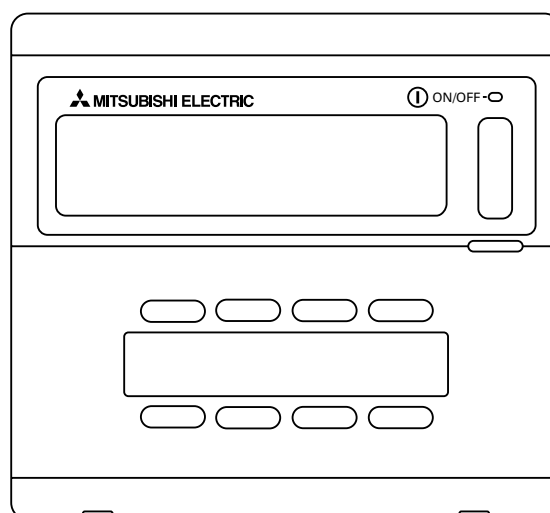


Mitsubishi Electric Building Air Conditioning Control System

Group remote controller

PAC-SC30GRA



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INSTRUCTION BOOK

Carefully read this book before use. It is recommended to safe keep this book for future reference.

ANWEISUNGSHANDBUCH

Vor Benutzung der Anlage dieses Buch sorgfältig durchlesen. Es wird empfohlen, dieses Buch zum Nachschlagen an einem sicheren Ort aufzubewahren.

MANUEL D'UTILISATION

Lire attentivement le présent manuel avant toute utilisation et le conserver dans un endroit sûr pour pouvoir le consulter ultérieurement.

INSTRUCTIEHANDLEIDING

Lees deze handleiding aandachtig door voordat u het apparaat in gebruik neemt. Het wordt aangeraden om deze handleiding zorgvuldig te bewaren om later, indien nodig, te raadplegen.

LIBRETTO ISTRUZIONI

Leggere attentamente questo libretto prima dell'uso. Si raccomanda di tenerlo in un luogo sicuro per ogni futura necessità.

LIBRO DE INSTRUCCIONES

Lea cuidadosamente este libro antes de usar el temporizador. Le recomendamos que guarde el libro en lugar seguro en previsión de consultas futuras.

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1. Safety precautions

Please take a moment to review these safety precaution. They are provided for your protection and to prevent damage to the controller.

This safety information applies to all operators and service personnel.

After you have read this manual, always observe the procedures described in the explanations and store it with the installation manual in a location that is easy to find. If the controller is going to be operated by another person, make sure that this manual is given to him or her.

Symbols and Terms

 WARNING	Statements identify condition or practices that could result in personal injury or loss of life.
 CAUTION	Statements identify condition or practices that could result in damage to the controller or other property.

Specific Precautions

WARNING

- Ask your dealer or technical representative to install.
 - If incorrect installation is done by a customer, it may cause an electric shock, fire, etc.
- Securely install in a place which can withstand the weight of the controller.
 - If it is not enough, the controller may drop and cause an injury.
- Make sure that the controller is connected to a rated power supply.
 - If the controller is not connected to a rated power supply, it may cause a fire or damage to the controller.
- Never remove the cover during operation.
 - Touching the charging parts of the controller may cause severe burns or other personal injury.
- Stop the operation if any malfunction occurs.
 - If malfunction occurs (burning smell, etc.) stop the operation and turn off the power supply. Contact the your dealer or technical representative immediate. If the controller continues to operate after a malfunction occurs, this may cause damage, electric shock or fire.
- Do not move and re-install the controller by yourself.
 - If installation is incorrect, it may cause an electric shock, fire, etc. Ask your dealer or technical representative.
- Contact your dealer if the controller will not be used any more or will be scrapped.
- Do not remodel or repair by yourself.
 - If the controller is remodeled or repair is not correct, it may cause an electric shock, fire, etc. Consult your dealer if repair are necessary.
- Stop the operation immediately and notify the your dealer if an error code is displayed or malfunction occurs.
 - Fire or damage may cause it the controller is operated in this condition.

CAUTION

- Do not install the controller in a place where inflammable gas could leak.
 - If gas leaks and collects around the controller, it may cause a fire or explosion.
- Do not wash the controller with water.
 - It may cause an electric shock or malfunction.
- Do not touch the switch with wet hands.
 - It may cause an electric shock.
- Do not use the controller for special applications.
 - This product is designed for use with the MITSUBISHI ELECTRIC BUILDING AIR CONDITIONING CONTROL SYSTEM. Do not use the system for other air condition management operation or applications. It may cause malfunctions.
- Do not apply insecticide or flammable sprays to the controller.
 - Do not place flammable spray near the controller and make sure it does not blow directly on the controller as this may cause in fire.
- Do not use the controller in special environments.
 - The performance may be reduce or parts may be damaged if the controller is used in locations subject to large quantities of oil (including machine oil), steam, sulfide gas.
- Do not touch the switches with sharp objects.
 - It may cause an electric shock or malfunction.
- Operate the controller within the specified temperature range.
 - Observe the specified temperature range when operating the controller. If the controller is used outside the specified temperature range, it may cause serious damage. Be sure to check the operation temperature range in the operation manual.
- Do not pull or twist the transmission line.
 - It may cause a fire or malfunction.
- Do not dismantle the unit.
 - It is dangerous to touch the internal circuit board. It may cause a fire or malfunction.
- Do not clean the unit using benzene, thinner or other chemicals.
 - It may cause discoloration or other damage. If the unit should become particularly dirty, apply a mild cleaner that has been diluted with water to a soft cloth and wipe the unit clean. Be sure to wipe away any residual moisture with a dry cloth.

2. Functions

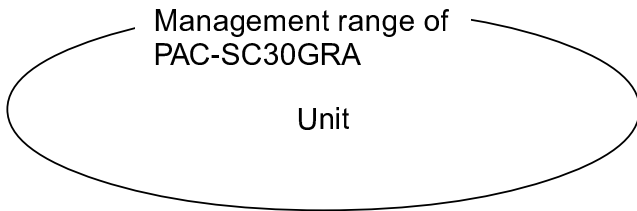
- This unit can control a maximum of 16 air conditioner units. The operation listed below are also possible.

<List of group remote controller functions>

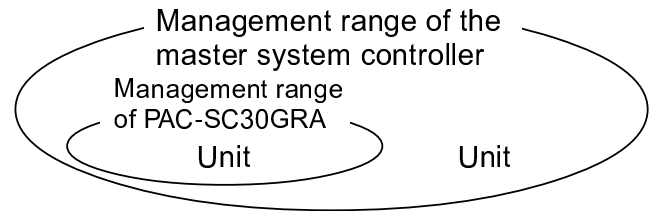
		Item	Specification
User operating function	Operations	ON/OFF	ON/OFF operations for the collective or each group.
		Operation mode	Switches between cool/dry/fan/auto/heat for the collective or each group.
		Fan speed	Switches between high /low for the collective or each group (switches the fan speed through four stages from 1 to 4)
		Temperature setting	Sets the temperature for the collective or each group. Range of temperature settings (Cool/Dry operations : 19 °C to 30 °C Heat operations : 17 °C to 28 °C Auto operations : 19 °C to 28 °C)
		Horizontal blow	Starts and stops horizontal blow operations for the collective or each group.
		Air direction/swing	Operates the vertical fan and swing fan for the collective or each group.
		Ventilation operation	Switches the interlocked ventilation unit between stop/high/low for the collective or each group.
		Timer operation	Switches between activating and suspending scheduled operations that use a program timer (sold separately) for the collective or each group.
		Filter reset	Resets the filter sign after the filter has been cleaned for the collective or each group.
	Monitoring	Collective operation	The overall status lamps display condition of the collective status.
		Each group operation	Liquid crystal display
		Operation mode	
		Fan speed	
		Temperature settings	
		Horizontal blow	
		Air direction/swing	
		Ventilation operation	
		Timer operation	
		Filter sign	
Prohibition			
Malfunction	Displays the unit address of the malfunction unit and the error code on the liquid crystal display		
Initial setting functions	Operations	Group settings	Performs the group settings for the unit (indoor unit, remote controller, slave system controller)
		Interlocked settings	Performs the interlocked settings for fresh masters and other ventilation unit.
	Monitor	Malfunction history	Displays the history of the ten malfunctions.
	System	Master system controller/slave system controller (*1)	Master and slave settings for the system controller.
		Group remote controller's address	Address setting for the group remote controller.

