

Mitsubishi Electric Air-conditioner Network System

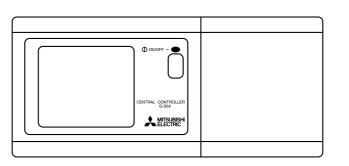
Central Controller Model: G-50A

Instruction Book

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Before using the controller, please read this Instruction Book carefully to ensure proper operation. Keep this manual for future reference.



1. Safety precautions

Before using the controller, read the Safety Precautions section carefully to ensure proper operation. These safety precautions must be observed by anyone who operates the central controller at all times. Keep this Instruction Book and Installation Manual for future reference. Make sure both this Instruction Book and the Installation Manual are given to the next user.

Safety symbols used in this manual

This symbol indicates that failure to follow the instructions exactly as stated poses the risk of serious injury of death.
This symbol indicates that failure to follow the instructions exactly as stated poses the risk of injury or damage to the controller.

• Have the unit professionally installed.	 Ask your dealer or an authorized technician to				
Improper installation by an unqualified person may result in	move the controller. Improper installation may result in electric shock or fire or				
a risk of electric shock or fire.	damage to the controller.				
 Make sure the controller is securely mounted so that it will not fall. 	Controllers must be disposed of properly. Contact your dealer for proper disposal procedures.				
 Make sure that the controller is connected to a	 Do not attempt to modify or repair the controller.				
properly rated power supply to avoid fire or	Modification or improper repair may result in electric shock				
damage to the controller.	or fire. Consult your dealer when repairs are necessary.				
• Do not remove the cover during operation.	 Stop the operation immediately and notify your				
Contact with electrically charged parts on the controller	dealer if an error code is displayed and the controller				
cause skin burns or other types of injury.	deap net operate, or when any opportunity in				
 If any abnormality is noticed (e.g., burning smell), stop the operation, turn off the power supply, and contact your dealer or technical representative immediately. Continuing the operation may result in damage to the controller, electric shock, or fire. 	does not operate, or when any abnormality is noticed. Continuing the operation may result in damage to the controller or fire.				

 Do not install the controller where there is a risk of leakage of flammable gas. If the leaked gas accumulates around the controller, it may be ignited and result in an explosion. 	• Do not use the controller in an environment high in oil, steam, or sulfuric gas. These substances may have adverse effects on the performance of the controller of damage its parts.				
• Do not wet the controller. Water may damage the controller and cause an electric shock.	• To avoid the risk of electric shock or damage to the controller, do not press the switches with sharp				
• To avoid the risk of electric shock or damage to the controller, do not touch the switches with wet hands.	objects.				
• Do not use the controller for specialized applications. This product is designed exclusively for use with the MITSUBISHI ELECTRIC building air conditioning control system. The use of this product with other air-conditioning management systems or for other purposes may result in malfunctions.	 Operate the controller within the temperature range specification. The use of controller outside of its specification may resul in serious damage to the controller. Be sure to check the temperature range specification in the Instruction Book. 				
• Do not spray insect sprays or sprays with flammable propellants to the controller. To avoid the risk of fire or explosion, do not place flammable sprays near the controller or spray them directly on the controller.					

2. Product features

The central controller is capable of controlling up to 50⁻¹ air conditioner units. It supports the following functions. (*1: The maximum number of connectible units depends on the indoor unit models.)

[1] User operation functions

(1) Operation

 Most of the functions of the local remote controllers are supported by the central controller. The central controller can turn on or off the indoor units in specific groups, display the room temperature for each indoor unit group, change the operation mode of the indoor units (COOL, DRY, FAN, AUTO and HEAT) and of the ventilation units (HEAT RECOVERY, BY-PASS, AUTO) as well as change the fan speed, air flow direction (4 directions and swing), ventilation mode (OFF, LOW speed, or HIGH speed), TIMER MODE, and temperature setting.

(Refer to section "5-7 User setting".)

- 2. Access to specific functions of the local remote controller, such as ON/OFF operation, mode selection, temperature setting, and filter sign reset can be prohibited.
- 3. Group setting Operation settings can be made for the entire groups or for each individual group.

(2) Weekly Schedule

- 1. The weekly schedule allows four different patterns of schedule to be set for each group. (P1-P4) Three of the four patterns (P1, P2, P3) are used to set the ON/OFF schedule, and the other one (P4) is used to prohibit the operation from the local remote controller. The ON/OFF schedule patterns (P1, P2, P3) can be used in combination with the operation prohibition function (P4) to set the schedule within the same day. By setting the schedule for each day of the week by using the four schedule patterns in combination, a weekly setting can be made for each group.
- 2. For each day, three ON times and three OFF times, or three prohibition times and three permission times can be set. It is possible to set only the ON times (prohibition times only) or only the OFF times (permission times only).
- Easy setting Daily operation schedule and weekly schedules (P1-P4) of a group can be copied to the settings for other groups.

(3) Operation status monitoring

- 1. The ON, OFF, or MALFUNCTION status of each unit or the group can be monitored.
- 2. Either the group numbers or the first three characters of group names that are controlled by the central controller can be displayed. The address of all units can be displayed altogether.
- 3. While all groups are displayed on the screen, the group that is marked with the ▷ symbol can be turned ON or OFF.

(4) Malfunction monitoring

- 1. The unit in error, error code, the address of the unit that detected the unit in error will appear on the "Malfunction monitor" screen.
- 2. Pressing the reset key stops all the units in the same group or in the same refrigerant system as the unit in error, and resets the error.

[2] System configuration setup and maintenance (1) System configuration setup

1. Indoor units, local remote controllers, and lower-level system remote controllers can be registered in the same group. OA processing or LOSSNAY units can also be registered.

