- If you press [↵] (Return), the selection of multiple units is cancelled, and the cursor returns to the first address.

3 Select the last address by using [<], [^], [v], and [>], and then press [●] (Confirm)

The "Zone list" screen is displayed.

4 Select a zone number by using [<], [^], [v], and [>], and then press [●] (Confirm)

The "Address list" screen returns.

- The selected zone no. is displayed to the right of the address.
- The number in < > is the number of units for which the zone No. is set.
- You can make the settings for up to 64 units.
- An error screen is displayed if you set 65 or more units.

Set the indoor unit as being out of the scope of management.

Zone list

Zone Settings <64> (1/4) ⏮ Next			
001	1	009	1
002	1	009	1
003	1	009	3
004	1	009	3
005	1	009	10
006	1	009	10
007	1	009	10
008	2	016	10

On the "Zone list" screen, select "Del" then press [●] (Confirm)

The display returns to the "Address list" screen.

- The zone number is deleted and will not be included in the number of units on the All screen.

Delete zone setting

IMPORTANT

After "Delete zone setting", the number of controlled/monitored units will be 0. Reset any zone.

Delete zone setting
Delete all.
Is it OK?
Yes
No

1 On the "Zone Settings" screen, select "Delete zone setting" then press [●] (Confirm)

The "Delete zone setting" confirmation screen appears.

2 Press [▲] and [▼] to select "Yes", then press [●] (Confirm)

"It has been deleted" appears and the display returns to the "Zone Settings" screen.

Changing the Display Method (Display settings)

Display settings
1. Daylight-saving
2. Temperature Display Conf.
3. Unit Order Settings

- 1 On the "Servicing Menu" screen, select "Display settings" then press [●] (Confirm)

The "Display settings" screen appears.

- 2 Select an item with [^] and [v] then press [●] (Confirm)

The screen for the selected item appears.

Daylight-saving

Daylight-saving
● Enable
Void

- 1 On the "Display settings" screen, select "Daylight-saving" then press [●] (Confirm)

The "Daylight-saving" screen appears.

- 2 Select "Enable" or "Void" using [^] and [v] then press [●] (Confirm)

Press [↵] (Return) to return to the "Display settings" screen.

- When "Void" is set, the clock setting "Daylight-saving" is hidden.

Temperature Display Conf.

Temperature Display Conf.
1. Temp. Unit <°C>
2. Temp. Increments <1°C>

- 1 On the "Display settings" screen, select "Temperature Display Conf." then press [●] (Confirm)

The "Temperature Display Conf." screen appears.

- 2 Press [^] and [v] to select the item, then press [●] (Confirm)

The screen for the selected item appears.

◆ Temp. Unit

Temp. Unit
● °C
°F

- 3 Press [^] and [v] to select the temperature unit, then press [●] (Confirm)

The temperature unit is set.

- Press [↵] (Return) to return to the "Temperature Display Conf." screen.

◆ Temp. Increments

Temp. Increments
● 1°C
0.5°C

- 3 Press [^] and [v] to select the temperature resolution, then press [●] (Confirm)

The temperature resolution is set.

- Press [↵] (Return) to return to the "Temperature Display Conf." screen.

Unit Order Settings

Set the display order of indoor units on the "Unit" screen.

Unit Order Settings
● Central control Address
Line Address

1 On the "Display settings" screen, select "Unit Order Settings" then press [●] (Confirm)

The "Unit Order Settings" screen appears.

2 Press [^] and [v] to select the display order, then press [●] (Confirm)

The display order changes to the selected display order.

- Press [↵] (Return) to return to the "Display settings" screen.

NOTE

Central control address: The indoor units are arranged in ascending order of Central control address, and the numbers display the Central control address.

Line address: The indoor units are arranged in ascending order of line address, and the numbers display the serial number.

Delete the History and Set the Notice Code (Check/Notice Settings)

Check/Notice Settings
1. Delete check history
2. Notice Settings

- 1 On the "Servicing Menu" screen, select "Check/Notice Settings" then press [●] (Confirm)

The "Check/Notice Settings" screen appears.