Item		Specification	
System control	Number of control unit	Indoor unit	Maximum 16 (maximum 8 groups)
		Number of indoor units in one group	0 to 16
		Number of remote controllers in one group	0 to 2
		Number of system controllers in one group	0 to 4 (including the number of remote controller in one group) 0 to 3 for which have one remote controller.
		Number of indoor units interlocked with one ventilation unit.	0 to 16 (some type of ventilation unit can be only operate when interlocked to a maximum of 9 units)

*1 Master system controllers and slave system controller



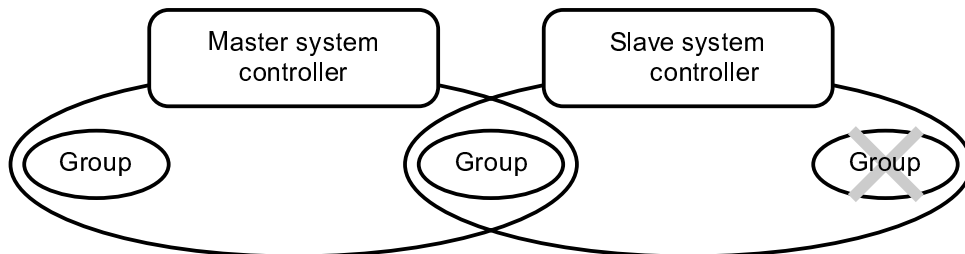
When using a system consisting only of PAC-SC30GRA, PAC-SC30GRA is set as the master system controller. In this case, the group settings are performed with PAC-SC30GRA.



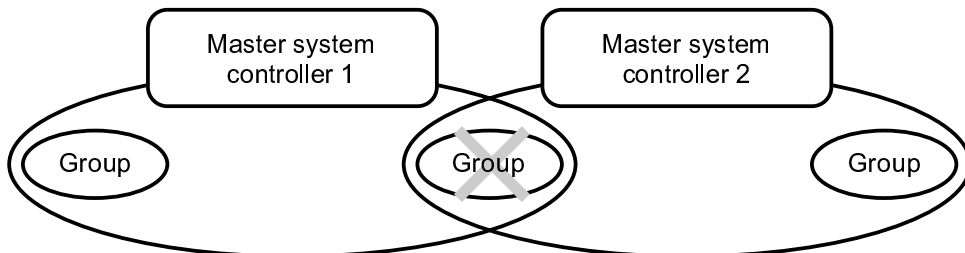
When using a system where PAC-SC30GRA is controller by a different system controller, PAC-SC30GRA is set as the slave system controller. In this case, the group settings are not performed with PAC-SC30GRA.

NOTE: It is not possible to set the master and slave settings with more than one group remote controller and control the same groups. Also, the groups listed below cannot be set.

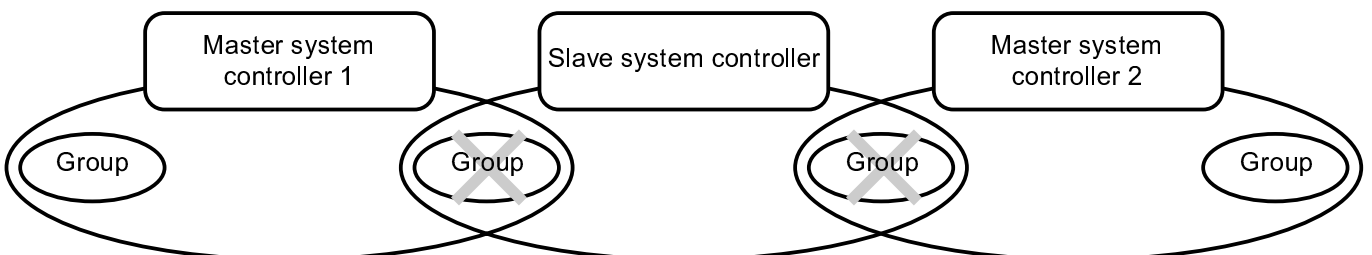
- Unit group which are not under the management of the master controller and are managed by the slave system controller.



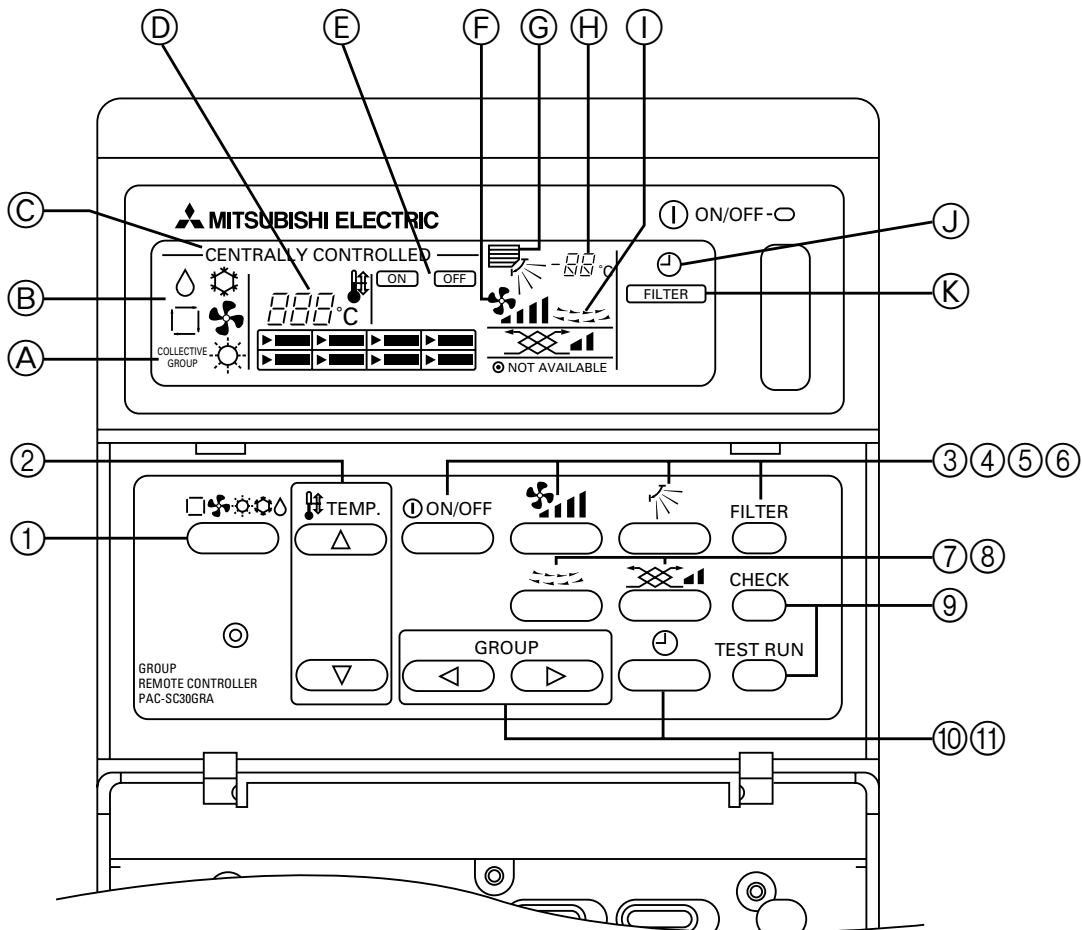
- A common group is managed by more than two master controllers.



- A slave system controller which exceeds the management range of the master system controller of two or more.