- Each group can be specified by its name.
 (Alphanumerical characters can be used for the group name.)
- 3. Group names can be copied to the settings for the other groups.
- 4. The group configuration settings and the group names can be set as long as power is supplied to the central controller, even if indoor units have not been connected.
- 5. When the system configuration was changed, the system configuration data on the central controller can be erased all at once if necessary.

(2) Refrigerant system monitoring

The addresses of all the units (indoor, outdoor, etc.) in each refrigerant system can be displayed on this screen. This information is useful for checking the address setting, transmission line connection, and power supply connection.

(3) Interlocked operation setting

Make this setting to perform an interlocked operation of one or more of the indoor units and a ventilation unit. The interlocked ventilation unit will go into operation when one of the indoor units that is interlocked with it goes into operation.

(4) Malfunction log

- 1. The log of the central controller will be kept for the last 64 errors.
- 2. Information about the date/time of error occurrence, address of the error-source unit, error code, and the address of the unit that detected the error will be displayed on the screen.
- 3. The log of the central controller and indoor units can be deleted all at once with the reset button.

[3] Miscellaneous

(1) Entire-system status lamp (Operation/Stop)

Displays the status of the entire system (Normal operation, all OFF, and malfunction status are indicated with a lit, unlit, blinking lamp respectively).

(2) Collective ON/OFF switch

This switch turns all of the units in the system ON or OFF at once.

(3) Power supply wiring

Power to the central controller is supplied from the PAC-SC50KUA unit through the M-NET transmission line of DC power line. The length of the DC power line between the PAC-SC50KUA power supply unit and the central controller must not exceed 10 m.

The central controller can be connected to anywhere on the M-NET transmission line. (M-NET transmission line is a central control line that is connected to the TB7 on the outdoor unit.)

3. Functions

3 - 1 Specifications

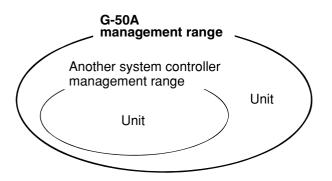
Item				Specification		
Source power requirement		Input voltage		DC24V, 0.02A (Maximum loading) Power received from PAC-SC50KUA Power Supply Unit via M-NET transmission line, or from an R410A compatible CITY MULTI outdoor unit (except the S Series). *Note: While the power to the connected outdoor unit is turned off, the G-50A cannot perform a schedule operation, collect charge data, or perform energy save control. DC12V, 0.2A (Maximum loading) Power is received from the PAC-SC50KUA Power Supply Unit via the DC power line.		
Environmen	tal condition	· ·	erature	Operating $0^{\circ}C \sim +40^{\circ}C / 32^{\circ}F \sim +104^{\circ}F$ Non operating $-20^{\circ}C \sim +60^{\circ}C / -4^{\circ}F \sim +140^{\circ}F$		
Dimensions		Humic mm in	120 (H	30 ~ 90%RH (No condensation)) × 300 (W) × 80 [*19] (D) *[]: indicate the thickness from H) × 11-13/16 (W) × 3-1/8 [*3/4] (D) the wall.		
Weight		kg lb	1.0 2-1/4	(W) × 11-15/10 (W) × 5-1/6 [5/4] (D) the wall.		
System con	dition		2 1/4			
System condition		Numb Numb Numb	: 5 er of uni : 1 *Note I t er of ren : 1 er of sys : 0 : 0 : 0 : 0	independent OA processing unit or LOSSNAY 0 units maximum (50 groups maximum)*3 ts (indoor or independent OA processing unit or LOSSNAY) in one group -16 units ndoor unit, independent OA processing unit and LOSSNAY can not regis- er to the same group. note controllers in one group -2 stem controllers in one group -4 (including the number of remote controller in one group) -3 for groups which have one remote controller. oor units interlocked with one OA processing unit or LOSSNAY -16 (some types of OA processing unit can only be operated when inter- locked to a maximum of 9 units)		
User operati						
	ON/OFF			operation can be performed as a collective or per group.		
	Operation mode *1 per group. [Selecta COOL [Selecta		oup. [Selecta COOI [Selecta HEAT	eration for the operation mode setting can be performed as a collective or able operation mode for the indoor unit] L/DRY/FAN/AUTO/HEAT able operation mode for the independent ventilation] RECOVERY/BY-PASS/AUTO		
Operation	Fan speed *1	an speed *1 per group. (The 4 fan spe		,		
	Air direction and swing operation *1	The air flow direction can be switched to 4 directions and swing operation as a collec- tive or per group. (Airflow setting can be switched to "5 directions" or to "AUTO" on the indoor units that support those settings via G-50A of ver. 3.10 or later.)				
	Temperature setting	Temperature setting can be performed collectively or per group.[Setting temperature range]Cool (Dry) operation: 19 ~ 30°C / 67 ~ 87°FHeat operation: 17 ~ 28°C / 63 ~ 83°FAuto operation: 19 ~ 28°C / 67 ~ 83°F				