- 2 Press [▲] and [▼] to select the item, then press [●] (Confirm)

The screen for the selected item appears.

Delete check history

Delete check history
Delete all.
Is it OK?
Yes
No

- 1 On the "Check/Notice Settings" screen, select "Delete check history" then press [●] (Confirm)

The "Delete check history" confirmation screen appears.

- 2 Press [▲] and [▼] to select "Yes", then press [●] (Confirm)

"It has been deleted" appears and the display returns to the "Check/Notice Settings" screen.

ON/OFF Settings

Notice Settings
1. ON/OFF Settings
2. Delete Notice history

- 1 On the "Check/Notice Settings" screen, select "Notice Settings" then press [●] (Confirm)

The "Notice Settings" screen appears.

- 2 Press [▲] and [▼] to select "ON/OFF Settings", then press [●] (Confirm)

The "ON/OFF Settings" screen appears.

ON/OFF Settings	(1/8)	Next
● 001	008	016
● 002	009	017
● 003	010	018
● 004	011	019
● 005	012	020
● 006	013	021
● 007	014	022
	015	023
		024
		025
		026
		027
		028
		029
		030
		031

- 3 Press [▲] and [▼] to select the notice code to display, then press [●] (Confirm)

"●" is displayed in the selected notice code.

- Press [●] (Confirm) to select/cancel "●".
- Use [↑↓] (Control) to switch pages.
- Press [↵] (Return) to return to the "Notice Settings" screen.

Delete Notice history

Delete Notice history
Delete all.
Is it OK?
Yes
No

- 1 On the "Notice Settings" screen, select "Delete Notice history" then press [●] (Confirm)

The "Delete Notice history" confirmation screen appears.

- 2 Press [▲] and [▼] to select "Yes", then press [●] (Confirm)

"It has been deleted" appears and the display returns to the "Notice Settings" screen.

Changing the External Input Function (External Input Settings)

NOTE

"Power peak cut" operates normally only when Central controller ID 1 is set.

If you set the Central controller ID number to other than 1, "Power peak cut" is disabled.

External Input Settings
1. DI1:OFF
2. DI2:ON
3. DI3:Void

DI1Select function(1/2) ⏏ Next
Void
<input checked="" type="radio"/> OFF
ON
Emergency system
Night Operation

DI1Select function(2/2) ⏏ Next
Locking <0>
Thermo OFF
Power peak cut <0%>

DI1Select signal ⏏ Next
<input checked="" type="radio"/> Contact A
Contact B

DI1Select Zone	†† End
<input checked="" type="radio"/> ZONE-1	<input type="radio"/> ZONE-6
<input type="radio"/> ZONE-2	<input type="radio"/> ZONE-7
<input type="radio"/> ZONE-3	<input type="radio"/> ZONE-8
<input type="radio"/> ZONE-4	<input type="radio"/> ZONE-9
<input type="radio"/> ZONE-5	<input type="radio"/> ZONE-10

1 On the "Servicing Menu" screen, select "External Input Settings" then press [●] (Confirm)

The "External Input Settings" screen appears.

2 Press [▲] and [▼] to select the input terminal to set then press [●] (Confirm)

The "Select function" screen appears.

3 Select the function with [▲] and [▼], press [●] (Confirm), then press [⏏] (Control) to go to the next screen

The "Select signal" screen appears.

- It is necessary to set the control contents for "Locking" and "Power peak cut".
- When "Void" is set, the display returns to the "External Input Settings" screen.

Lock pattern ⏏ Next
<input checked="" type="radio"/> 0:OFF/-
1:OFF/Unlock1
2:OFF, Lock1/Unlock1
3:OFF/ON

Power peak cut ⏏ Next
80%
70%
60%
<input checked="" type="radio"/> 0%

4 Select the input signal with [▲] and [▼], press [●] (Confirm), then press [⏏] (Control) to go to the next screen

The "Select Zone" screen appears.

5 Press [<] [▲] [▼] [>] to select the target zone, then press [●] (Confirm)





Press [●] (Confirm) to select/cancel "●".