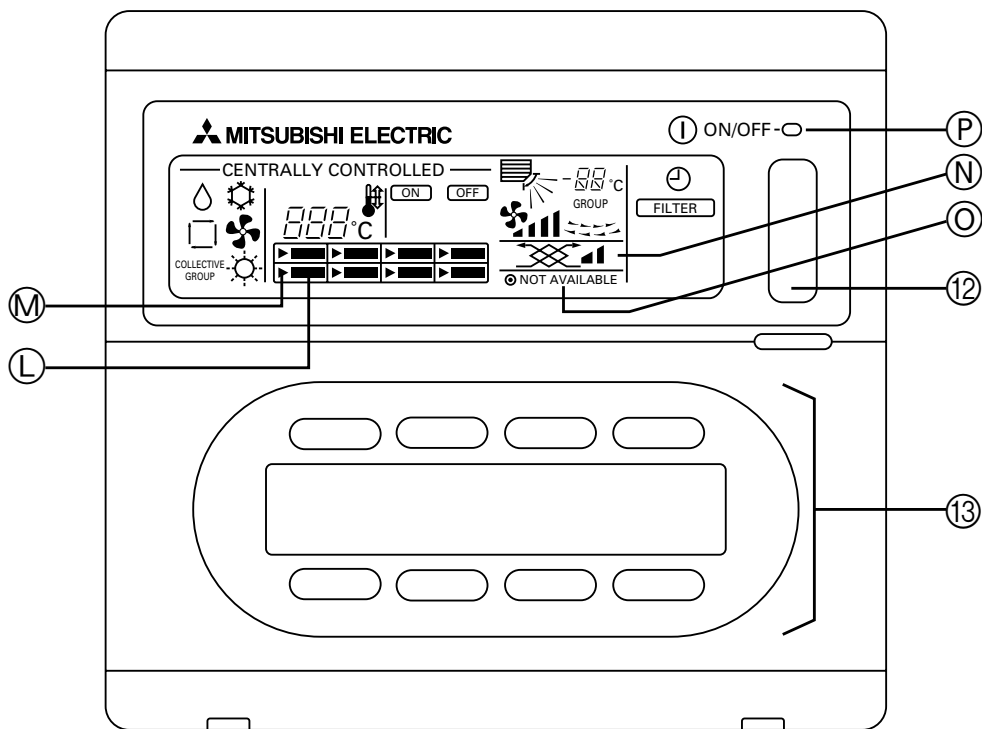


3. The names of indicators and their functions



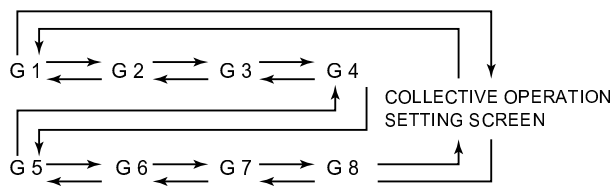
- Ⓐ COLLECTIVE SETTINGS/INDIVIDUAL GROUP SETTINGS DISPLAY:
COLLECTIVE is displayed when entering the same settings for multiple groups.
GROUP is displayed when entering varying settings for individual groups.
- Ⓑ OPERATION MODE DISPLAY:
Displays the current operating mode.
- Ⓒ CENTRALLY CONTROLLED DISPLAY:
Indicates when operation of group remote controller is prohibited by the master controller.
- Ⓓ TEMPERATURE SETTING DISPLAY:
Displays the current temperature setting.
- Ⓔ ON/OFF DISPLAY FOR INDIVIDUAL GROUPS:
Displays whether a group's operations have been stopped by showing a "▶" mark in the operation status display for each individual group.
- Ⓕ FAN SPEED DISPLAY:
Displays the current fan speed.
- Ⓖ AIR DIRECTION DISPLAY:
Displays the current direction of airflow.
- Ⓗ ROOM TEMPERATURE DISPLAY:
Indicates the room temperature of the group currently being displayed (will blink when the temperature is outside the range of 8°C to 39°C).
- Ⓛ HORIZONTAL BLOW DISPLAY:
Displays the operations of the horizontal blow. Not displayed when operations are stopped.

- Ⓜ TIMER OPERATION DISPLAY:
Displayed when a PROGRAM TIMER (sold separately) is installed and the TIMER MODE is set.
- Ⓚ FILTER SIGN DISPLAY:
Blinks when the filter requires cleaning. Also the GROUP SELECTION DISPLAY "▶" of the specified group will blink.
- Ⓛ OPERATIONAL STATUS DISPLAY BY GROUP: ■
ON: Run OFF: Stop BLINKING: Malfunction
- Ⓜ GROUP SELECTION DISPLAY: ▶
Displays the position of the selected group. All registered groups are displayed on the collective operation setting screen.
- Ⓝ VENTILATION DISPLAY:
Displays the operating condition of the ventilation unit (if a ventilation unit has been installed).
- Ⓞ NOT AVAILABLE DISPLAY:
Blinked together with the relevant function when a function switch has been pressed for a unit that is not equipped with the function.
- Ⓟ OVERALL STATUS LAMP:
The lamp indicates the unit operation condition.
ON: One or more group(s) run.
OFF: All groups stopped. BLINKING: Malfunction.



- ① OPERATION MODE SWITCH:
Used to switch between Cool/Dry/Fan/Auto/Heat.
- ② TEMPERATURE SETTING SWITCH:
Used for changing the temperature setting. Setting changes are possible in increments of 1°C.
- ③ ON/OFF SWITCH:
Used to switch between ON/OFF for the group indicated on the group selection display.
- ④ FAN SPEED SWITCH:
Used to switch fan speeds.
- ⑤ AIR DIRECTION SETTING SWITCH:
Used to adjust the vertical direction of the blow.
- ⑥ FILTER SIGN RESET SWITCH:
Used to reset the filter sign.
- ⑦ HORIZONTAL BLOW SWITCH:
Used to switch between start and stop for the horizontal blow.
- ⑧ VENTILATION SETTING SWITCH:
Used for changing the operation settings of the ventilation unit (if a ventilation unit has been installed). Possible changes to the operation settings of the ventilation unit include OFF/ON (low) or ON (high). It is possible to operate only the ventilation units by pressing this switch when the air-conditioners are not operating.

- ⑨ CHECK/TEST RUN SWITCH:
Used only during inspections and test run operations. Not to be used during normal operations.
- ⑩ GROUP SELECT SWITCH:
Used to call out the group and collective operation setting screens to perform the various settings.



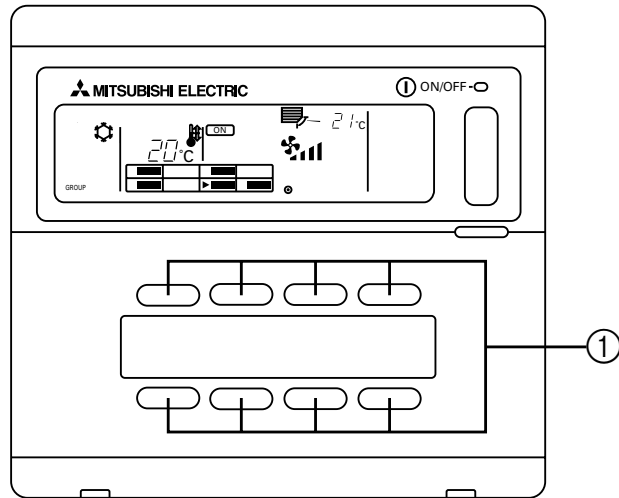
“Group” is abbreviated as “G”.

- ⑪ EXTERNAL TIMER SWITCH:
Allows you to select the TIMER MODE when a PROGRAM TIMER (sold separately) has been installed.
- ⑫ COLLECTIVE ON/OFF SWITCH:
Allows you to operate and turn off the air conditioners for all groups at once. All groups will commence operations when operations for all groups are stopped. Operations for all groups stopped when one or more groups are operating.
- ⑬ ON/OFF SWITCH BY GROUP:
Run and stop operations by each group.