Item		Specification
	Prohibit local remote control	The specific functions of a local remote controller can be prohibited as a collective or per group. [Prohibit function] ON/OFF operation, Operation mode setting, Temperature setting and Filter sign reset operation.
	Timer operation	The set schedule operations can be switched to ON/OFF (local remote controller opera- tion prohibition/permission) for each group.
Operation	Filter sign reset	The filter sign reset operation after the air filters are cleaned can be performed as a collective or per group.
	Ventilation operation *1	The ventilation operation of the interlocked OA processing unit or LOSSNAY can be collective or per group. [Ventilation operation] Low speed/High speed/Ventilation OFF
	Collective operation	The overall status lamp displays conditions of the collective statues.
	Each group operation	Each group operation is displayed on the operation setting screen (group) or opera- tion monitor screen.
operation tion monitor screen. Operation mode Fan speed Air direction Air direction Temperature setting Timer operation Filter sign Honitor Monitor Local remote		Displayed on the operation setting screen (group).
	Malfunction Current time back-up	when a malfunction occurs. When the power is cut off, the current time is backed up for approximately one week. (When the controller is fully charged. The controller is fully charged by twenty-four hours after power feed.)
Other	Timer setting	 Operation pattern setting can be performed. Operation interval: Minimum 10 minutes The daily operation pattern and weekly schedule for each group can be set. A pattern of one day: P1/P2/P3/ P1 / P2 / P3 / P4 / - * ON/OFF setting up to three times a day are possible for P1/P2/P3. * P4 enables to set operation prohibition of 3 times per day for the remote controller. * P1 / P2 / P3 implement the schedule which has combined P1/P2/P3 of ON/OFF pattern and P4 of remote controller operation prohibition pattern together. (P1 = P1 + P4 / P2 = P2 + P4 / P3 = P3 + P4 is displayed.) * - is a day without timer operation. "The reference temperature and set-back value" or "Setting temperature" which are linked with timer operation can be set.

lt	em	Specification
	Group name designation	Group name can be specified and display on the operation setting screen. * Group name setting is need at the initial setting.
Other	External signal input interface	Emergency stop/normal, ON/OFF, prohibit/permit for local remote operation can be con- trolled for units being controlled with a non-voltage contact signal input from an external source.
	External signal output interface	When one or more units being controlled are operating, the "ON" signal will be output, and if a malfunction occurs in one or more units, the "malfunction" signal will be output.
Initial setting	(for installation	and maintenance)
Connecting information	Group setting	The group setting operation for units (indoor units local remote controllers, independent OA processing unit, LOSSNAY and sub system controllers) are performed on the group setting screen.
setting	Interlocked setting	The interlocked setting for the ventilation equipment as the OA processing unit or LOSSNAY, etc to indoor unit is performed on the interlocked setting screen.
Monitor	Malfunction history	A maximum of the 64 most recent malfunction are displayed on the malfunction log monitor.
WOIIIIO	Refrigerant system monitor	The connected unit address are displayed on the refrigerant monitor screen.
	User setting	Some of the indication and function that appear on the each screen can be specified to match the needs of the user.
	Main system controller/ Sub system controller	Main/Sub setting of the system controller. * G-50A does not support sub controllers.
	setting *2	
Other	Prohibition setting enable /disable	The setting of a system controller which the local remote control is prohibition enable or disable.
	The prohibited controller range setting	Selecting of the prohibited controller which is only local remote controller or both local remote controller and the other system controller.
	K-control type	The system composed of K-control type air conditioner equipment can be controlled using the K transmission converter (PAC-SC25KAA).

*1 Each operation is available in accordance with the function of unit.

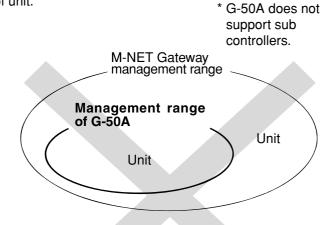
*2 Main system controller and sub system controller.



When G-50A controls another system controller or when the system contains only G-50A:

G-50A is set as the main system controller.

* G-50A performs the group setting in this configuration.



When G-50A is controlled by another system controller: (Example: MJ-300Gateway)

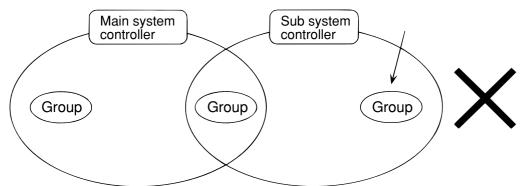
G-50A is set as the sub system controller. * The group setting is performed by main system controller.

*3 The number of connectible units may be fewer depending on the indoor unit models.

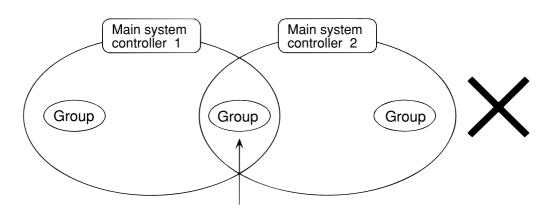
NOTE:

The following group setting cannot be performed.

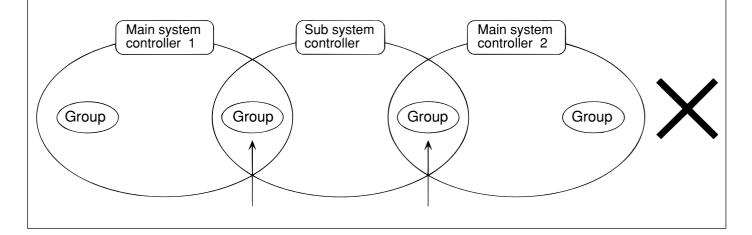
• Unit groups which are not under the management of the main controller and are managed by the sub system controller.