- In the initial setting, all zones are selected.
- Zones where indoor units are not registered are not displayed.

6 Select the target zones and press [⏏] (Control)

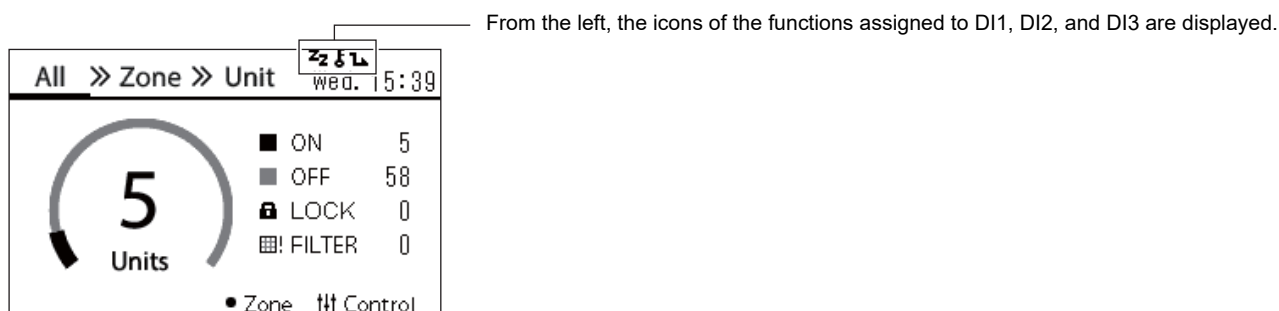
The settings are completed and the display returns to the "External Input Settings" screen.

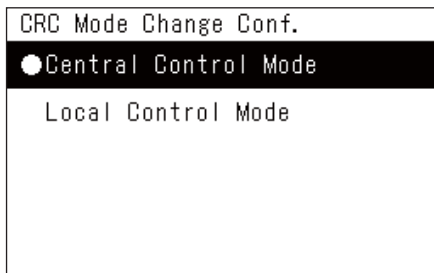
External input function table

Icon	Setting Items	Description	Settings		
-	Void	No function	-		
-	OFF	When ON, the air conditioners in the specified zones are stopped. When OFF, no control is performed.	Contact A (ON at signal input, OFF at release) Contact B (OFF at signal input, ON at release)		
-	ON	When ON, the air conditioners in the specified zones are operated. When OFF, no control is performed.	Contact A (ON at signal input, OFF at release) Contact B (OFF at signal input, ON at release)		
	Emergency system	When ON, the air conditioners in the specified zones are stopped and the local remote controller is disabled. When OFF, the disabling the local remote controller is released.	Contact A (ON at signal input, OFF at release) Contact B (OFF at signal input, ON at release)		
	Night Operation	When ON, the operating noise of the outdoor units is reduced. When OFF, the Night Operation function is disabled.	Contact A (ON at signal input, OFF at release) Contact B (OFF at signal input, ON at release)		
	Locking	When ON and OFF, the air conditioners in the specified zones are controlled to the set pattern. * Set the lock pattern before setting the input signal.	Contact A (ON at signal input, OFF at release) Contact B (OFF at signal input, ON at release)		
				ON	OFF
			Pattern 0	Stop operation	- (Maintain the status quo)
			Pattern 1	Stop operation	Cancel "Start/Stop" operation prohibition
			Pattern 2	Stop operation, and Prohibit "Start/Stop" operation	Cancel "Start/Stop" operation prohibition
			Pattern 3	Stop operation	Start operation
	Thermo OFF	When ON, the air conditioners in the specified zones are demand controlled. When OFF, the demand control is disabled.	Contact A (ON at signal input, OFF at release) Contact B (OFF at signal input, ON at release)		
			Contact A (ON at signal input, OFF at release) Contact B (OFF at signal input, ON at release)		
	Power peak cut	When ON, the air conditioners in the specified zones are demand controlled. When OFF, the demand control is disabled. * Set the demand rate before setting the input signal.	Demand rate (0% / 60% / 70% / 80%)		

NOTE

- The icon for each function is displayed at the top of the clock when a signal is received.