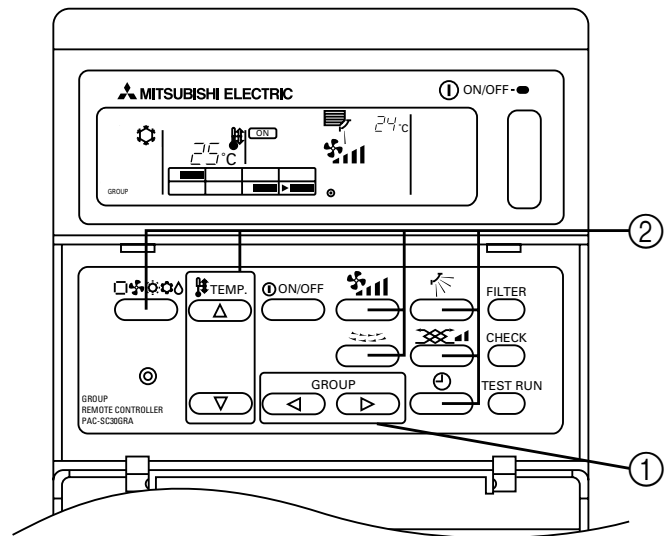
4. Operations

4-1. Operation settings by group

(1) With the cover closed:



(2) With the cover open:

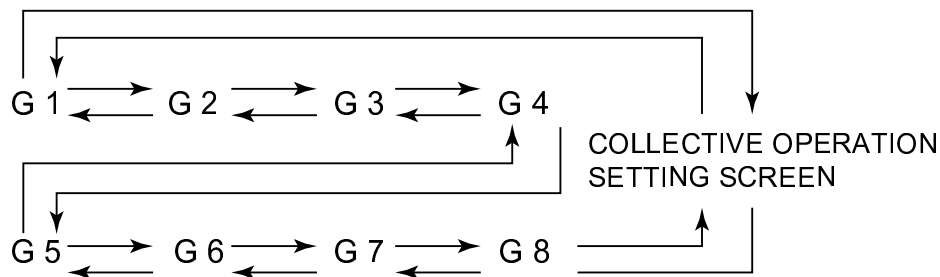


(1) With the cover closed:

- ① The start and stop functions of the air conditioners for each group can be controlled using the ON/OFF switch by group.

(2) With the cover open:

- ① Use the GROUP select switch to call the group that you want to set. (GROUP SELECTION DISPLAY: The position of the “▶” will change. Groups of air conditioners that have not been registered will be skipped.)



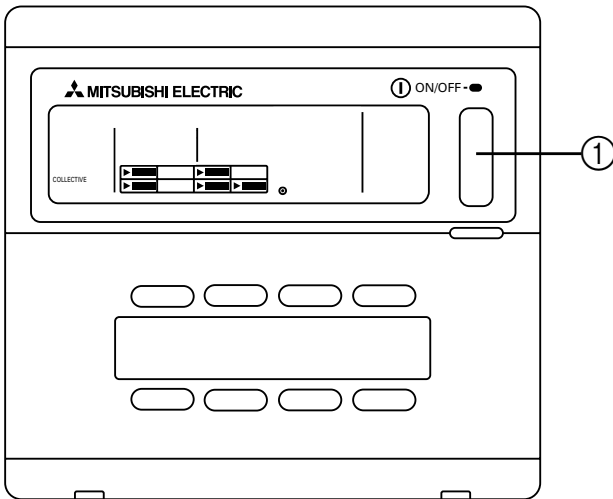
“Group” is abbreviated as “G”.

② Controlling the items that you want to adjust

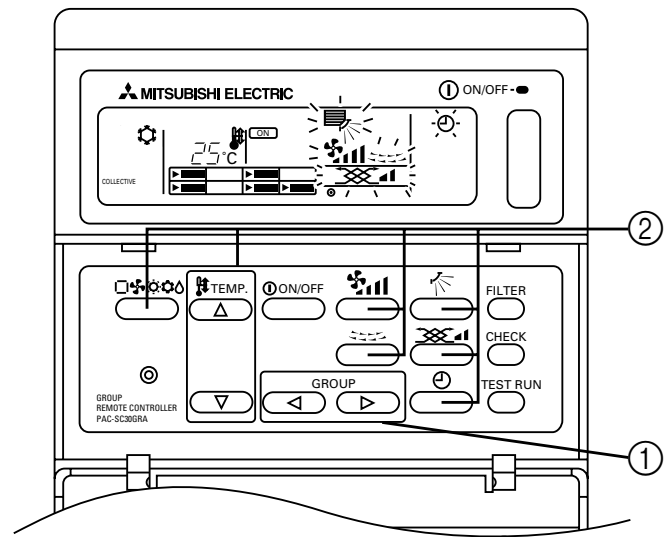
- If the selected group is not in operation, press the ON/OFF switch to start operation.
- Press the switch that you want to adjust (OPERATION MODE, TEMPERATURE SETTING, FAN SPEED, AIR DIRECTION SETTING, HORIZONTAL BLOW, VENTILATION SETTING and EXTERNAL TIMER SETTINGS).
(For detailed explanations on how to adjust each feature, refer to 4-3.)
- If the registered group contains air conditioners that are not equipped with the FAN SPEED, AIR DIRECTION SETTING, HORIZONTAL BLOW, VENTILATION SETTING and EXTERNAL TIMER SETTINGS, the message “NOT AVAILABLE” will blink to indicate that the setting is not supported.

4-2. Collective operation settings

(1) With the cover closed:



(2) With the cover open:

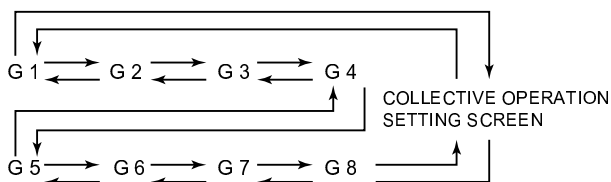


(1) With the cover closed:

- ① The start and stop functions of the air conditioners for all groups can be controlled using the collective ON/OFF switch. (This collective ON/OFF function can be operated when the UPPER PANEL is open as well.)

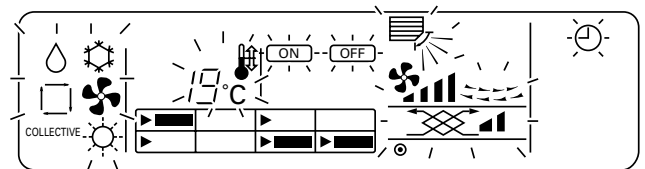
(2) With the cover open:

- ① Call the COLLECTIVE OPERATION SETTING SCREEN using the GROUP select switch (the screen in which all indicators are blinking).



“Group” is abbreviated as “G”.

[COLLECTIVE OPERATION SETTING SCREEN]



② Controlling the items that you want to adjust

- Press the switch that you want to adjust (OPERATION MODE, TEMPERATURE SETTING, FAN SPEED, AIR DIRECTION SETTING, HORIZONTAL BLOW, VENTILATION SETTING and EXTERNAL TIMER SETTINGS).

(For detailed explanations on how to adjust each feature, refer to 4-3.)

- Indicators will stop blinking but will remain lit as the settings are entered for all groups.
- If you do not want to adjust a particular setting for all groups, leave it as is (so that it continues to blink). The previous setting that was used will continue to be enabled.

4-3. Adjusting each function

The following section describes the operation of the switches for the OPERATION MODE, TEMPERATURE SETTING, FAN SPEED, AIR DIRECTION SETTING, HORIZONTAL BLOW, VENTILATION SETTING and EXTERNAL TIMER SETTINGS.





If your air conditioner is not equipped with FAN SPEED, AIR DIRECTION SETTING, HORIZONTAL BLOW, VENTILATION SETTING and EXTERNAL TIMER SETTINGS or a PROGRAM TIMER (sold separately), the "NOT AVAILABLE" indicator will blink when the switches for these functions are operated and the operation will not be performed.










However, "NOT AVAILABLE" does not appear on the COLLECTIVE OPERATION SETTING SCREEN.

If "CENTRALLY CONTROLLED" blinks when the each switch is operated, the message indicates that the operation is prohibited by the master controller.

All of the blinking items in the COLLECTIVE OPERATION SETTING SCREEN indicate items that can be adjusted. After the items are adjusted they will stop blinking but will remain lit and those adjustments will be applied to all groups.



(1) Operation mode

① Press the     operation mode switch.

- The operation mode will switch between Cool () → Dry () → Fan () → <Auto ()> → <Heat ()> whenever the     operation mode switch is pressed. The operation modes enclosed in parenthesis (< >) will not be displayed if the indoor units registered in the various groups are not equipped with these modes.

(2) Temperature adjustment

① Press either of the  or  temperature setting switch.







- The temperature setting will be amended by 1 °C when either of the  or  temperature setting switch are pressed. The setting will change by 1 °C in a continuous stream if pressure is kept on these switches.
- The room temperature can be set within the following ranges.