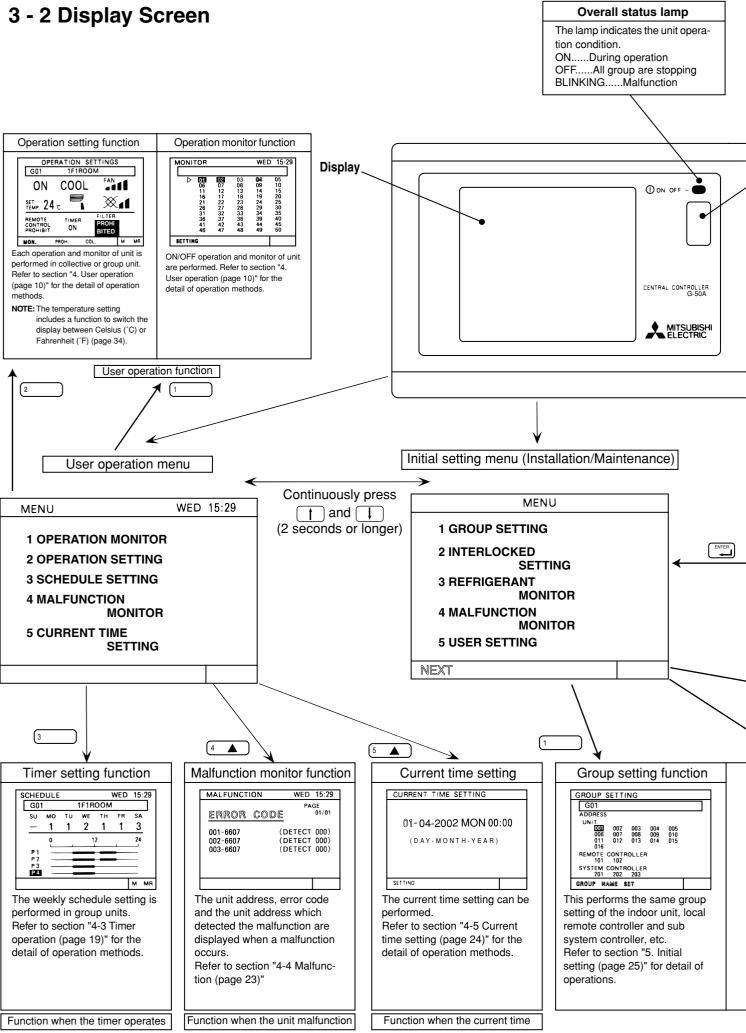


• A common group is managed by more than two main controllers.

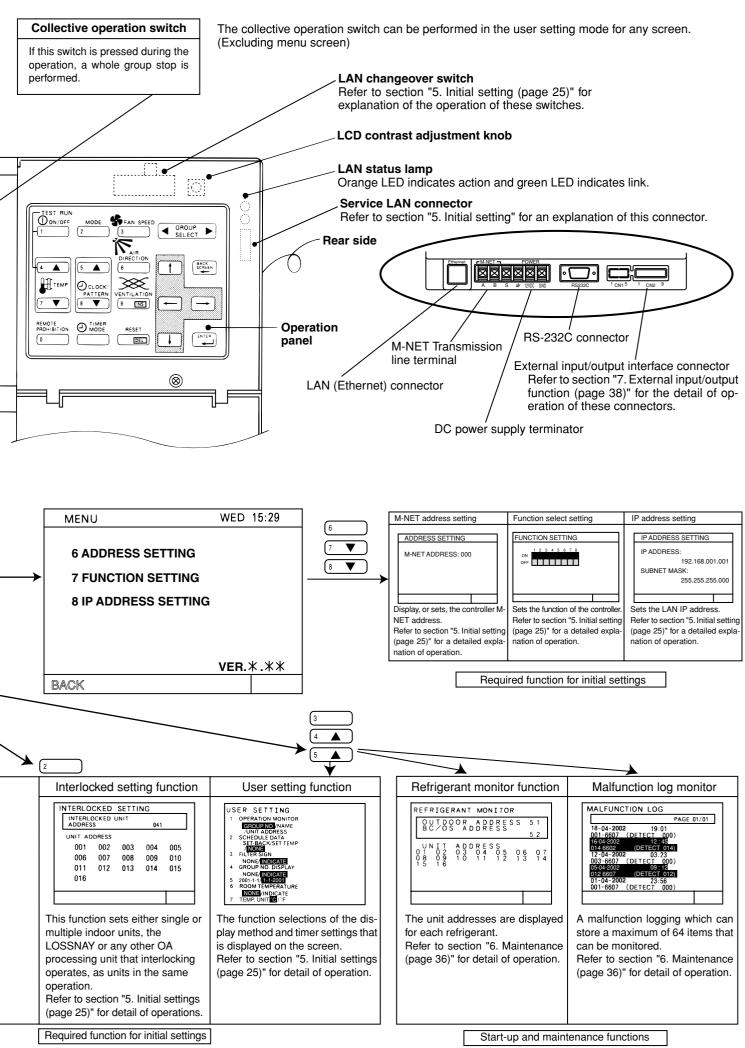


• A sub system controller which exceeds the management range of the main system controller of two or more.