Switch Operation Mode (CRC Mode Change Conf.)**1 On the "Servicing Menu" screen, select "CRC Mode Change Conf." then press [●] (Confirm)**

The "CRC Mode Change Conf." screen appears.

2 Press [^] [v] to select the mode, then press [●] (Confirm)

Press [↵] (Return) to return to the "Servicing Menu" screen.


NOTE

Central Control Mode: Use this unit as a Central remote controller.

By setting the "Key lock" on this unit, you can restrict the operation of the local remote controller.

Local Control Mode: Use this unit as a remote controller.

When "Key lock" is set by another Central remote controller, the operation of this unit is restricted in the same way as the local remote controller.

While Local Control Mode is set,  appears at the top of the clock and on each control screen.

Change the Indoor Unit Data (DN setting)**IMPORTANT**

Only service personnel should perform this work.

Do not change this as it is related to the control of the device.

Change Communication Configuration (Communication Conf.)

Communication Conf.
1. Obtain address setting
2. Central controller ID <ID 1>

- 1 On the "Servicing Menu" screen, select "Communication Conf." then press [●] (Confirm)

The "Communication Conf." screen appears.

- 2 Press [^] and [v] to select the item, then press [●] (Confirm)

The screen for the selected item appears.

Obtain address setting

Obtain address setting
● Central control Address
Line Address

- 1 On the "Communication Conf." screen, select "Obtain address setting" then press [●] (Confirm)

The "Obtain address setting" screen appears.

- 2 Press [^] and [v] to select the desired acquisition method, then press [●] (Confirm)

The selected acquisition method is set to be active.

- Press [↵] (Return) to return to the "Communication Conf." screen.

IMPORTANT

- If you set the address acquisition method to "Line Address", it will take time to obtain the address.
- When setting Central control address with indoor units for which Central control address has not been configured, set to "Line Address".

Central controller ID

Communication Conf.
1. Obtain address setting
2. Central controller ID <ID 1>

Central controller ID			
● 001	009	017	
002	010	018	
003	011	019	
004	012	020	
005	013	Old	
006	014		
007	015		
008	016		

1 On the "Communication Conf." screen, select "Central controller ID" then press [●] (Confirm)

The "Central controller ID" screen appears.

2 Press [▲] and [▼] to select Central controller ID, then press [●] (Confirm)

Central controller ID is set.

- Press [↵] (Return) to return to the "Communication Conf." screen.

When using in combination

- When using 2 or more units in combination with this Central remote controller only
 - Set the Central controller ID numbers for the second and subsequent units to Central controller ID 2 and subsequent ID numbers.
 - Example: When using 3 units in combination
 - 1st unit: Central controller ID 1 (initial setting)
 - 2nd unit: Central controller ID 2
 - 3rd unit: Central controller ID 3
- When using in combination with a central control device that supports TU2C-LINK
 - Set to Central controller ID 2 or a subsequent ID number so that it does not overlap with other central control devices.
- When using in combination with a central control device that does not support TU2C-LINK
 - Set to "Old (Old controller)".

When replacing with a Central remote controller that does not support TU2C-LINK

If only 1 unit is used (no combined use), use the initial settings.

When using more than 1 unit, set according to "When using in combination".

IMPORTANT

- If the setting is incorrect, a communication error may occur.
- Unless using it together with another central control device other than this device, there is no need to set the Central controller ID.
- If there is another central control device (of the U series) other than this device, perform Central controller ID setting so that there is no duplication of ID numbers. If there is any duplication of Central controller IDs, the check code S33 will appear.
- If there is another central control device (not of the U series) other than this device, select "Old (Old controller)" for the setting.
- If the following settings are changed, turn the power off and then back on for the multi outdoor units after the connected SMMS-u.
 - Central controller IDs 1 to 20 → Old (Old controller)
 - Old (Old controller) → Central controller IDs 1 to 20

Check the Connection Status of the Indoor Units (Communication Check)

Communication Check
1. Connection Confir. List
2. Communication Quality

- 1 On the "Servicing Menu" screen, select "Communication Check" then press [●] (Confirm)

The "Communication Check" screen appears.