Cool/Dry operations:	19 °C to 30 °C
Heat operations:	17 °C to 28 °C
Auto operations:	19 °C to 28 °C
- The room temperature cannot be set for Fan operations.
- Although the temperature range can be set between 19 to 30 °C regardless of the operation mode on the collective operation setting screen, the actual temperature setting will be based on the operation mode for each group.

(3) Fan speed adjustment


① Press the  fan speed switch.


- The fan speed settings will differ depending on the type of indoor unit.

Fan speed	Remote controller display			
	Low	Medium 2	Medium 1	High
2-stage				
4-stage				

The fan speed will change whenever the fan speed switch is pressed.

(4) Horizontal blow

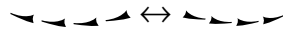
① Press the  horizontal blow switch.

- The horizontal blow are operated and stopped whenever the  horizontal blow switch is pressed.

[Display example]

<When the horizontal blow are operating>


<When the horizontal blow are not operating>




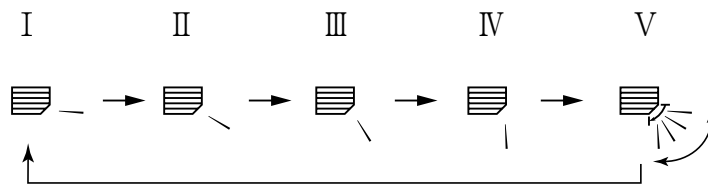
Interchangeable display

No display

(5) Air direction

① Press the  air direction switch.

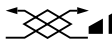
- The direction of the fan will change whenever the  air direction setting switch is pressed.



- Only I - IV will be displayed without V if the indoor unit is not equipped with the swing function.

(6) Ventilation setting

① Press the  ventilation setting switch

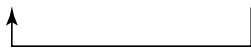
- The ventilation unit is operated whenever the  ventilation setting switch is pressed.

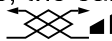
Off → Low → High

[Display example]

<With low ventilation>


<With high ventilation>



- Once the interlocked operations between the indoor unit and the ventilation unit have been set once, the same operations can be repeated simply by pressing the ① ON/OFF switch.
- The  ventilation setting switch is valid even when the air-conditioner is not operating to enable only the ventilation unit to be used. (The ① ON/OFF switch operations are not necessary.)

(7) External timer

① Press the  external timer switch.

- The external timer is activated and deactivated whenever the external timer switch is pressed. The  will be illuminated when the external time is activated and start/stop operations will be performed in accordance with the PROGRAM TIMER settings (sold separately.)

5. Filter sign reset

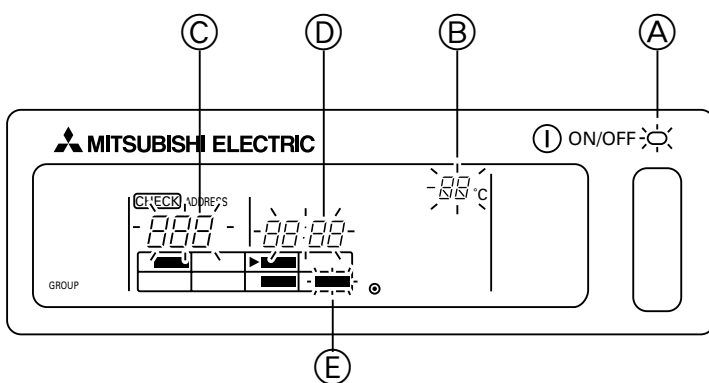
- The **FILTER** will blink to indicate that the filter requires cleaning. The group for which the filter requires cleaning will blink on the group selection display at the same time.

(1) Filter sign reset

- ① Select the appropriate group for which you want to reset the filter sign using the GROUP select switch. If you want to reset the filter sign for all groups, call the COLLECTIVE OPERATION SETTING SCREEN (the screen in which all indicators are blinking).
- ② Press the **FILTER** sign reset switch two times.
The **FILTER** display will stop blinking but will remain lit, the GROUP SELECTION DISPLAY “▶” will come on and the filter sign will reset.

6. When malfunction occurred

- The following will be displayed when a malfunction occurred.
- Having confirmed the address of the unit in which the malfunction has occurred and the error code, contact your dealer or service center.



- A The overall status lamp will blink.
 - B The unit type in which the error has occurred will blink.
 - C The address number of the unit in which the malfunction has been occurred will blink.
 - D The error code will blink (four characters).
 - E The block area of the operation display by group registered for the unit in which the malfunction has been occurred will blink.
- Canceling the error: Perform procedure ① or ② to cancel an error.
 - ① Press the collective ON/OFF switch.
Operations for all groups will be stopped.
 - ② Open the door to the operation area, call out the group in which the malfunction has occurred and then press the ① ON/OFF switch.
Only the operations for the group in which the malfunction occurred will be stopped.

7. Initial settings

7-1. Setting the master controller

It is necessary to enter initial settings. The initial settings include the following:

7-1-1. Group settings

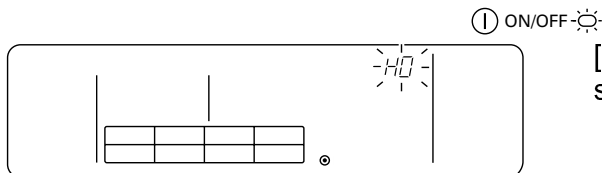
7-1-3. Canceling the initial setting mode

7-1-2. Interlocked setting

7-1-4. Collective deletion

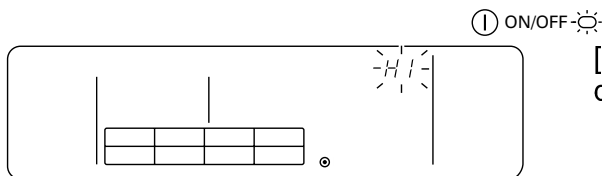
In order to perform these operations, first of all display the initial settings on the remote controller's screen.

- ① The following will be displayed when power is supplied to the remote controller.
 (i) If the group setting information has not been registered:

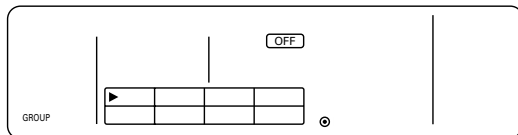


[H0] in the room temperature display area and the overall status lamp will blink.

- (ii) The following is displayed when group setting information already exists.



[H1] will blink in the room temperature display area during system start-up communications.

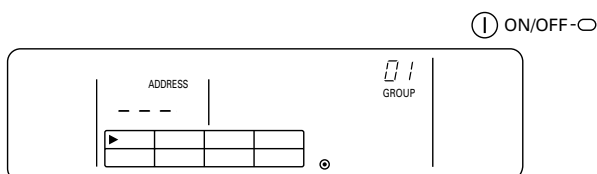


The user operation screen will be displayed when system start-up communications have been completed.

- ② Display the initial setting mode screen.

When ① (i) [H0] blinks in the remote controller's screen or when the user operation screen ① (ii) is displayed, press the FILTER sign reset and horizontal blow switches simultaneously (for at least two seconds). Be sure to perform this operation after first turning off the air conditioners for the entire group using the collective ON/OFF switch in the user operation screen ① (ii).

Also, switch operations are disabled if the display is illuminated. Press the external timer switch and perform normal operations once the display has been extinguished.



Initial setting mode screen

Perform operations 7-1-1 to 7-1-4 once the above status has been reached.

7-1-1. Group settings

Register the indoor units into each group.

Register the remote controller and the slave system controller in the same way.

- ① Select the group
↓
Select the group for which unit registration is required.
- ② Select the unit
↓
Select the unit to be registered into the group selected in ①.
- ③ To register units in groups
- ④ To delete units from the group
- ⑤ To confirm registered units
↓



Refer to 7-1-2 or 7-1-3.

NOTE: The range of the address number settings for the remote controller is between 201 and 250. Group allocation for the eight groups are automatically assigned a group number. (The controlled group is between group remote controller address minus 200 and group remote controller address minus 200+7.)

Example: When the group remote controller address is 201, the controlled groups are between groups 1 and 8. When the group remote controller address is 209, the controlled groups are between groups 9 and 16.