- 8 -



-9-

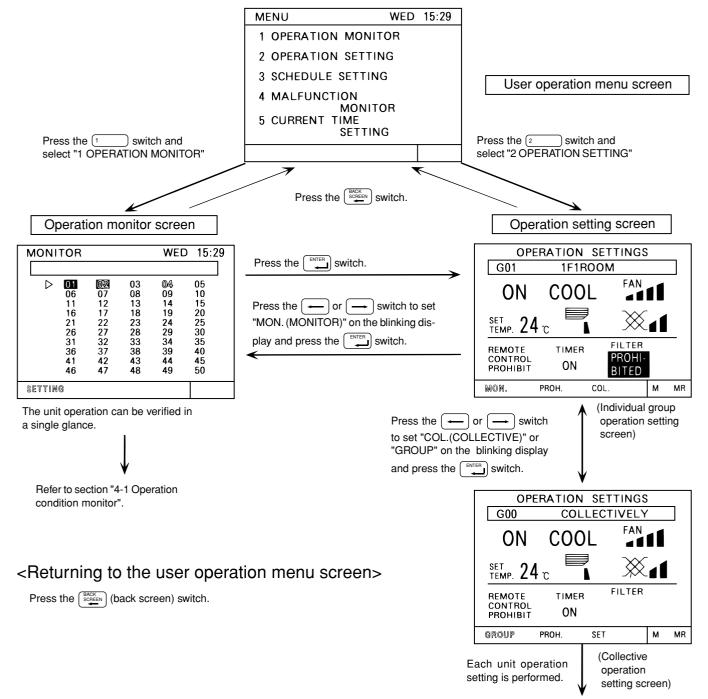
4. User operation

Operation monitor screen	This screen displays ON/OFF and malfunction condition of unit. G-50A normally displays this screen.
Operation setting screen	The unit operations can be performed by individual group or collective op- eration. These operation include the ON/OFF, operation mode, fan speed, temperature setting, air direction, ventilation setting, timer operation ON/OFF, local remote controller prohibition and filter sign reset are performed by group or collectively. In addition, this screen can also displays the room tempera- ture of each group.

Used the following two screens when user operation is performed.

• The collective operation can be performed on any screen (except for the menu screen) in the user operation mode.

<Shifting to the operation monitor screen and operation setting screen>



Refer to section "4-2 Operation setting".

4 - 1 Operation condition monitor

- This function displays the ON/OFF/Malfunction status of specific units or group.
- ON/OFF/Malfunction status is shown by the indication corresponding to the unit or group appearing in inverse, normal or blinking display.
- The user may select display items by unit address, group number or group name.
- Refer to section "5-7 User setting (page 34)" for detail of user setting.
- During the user operation mode, this screen returns from any screen if there is no operation for approximately 10 minutes.

(1) Operation Method

• Note that operation is different for each of the following display methods.

<Unit address display>

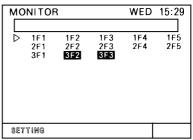
	_			15.00
MONITO		WED	15:29	
G00		COLLECTIVELY		
001	002	03	004	005
006	007	800	009	010
011	012	013	014	015
016	017	018	019	020
021	022	023	024	025
026	027	028	029	030
031	032	033	034	035
036	037	038	039	040
041	042	043	044	045
046	047	048	049	050
SETTING				

() Press the \bigcirc $_{\text{SELECT}} \longrightarrow$ switch to change the display group in desired operation and monitor.

- (2) When displaying the units in a given group, press the $\underbrace{0}_{1}$ switch turn all the units in that group ON or OFF.
- <Group number display>

MONI	15:29				
$\overline{}$	01	02	03	· 04	05
	06	07	08	09	10
	11	12	13	14	15
	16	17	18	19	20
	21	22	23	24	25
	26	27	28	29	30
	31	32	33	34	35
	36	37	38	39	40
	41	42	43	44	45
	46	47	48	49	50
SETTIR	IG				

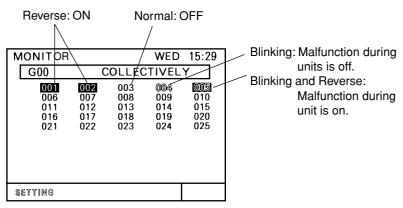
<Group name display>



(2) Display contents

- Press the 1 → → switch to move the ">" select the group number to be operated.
- (2) Press the $\underbrace{\mathbb{O}_{\text{INOFF}}}_{1}$ switch to set the displayed group unit is indicated by the ">" symbol to the on/off mode.
- Press the
 ↑
 ↑
 ← switch to move the ">" symbol. Select the group name to be operated.
- (2) Press the $\underbrace{\mathbb{O}_{1}}_{1}$ switch to set the displayed group unit is indicated by the ">" symbol to the on/off mode.

*Displays up to the first 3 characters of the set group name.

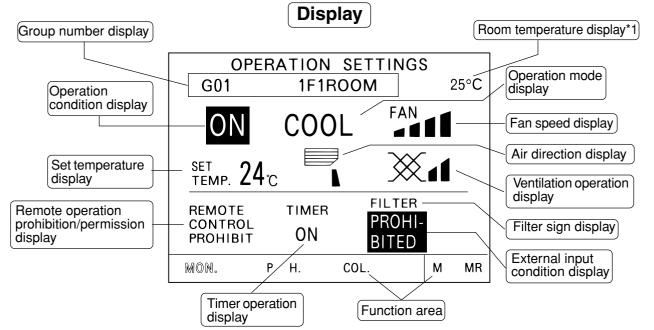


*When a malfunction occurs, refer to section "4-4 Malfunction (page 23)".

4 - 2 Operation setting

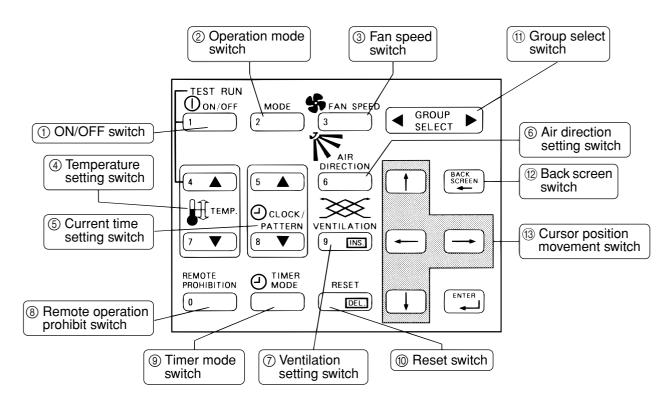
• There are two methods for the operation, performing the operation classified by groups or collective operation.