- 2 Press [▲] and [▼] to select the item, then press [●] (Confirm)

The screen for the selected item appears.

Connection Confir. List

Connection Confir. List (1/8)					
001	1	ON	009	1	1
002	1	ON	010	1	1
003	1	ON	011	3	OFF
004	1	ON	012	3	ON
005	2	OFF	013	10	!
006	2	OFF	014	10	!
007	2	OFF	015	10	!
008	2	OFF	016	10	!

Operation status

Zone No.

Central control address

- 1 On the "Communication Check" screen, select "Connection Confir. List" then press [●] (Confirm)

The "Connection Confir. List" screen appears.

- 2 Press [▲] and [▼] to switch pages

- Press [↵] (Return) to return to the "Communication Check" screen.
- The Central control addresses are displayed in ascending order.
- Central control addresses fields that are not connected will be blank.

Communication Quality

Communication Quality						
Ux	Laddr	n	U%	R%	X%	bps
Uh	-	0	3	5	0	9600
Uv	001	0	-	-	-	-

- 1 On the "Communication Check" screen, select "Communication Quality" then press [●] (Confirm)

The "Communication Quality" screen appears.

- 2 Press [▲] and [▼] to switch pages

- Press [↵] (Return) to return to the "Communication Check" screen.

Item	Description
Ux	Uh: Between lines, Uv: Within lines
Laddr	Line address
n	Number of connected units
U%	Usage rate
R%	Retransmission rate
X%	Collision rate
bps	Communication baud rate

Register Contact Information when an Error Occurs (Register Contact Info)

Register Contact Info
1. Contact information entry

- 1 On the "Servicing Menu" screen, select "Register Contact Info" then press [●] (Confirm)

The "Register Contact Info" screen appears.

- 2 Press [^] and [v] to select the item, then press [●] (Confirm)

The screen for the selected item appears.

Contact information entry

◆ Contact Name

Contact information entry
1. Contact Name
2. Contact TEL No.

- 1 Press [^] and [v] to select "Contact information entry", then press [●] (Confirm)

The "Contact information entry" screen appears.

- 2 Press [^] and [v] to select "Contact Name", then press [●] (Confirm)

The "Character entry" screen appears.

ABCDE abcde 12345 Del FGHIJ fg hij 67890 KLMNO klmno -+!? PQRST qrst .# () UVWXY uvwxy Z z
Fix

- 3 Select characters using [<], [^], [v], and [>], and then press [●] (Confirm)

The selected characters are displayed at the top of the screen.

- Up to 16 characters can be entered.

A
ABCDE abcde 12345 Del FGHIJ fg hij 67890 KLMNO klmno -+!? PQRST qrst .# () UVWXY uvwxy Z z
Fix

- 4 Repeat step 3, select "Fix", and then press [●] (Confirm)

The "Contact information entry" screen appears.

- If you press [↵] (Return) without pressing "Fix", the setting is cancelled and the screen returns to the state it was in before the change was made.

ABCDE abcde 12345 Del FGHIJ fg hij 67890 KLMNO klmno -+!? PQRST qrst .# () UVWXY uvwxy Z z
Fix

Deleting a character

Select "Del", and then press [●] (Confirm)

The last character is deleted.

◆ Contact TEL No.

Contact information entry
1. Contact Name
2. Contact TEL No.

Contact TEL No.
Input telephone number
■ —————

- 1 Press [^] and [v] to select "Contact information entry", then press [●] (Confirm)**

The "Contact information entry" screen appears.

- 2 Press [^] and [v] to select "Contact TEL No.", then press [●] (Confirm)**

The "Contact TEL No." screen appears.

- 3 Move the cursor with [<] and [>], select a number with [^] and [v], then press [●] (Confirm)**

The contact TEL No. is registered and the display returns to the "Register Contact Info" screen.

Carrier Japan Corporation

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