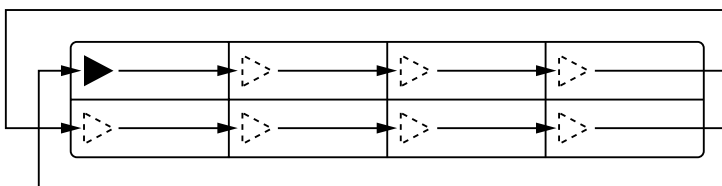
Address of PAC-SC30GRA	Controlled group number
201	1 to 8
209	9 to 16

① Select the group

- (1) The cursor in the group display area will move in the following sequence whenever the  GROUP select switch is pressed. It will move in the opposite direction when the  switch is pressed.

Example: When the group remote controller address is 201

Cursor movement



1	2	3	4
5	6	7	8

Group display area: Group number allocation

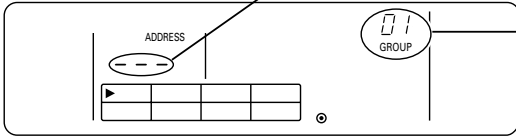
Room temperature display area (group number displayed for two seconds.)

“01” → “02” → “03” → . . . → “08”

- The controlled group display will change in accordance with the address number setting.

- (2) Once the group has been selected, the unit with the smallest address number will be displayed if registered units exist for that particular group. The unit type will also be displayed after two seconds. Details displayed:
 Temperature setting display area: Address number
 Room temperature display area: Unit type
 Example: When groups 1 and 2 are not registered and an indoor unit with the address 005 is registered in group 3.

Temperature setting display area: [— — —] will be displayed if nothing is registered.

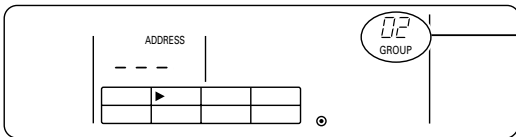


The relevant group number is displayed, and [— —] will be displayed two seconds later if nothing is registered.

Group 1 display




Press  once.

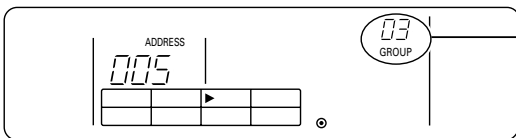


[— —] will be displayed two seconds later if nothing is registered.

Group 2 selection



Press  once.




[I] or other unit type will be displayed two seconds later.

Group 3 selection.
 Indoor unit 005 is registered.


② Select the unit

(1) Select the unit to be registered in the group selected with ①.

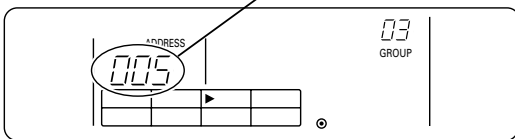
- The address numbers will change in the sequence shown below within the temperature setting display area whenever the  temperature setting switch is pressed.

“001” → “002” → “003” → → “250”

Indoor unit:	001 to 050
Remote controller:	101 to 200
System controller:	201 to 250

- The address numbers will change in the opposite direction when the  switch is pressed.

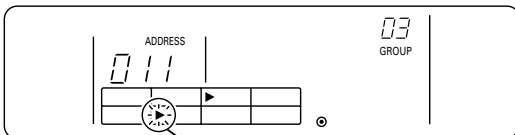
Temperature setting display area: Address number displayed



(2) Selecting registered units

- The following display will be shown when the selected unit is registered in one of the eight groups controlled by this equipment.



Example: When unit 011 is called out with group 3



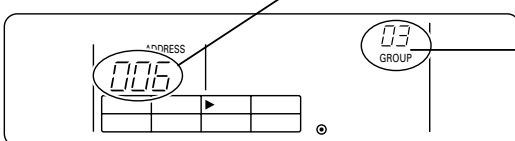
Cursor blinks. Indicates that the unit is registered in group 6 in this case.


③ To register units in groups

(1) Register the selected units in groups


- Press the TEST RUN switch with the group number and unit address selected with ① and ② displayed.
- This operation completes the registration task.
- [] or unit type will be displayed if registration was performed normally. [] will blink beside the unit type if the registration was not performed normally.

Display the address number that is to be registered



[] or unit type will be displayed if registration was performed normally
Registration complete screen. Indoor unit with an address number of 006 is registered in group 3.


(2) Registering other units

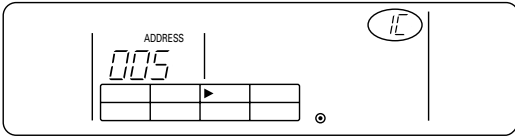
- The subsequent address will be displayed when the  temperature setting switch is pressed after registration is complete. Repeat procedures ② and ③ to continue with registration.

NOTE: Registration is required not only for indoor units but when you want to set the remote controller and slave system controller as well. Registration of multiple groups is possible only at the system controller address.

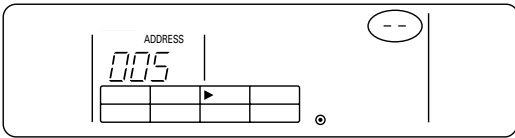
Each controller	Indoor unit:	IC
	Remote controller:	RC
	System controller:	SC

④ To delete units from the group

- Perform the procedure explained in ① and ② to call out the unit address number that is to be deleted.
 - The unit registered in the group will be deleted if the  fan speed switch is pressed twice at this time.



↓ Press the  fan speed switch twice.



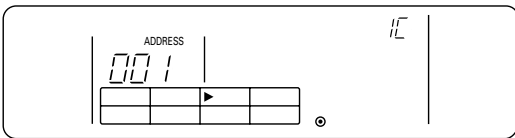
The unit type display will disappear and be replaced with [— —] once this procedure is completed normally.

⑤ To confirm registered units

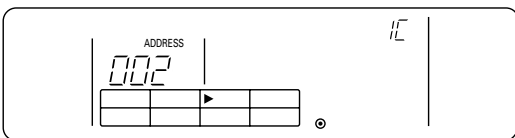
It is possible to confirm the address numbers of all units registered within groups.

- Perform the procedure explained in ① and select the group for which a search is to be run.
- Press the ① ON/OFF switch to display the registered unit address numbers sequentially from the smallest number.

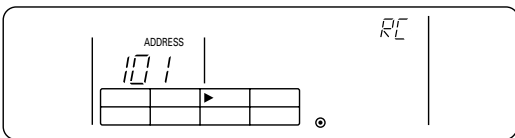
Example:



↓ Press the ① ON/OFF switch.



↓ Press the ① ON/OFF switch.



Press the ① ON/OFF switch.



- [— — —] will be displayed if no units are registered.

7-1-2. Interlocked setting

- Sets each group for Interlocked operations with Interlocked unit.
- Perform the settings for the Interlocked unit after the groups have been set. Interlocked unit cannot be set up for groups that do not have any units registered.

① Call out the Interlocked unit setting screen



② Select the group number

Select the group for which interlocked unit is to be registered in the same way as for retrieval and deletion.



③ Call out the registered unit



④ Select the interlocked unit address number



⑤ To register interlocked units

⑥ To delete interlocked units


⑦ To confirm interlocked units

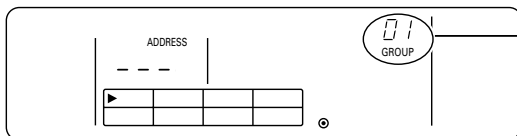


Refer to 7-1-1 or 7-1-3.

① Call out the interlocked unit setting screen

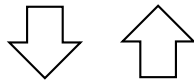
(1) Change the screen from the group selection screen shown in 7-1-1 ① to the interlocked unit setting screen.


Press the  operation mode switch.

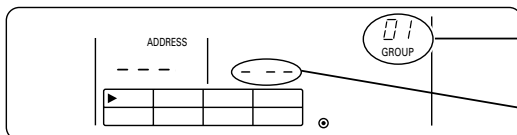


[— —] will be displayed two seconds later

Initial settings mode screen



The screen will switch between the initial settings mode screen and the interlocked unit setting screen whenever the  operation mode switch is pressed.



[— —] will be displayed two seconds later

Display area for the interlocked unit address number

Interlocked unit setting screen

② Select the group number

(1) Call out the group number

- Call out the group number into which the interlocked unit is to be registered. Perform the same procedure as explained in 7-1-1. ① group selection.
- Select the group with the  and  GROUP select switch.

(2) The relevant group number will be displayed in the room temperature display area once the group has been selected.