No.	Name of switches	Function	Display
1	ON/OFF switch	The ON/OFF condition of the displayed group is switched.	Operation status display ↓ [ON] → [OFF] * When there is an interlocked OA processing unit or LOSSNAY, turning this switch ON starts operation in a [High] ventilated state.
2	Operation mode switch	Used to the type of the operation mode selection. Note: Operation mode can be selected ac- cording to the function of unit. If the unit is only cooling type HEAT/AUTO mode may not appear on the display. Refer to the instruction manual of the air conditioner for more detail.	Each time to push the switch, a mode is selected in a sequence that goes from COOL, DRY, FAN, AUTO, HEAT and beck to AUTO for air conditioner group. COOL \rightarrow DRY \rightarrow FAN \rightarrow AUTO \rightarrow HEAT On the group composed of independent LOSSNAY, operation mode is selected in a sequence that goes from HEAT RECOVERY, AUTO, BY-PASS and back to HEAT RECOVERY. (HEAT RECOVERY)
3	Fan speed switch	The fan speed can be switched to four levels. Switching may be 3 levels or 2 levels, depending on the model.	Fan speed display * Indicates AUTO (On the version 3.10 or later, this symbol appears if the AUTO function is available on the indoor unit.) 4 levels $f^{AN} \rightarrow f^{AN} \rightarrow $
4	Temperature setting switch	The setting temperature change is per- formed.	The setting temperature display. The setting range change according to the operation mode. (1°C unit/2°F unit) COOL/DRY 19 ~ 30°C / 67 ~ 87°F HEAT 17 ~ 28°C / 63 ~ 83°F AUTO 19 ~ 28°C / 67 ~ 83°F NOTE: The temperature setting includes a function to switch the display between Celsius (°C) or Fahrenheit (°F) (page 34).

Operation panel

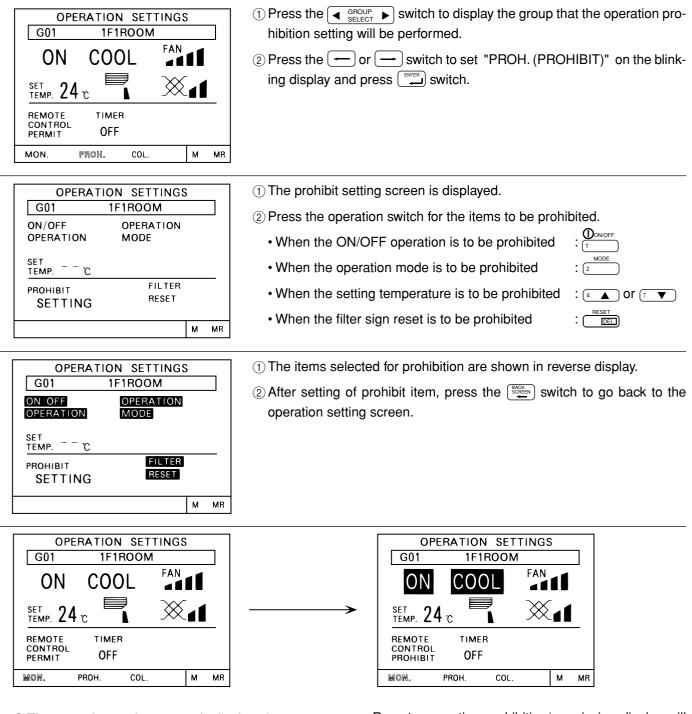


No.	Name of switches	Function	Display
(5)	Current time setting switch	These switches are used when the cur- rent time is set.	Refer to section "4-5 Current time setting".
6	Air direction setting switch	The Air flow direction can be selected. The air flow direction can be selected to four directions and swing operation (auto vane).	Air flow direction
7	Ventilation set- ting switch	The operation mode of the interlocked ventilation can be performed. *Where there is no interlocked ventilation, the operation of this switch is invalid. * "Ventilation" is OA processing unit or LOSSNAY.	Ventilation volume setting display $\rightarrow \underset{(Low)}{} \underset{(High)}{} \underset{(Ventilation off)}{}$
8	Remote operation prohibit switch	Used to prohibit for the local remote control.	PROHIBIT: Local remote control specified on the prohibit setting screen is not possible. PERMIT: Local remote control is possible.
9	Timer mode switch	The timer operation can be performed according to a previously set operation pattern.	Timer operation display [ON] → [OFF]
10	Reset switch	The filter sign display reset is per- formed. The reset processing is completed by pressing this switch two times.	Filter display [Filter] → No display
1	Group select switch	The display group is changed.	Group number display This switch displays 1 ~ 50 group numbers. The switch can also display group names.
(12)	Back screen switch	Use to back to the user menu screen.	The menu screen will be returned.
(13)	Cursor position switch	The position of a cursor can be moved when a cursor is appear.	The cursor position (blinking) moves.

*1: Room temperature can be displayed by selecting the room temperature display function per "5-7 User Setting" (but limited to indoor unit group).

(1) Local remote control operation prohibition setting

• G-50A can prohibit the operation of item such as connected local remote controller or sub system controller for each group. The prohibit items are ON/OFF operation, operation mode, temperature setting and filter sign reset operation.



① The operation setting screen is displayed.

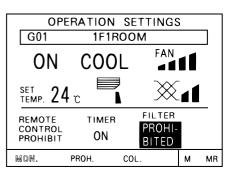
(2) Press the (9) switch to set "PROHIBIT [ON]".

Remote operation prohibition/permission display will be change [PERMIT] to [PROHIBIT] and the prohibited item set on the prohibit setting screen are shown in reverse display. The prohibit setting is completed.