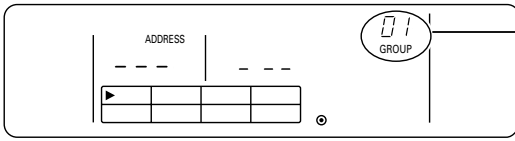
- (3) Once the group has been selected, the unit with the smallest address number will be displayed if registered units exist for that particular group.

Details displayed:

Temperature setting display area: Address number

Room temperature display area: unit type

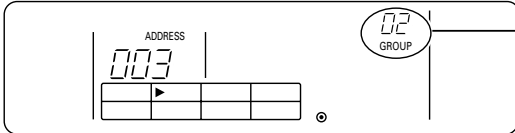
Example: When group 1 is not registered and an indoor unit with the address 003 is registered in group 2.



[— —] will be displayed two seconds later

(interlocked unit setting screen)

Press once.



[003] or other unit type will be displayed two seconds later.

Group 2 selection

③ Call out the registered unit

Call out the indoor unit's address number for which interlocked unit is to be registered by pressing the ① ON/OFF switch.

④ Select the interlocked unit address number

Call out the interlocked unit address number to be registered in the indoor unit selection in ③.

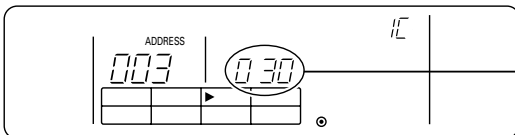
- (1) Press the air direction setting switch with the indoor unit selected in ③ displayed.

- The displayed interlocked unit address numbers will change in the following sequence whenever the switch is pressed.

“001” → “002” → → “050”

The diagram shows the sequence of address numbers: "001" followed by an arrow to "002", then an arrow to a series of dots, and finally an arrow to "050". A bracket underneath the sequence indicates the range of addresses.

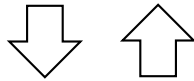
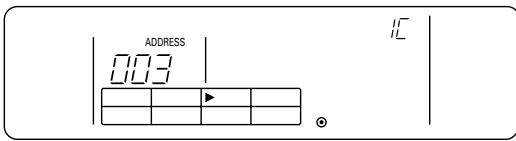
- Press the external timer switch to change the display in the opposite direction.



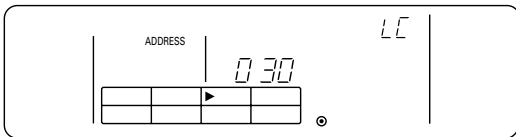
Aligned with the address number of the interlocked unit to be registered.

⑤ To register interlocked units

- (1) Press the TEST RUN switch with the details explained in ④ displayed to register the interlocked unit into the group.
- The following will be displayed if registration was performed normally.



The contents of the display will alternate between the information for the indoor unit's set address number and that of the interlocked unit's address number.



[] will blink beside the unit type if the registration was not performed normally.

(2) Registering other units

- Select other groups with the use of the and GROUP select switch.
- Select the indoor unit into which the interlocked equipment is to be registered with the operation mode switch.
- Select the other interlocked unit with the air direction and external timer switch.

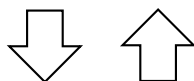
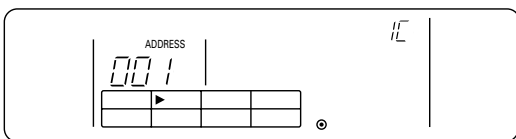
By performing the above procedure, the interlocked unit address number selection screen shown in ④ will be displayed to allow the set-up of subsequent interlocked unit.

The range of settings for address numbers and attributes for the interlocked units are:	001 to 050, LC or FU
---	-------------------------

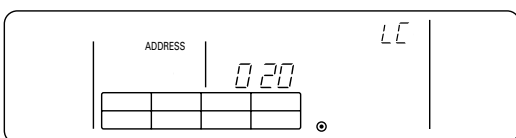
⑥ To delete interlocked units


Deletes the interlock settings for indoor units and interlocked unit.

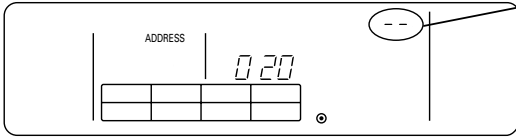
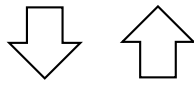
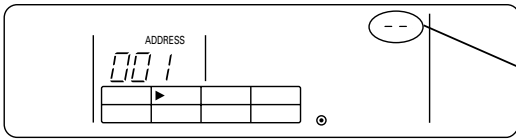
- (1) Display the screen following interlocked unit set-up or the retrieval screen for interlocked unit.



Alternately



- (2) The interlocked unit setting will be deleted if the  fan speed switch is pressed twice at this time.





Alternately

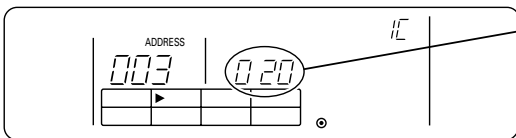
The unit type display will disappear and be replaced with [— —] once this procedure is completed normally.

⑦ To confirm interlocked units

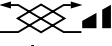
It is possible to confirm which indoor unit the interlocked unit is registered against with the retrieval process.

- (1) The address number for the interlocked unit assigned with settings that you want to check is displayed using the same operation that was used in ④.

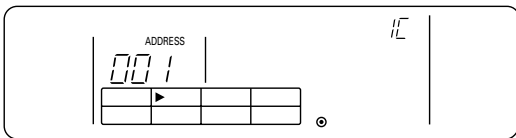
- Select the interlocked equipment with the  air direction and  external timer switch.



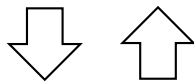
Display the address number of the interlocked unit to be retrieved.

Press the  ventilation setting switch with the left displayed.

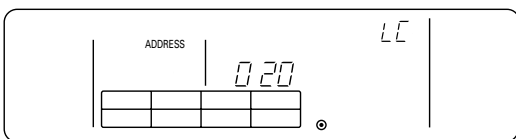
- (2) When a interlocked unit setting exists



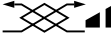
The address number and unit type of the set-up unit are displayed.



Alternately



Address number of unit type of the interlocked unit are displayed.

- Press the  ventilation setting switch with the above displayed to confirm each of the other units into which link settings have been established for the interlocked unit.

Example: When interlocked unit 020 is interlocked into the following units:

Indoor unit: 001 (group 1)
002 (group 2)

The contents of the retrieval will be displayed as follows:

Press the  ventilation setting switch.

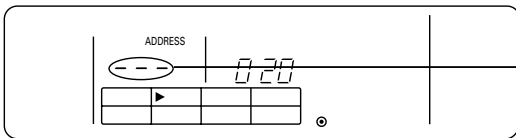
→ Indoor unit address 001 and its type ↔ Interlocked unit address 020 and its type

↓ Press the  ventilation setting switch.

Indoor unit address 002 and its type ↔ Interlocked unit address 020 and its type


Press the  ventilation setting switch.

(3) When interlocked unit has not been set up.



[— — —] will be displayed in the unit address display area (temperature setting display area.)


7-1-3. Canceling the initial setting mode

- Press the FILTER sign reset switch and  horizontal blow switch simultaneously (for at least two seconds) when the group settings and linked equipment settings have been completed.
- This will store the group setting information and perform system start-up communications. Once this has been completed, the user operation screen will be displayed. (Refer to 7-1. ① (ii))


NOTE: Do not switch off the power supply during system start-up communications (when [H1] is blinking.)
(The group setting information will be stored incomplete if the power supply is cut off.)

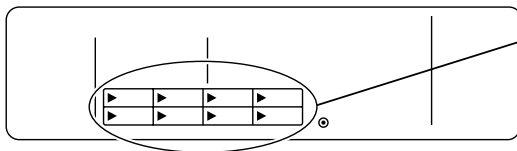
7-1-4. Collective deletion

Deletes all group setting information and interlocked unit setting information.

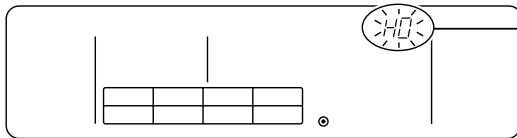
- (1) Display the initial setting mode screen or the interlocked unit setting screen.
- (2) Press the  fan speed switch with this displayed for three or more consecutive seconds to delete all setting information.

CB

Press the  fan speed switch for three or more consecutive seconds



The ① ON/OFF switch LED and the selection mark will blink



Communications process for collective deletion in progress

[H0] will blink in the room temperature display area

Initialized status

7-2. Setting the slave controller

- Initial settings are performed with the master system controller when this equipment is controlled by the master system controller.
(It is not necessary to enter initial settings.)

NOTE: Observe the system limitations mentioned in *1 of 2. Functions when making the initial settings with the master system controller.

8. Functions during start-up and servicing

8-1. Self-diagnosis

- It is possible to check past errors (error codes) stored in the indoor units.

- ① Group selection
↓
- ② Calling out the self-diagnosis screen
↓
- ③ Selecting the indoor unit address number for which self-diagnosis is to be performed
↓
- ④ Displaying error codes
↓
- ⑤ Resetting the error history
↓
- ⑥ Canceling the self-diagnosis

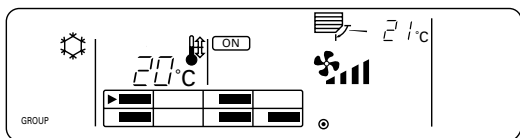
① *Group selection*

- Select the group for which self-diagnosis is to be performed with the ◀ and ▶ GROUP select switch.

NOTE: The group with the smallest group number from amongst all registered groups will be selected when self-diagnosis is performed from the collective operation settings screen.

② *Calling out the self-diagnosis screen*

- Switch across to the self-diagnosis screen and start the self-diagnosis process by pressing the CHECK switch twice on the group operation setting screen.

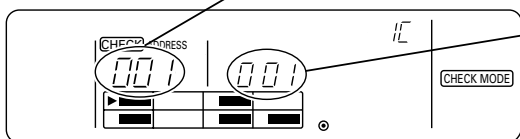


Group operation setting screen



Press the CHECK switch twice.

The smallest address number from the groups selected with ① will be displayed.



Self-diagnosis screen

Error code display area [001] (indoor unit address number)

↕ Alternately

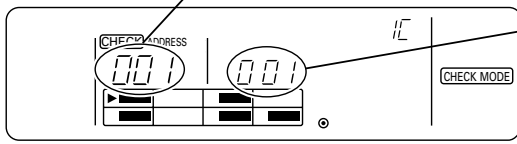
[25 03] (error code)

③ *Selecting the indoor unit address number for which self-diagnosis is to be performed*

- Select the indoor unit address number for which self-diagnosis is to be performed with the use of the ▲ and ▼ temperature setting switch or the ⌚ external timer switch.
- If the indoor unit address number was selected with the ⌚ external timer switch, only the address number of the indoor unit registered within the group selected in ① will be selected.

- If the indoor unit address number was selected with the \triangle and ∇ temperature setting switch, it is possible to select address numbers of the indoor units registered outside of the group selected in ①.

The display will change when the \triangle and ∇ temperature setting switch or the \oplus external timer switch are pressed.

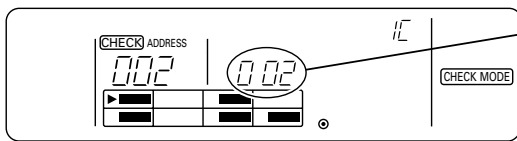


Self-diagnosis screen

Error code display area
[001] (indoor unit address number)
↕ Alternately
[25 03] (error code)

④ Displaying error codes

- The following will be displayed in the error code display area when the address number of the indoor unit is selected with ③.



Error code display area
[002] (indoor unit address number)
↕ Alternately
[25 03] (error code)

- Inspection codes
When an error exists: 4-character numeral
When no error exists: [-- --]
In the case of non-registered indoor units: [FF FF]

⑤ Resetting the malfunction history

- Select the indoor unit number to be reset with the use of the \triangle and ∇ temperature setting switch.
- Press the \square operation mode switch twice to reset all error codes stored within the indoor unit.

NOTE: The malfunction history stored within the group remote controller will not be reset.

⑥ Canceling the self-diagnosis

- Perform the following procedure to cancel the self-diagnosis and return to group operation setting screen for the group selected in ①.
 - (1) Press the CHECK switch twice.
 - (2) Press the \triangleleft and \triangleright GROUP select switch.
 - (3) Close the upper panel.
 - (4) Press the collective ON/OFF or ① ON/OFF switches.
- The air-conditioner will be stopped if the self-diagnosis is canceled with (4).
Also, The screen will change to the collective operation setting screen if the self-diagnosis is canceled with the collective ON/OFF switch.

8-2. Malfunction history monitoring function

- It is possible to monitor up to ten of the most recent malfunction histories.
- The address of the unit in which the malfunction occurred and the error code will be displayed.
- This information is not deleted when the power supply is switched off. It can only be deleted by performing the malfunction history reset procedure.
- If the malfunction history is reset at the end of a service, it is possible to have a clear record of all malfunction that occurred up until the next service.

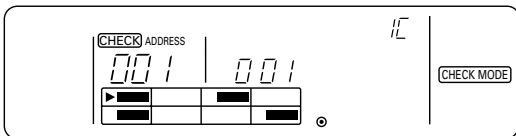
- ① Calling out the self-diagnosis screen
↓
- ② Calling out the malfunction history monitoring screen
↓
- ③ Retrieving malfunction histories
↓
- ④ Resetting the malfunction history
↓
- ⑤ Canceling malfunction history monitoring

① Calling out the self-diagnosis screen

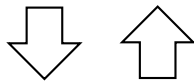
- Press the CHECK switch twice to switch across to the self-diagnosis screen.

② Calling out the malfunction history monitoring screen

- The display will switch between the self-diagnosis screen and the malfunction history monitoring screen whenever the TEST RUN switch is pressed.

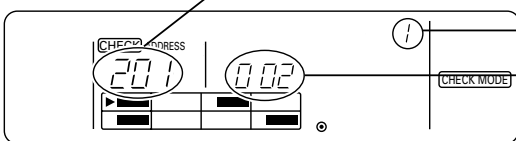


Self-diagnosis screen



The display will switch between the self-diagnosis screen and the malfunction history monitoring screen whenever the TEST RUN switch is pressed.

Group remote controller address number



Malfunction history monitoring screen


The smaller the number, the most recent the error.

[0 0 2] (address number).





↕ Alternately

[2 5 0 3] (error code)

③ Retrieving malfunction histories




- The most recent error code will be displayed sequentially whenever the  external timer switch is pressed. (A maximum of 10 errors can be displayed.)

④ Resetting the malfunction history

- Press the     operation mode switch twice to reset all of the malfunction history information stored within the remote controller.

NOTE: The error codes stored in the indoor units will not be reset.

⑤ Canceling malfunction history monitoring

- Observe the following procedure to cancel malfunction history monitoring and switch back to group operation setting screen that was displayed prior to the self-diagnosis screen being called out.
 - (1) Press the CHECK switch twice.
 - (2) Press the  and  GROUP select switch.
 - (3) Close the upper panel.
 - (4) Press the collective ON/OFF or  ON/OFF switch.
- Operations for the air-conditioner will be stopped when malfunction history monitoring is canceled in accordance with the procedure outlined in (4). Also, if malfunction history monitoring was canceled by pressing the collective ON/OFF switch, the screen will switch across to the collective operation setting screen.

9. Specifications

Specifications for this equipment

Item	Details
Power supply:	DC30V (power supplied from the outdoor unit or a power unit for transmission lines (model: PAC-SC34KUA))
Electricity consumption:	1W
Environmental conditions for usage:	Temperature 0 to 40 °C, humidity 30 to 90% RH (with no condensation)
Weight:	0.2kg
External dimensions (H × W × D):	120 × 130 × 18 (mm)

This product is designed and intended for use in a residential, commercial or light-industrial environment.
The product at hand is based on the following EU regulations:

- Electromagnetic Compatibility Directive 89/336/EEC

 **MITSUBISHI ELECTRIC CORPORATION**

HEAD OFFICE MITSUBISHI DENKI BLDG MARUNOUCHI TOKYO 100-8310 TELEX J24532 CABLE MELCO TOKYO