- **NOTE:** The system controller that performed the local remote control operation prohibition setting can operate the prohibited items.
 - When the No.4 function select is set ON, the prohibit setting of the local remote control operating cannot be made. For details, refer to "5-3 Function setting".
 - In a LOSSNAY group, the operations of only the "ON/OFF" and "FILTER RESET" functions can be prohibited.
 - When an M-NET remote controller is used, it must be properly registered to the group for the G-50A unit to be able to prohibit its operation.

(2) G-50A operation prohibition

• The operation of this controller is prohibited when an operation prohibition setting for this controller is received from a system controller other than this controller or when an external input signal is used.



PROHI-The **BITED** is displayed and the prohibition operation is display in reverse display when operation of this controller is prohibited by another system controller or an external input signal used.

The prohibition operation which is displayed in reverse display is not possible to operate in this condition.

- NOTE: · If the Level Run/Stop function is controlled via an external input, local operation of the Run/Stop button will be prohibited, and the timer operation function will also be prohibited.
 - If the Emergency Stop function is controlled via an external input, local operation of the Run/Stop button during emergency stop status will be prohibited, and the timer operation function will also be prohibited.

(3) Using the function area

To select the function from the function area, use the (-) or (-) switch to move the cursor to the blinking to the function of your choice and press the switch. The current cursor position appears as a blinking indication on screen.

- MON. (MONITOR)
- : Shift to the operation monitor screen. PROH. (PROHIBIT)
- COL. (COLLECTIVE)
- M (MEMORY)
- MR (MEMORY READ)
- : Shift to the prohibit setting screen.
- : Shift to the collective operation setting screen.
- : Stores the setting currently shown on the screen in memory.
- : Reads the setting stored in memory and activates them for the currently displayed group.

4 - 2 - 2 Collective operation setting

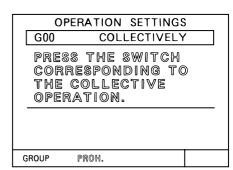
when shift to another screen.

• A collective operation setting and a collective prohibit setting can be performed for all the group managed by this controller at one time.

(1) Collective operation setting

OPERATION SETTINGS G01 1F1ROOM ON COOL FAN SET 24 C SANA REMOTE TIMER CONTROL OFF MON. PROH. COL. M MR		→ switch to set "COL. (COLLECTIVE)" in blinking he switch on the group operation setting screen.
OPERATION SETTINGS GOO COLLECTIVELY PRESS THE SWITCH CORRESPONDING TO THE COLLECTIVE OPERATION. GROUP PROH.	 ③ Select the items for initial screen. The operation me operation setting" NOTE: The ite tion that 	ms which were not set, remain set to the same condi- at were set before the collective operation was per-
OPERATION SETTINGS GOO COLLECTIVELY ON COOL FAN SET TEMP. 24 C GROUP PROH. SET	setting screen. ⑤ When all setting a the "SET" in blinkir	d for the operation blink on the collective operation re completed, press the ← → switch to display ng display for the indicated function area. itch one time to complete this setting.
OPERATION SETTINGS GOO COLLECTIVELY UNDER COLLECTIVE SETTING		OPERATION SETTINGS GOO COLLECTIVELY ON COOL FAN SET TEMP. 24 C
The collective setting is executed. The collective setting takes approxin seconds. NOTE: The display of setting conte		The collective setting is completed when the previ- ous items light. (After the setting are completed, start from step ③ to perform operation again if change operation are required.)

(2) Collective prohibit setting



Press the ← → switch to set "PROH. (PROHIBIT)" in blinking display and press the → switch on the collective operation setting initial screen.

OPER	ATION	SETTING	S
G00	COL	LECTIVEL	{
CORRE THE CO	SPON DLLE(DING TO CTIVE	٥
			1
	GOO PRESS CORRE THE CO	GOO COL PRESS THE S CORRESPON THE COLLES	OPERATION SETTING GOO COLLECTIVEL PRESS THE SWITCH CORRESPONDING TO THE COLLECTIVE PROHIBITION.

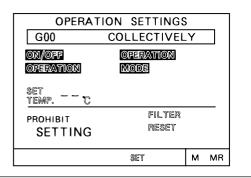
- 2 The collective prohibit setting initial screen is displayed.
 2 Setup the investigation of the setup of the
- ③ Select the items to be prohibited or permitted on the collective prohibit setting initial screen.

Each time to press the switch corresponding to the prohibition item, the prohibition or permission is selected.

Prohibition setting: The prohibited item is displayed in reverse with blinking.

Permission setting: The permitted item is displayed with blinking.

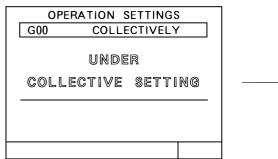
The selection method concerning to prohibit/permit item is same as described in section "4-2-1 (1) Local remote control operation prohibit setting" (page 14).



④ The items selected for the prohibition or permission are displayed with blinking.

And the "SET" is displayed with blinking in the function area.

(5) When all setting are completed, press the switch one time to complete this settings.



____**>**

6 The collective prohibit setting is excused.

The collective prohibit setting takes approximately 20 seconds.

OPERA	TION SETTINGS
G00	COLLECTIVELY
ON OFF	OPERATION
OPERATION	MODE
SET TEMP C	
PROHIBIT	FILTER
SETTING	RESET

- ⑦ The collective setting prohibition/permission item setting is completed when the previous item light.
- After setting of prohibit/permit items, press the
 Setting switch to back to the collective operation set ting initial screen.
 After setting initial screen.

OPERATION SETTINGS GOO COLLECTIVELY PRESS THE SWITCH CORRESPONDING TO THE COLLECTIVE OPERATION.	 The collective operation setting initial screen is displayed. Press the <pre>PROHIBIT</pre> switch to set "REMOTE CONTROL [PROHIBIT]".
group prom.	
OPERATION SETTING G00 COLLECTIVELY	 Remote operation prohibition/permission display ("REMOTE CONTROL [PROHIBIT]") is displayed with blinking.
	Press the
REMOTE CONTROL	Press the switch one time to complete the collective prohibit set ting.
PROMIBIT GROUP PROH. SET	
OPERATION SETTING GOO COLLECTIVELY UNDER COLLECTIVE SETTING	(3) The collective prohibit setting is executed. It takes approximately 20 seconds.
OPERATION SETTING G00 COLLECTIVELY	If The collective prohibit setting is completed when the remote operation prohibition/permission display is change to be light.
REMOTE CONTROL PROHIBIT GROUP PROH.	

- The range that can be set falls within 19°C ~ 28°C /67°F ~ 83°F regardless of the operation mode.
 2. Operation mode selection, fan speed selection, air direction, etc., can be collectively set regardless of the functions of the unit. However, actual setting to a unit without functions cannot be performed. To obtain the correct setting contents, refer to the respective group operation setting screens.
- When an M-NET remote controller is used, it must be properly registered to the group for the G-50A unit to be able to prohibit its operation.

4 - 3 Timer operation

- A weekly schedule setting can be specified for each group.
- Possible to set on the timer the schedule to prohibit operation of the local remote controller in addition to ON/OFF schedule.

NOTE:	Always set to current time on the current time setting screen when the schedule setting is performed.
	Refer to section "4-5 Current time setting".
	• To perform a scheduled operation, make the settings that are explained under items (1) (p.20), (2)
	and (3) (p.21), and set the Timer mode switch on the OPERATION SETTINGS screen to ON.
	Refer to section "4-2 Operation setting".
	• When browser monitoring, or schedule setting from central monitoring PC, was performed, the timer screen of this function cannot be used.
	• When the "Annual/Weekly Schedule" is used, the "Timer" menu will not appear on the menu screen.
	• When an external input signal that corresponds to "Emergency Stop" or "Level Run/Stop" is being input, timer operation will not be performed.

<Schedule setting function summary>

- 1) The ON and OFF (PROHIBITION and PERMISSION) times can set in 10-minute units.
- (2) The daily operation schedule can include up to three ON (PROHIBITION) time settings and three OFF (PERMISSION) time settings.
- (3) Three types (P1-P3) of daily ON/OFF pattern and one type (P4) of prohibition/permission pattern* are available respectively, each of which can be set every to each group.

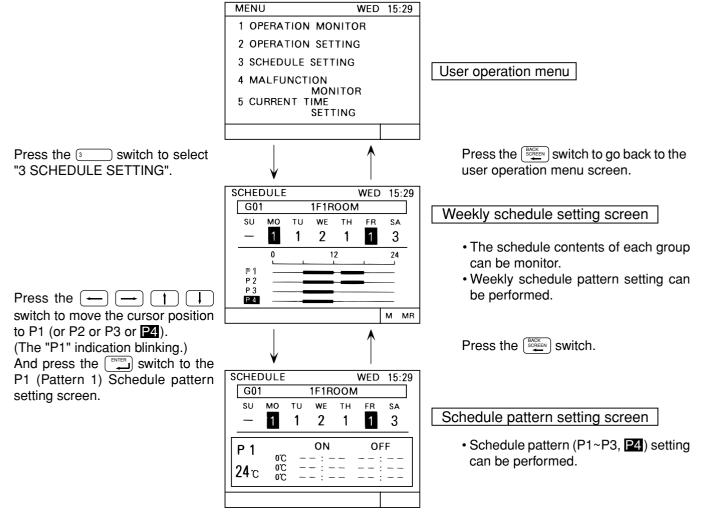
* "Prohibition/Permission" setting can only be made collectively for all applicable items; it cannot be set individually for each item. Week day which is not set in timer pattern is displayed with (-).

In addition, it is also possible to set the schedule which has combined P1-P3 and P4 together.

(P1 / P2 / P3) In this case, both of ON/OFF pattern and prohibition/permission pattern are daily executed. Any one of these options may be selected for each separate day of the week.

- (4) The schedule patterns can be copied easy to other group by the memory and memory read functions because the schedule contents can be recorded in the memory.
- (5) The setting temperature or set-back value setting can also be supported during timer operation.

<Shifting to the schedule setting screen>



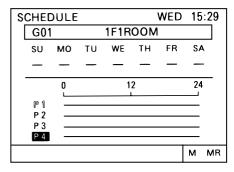
– 19 –

(1) Schedule pattern (P1~P3) setting

- Follow the procedures described below to set each daily schedule pattern for each group.
- The setting temperature or set-back values setting are also performed in the schedule setting operation. To enter the setting temperature or set-back value setting select SET-BACK or SET TEMP. Accordance with section "5-7 User setting (page 34)" in advance.
- The setting temperature or set-back value selected in this way take effect only during timer operation. Also setback operation is cancelled if the setting temperature is changed using this central controller or a local remote controller.

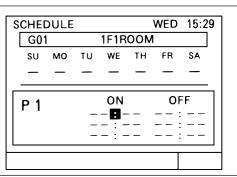
(The set-back operation resumes at the next timer-ON time)

<Schedule pattern setting (P1 ~ P3, P4)>



- (1) Press the \bigcirc group \rightarrow switch to display the group in desired a timer setting.
- ② Press the ← ← ↑ ↓ switch to move the cursor position to the pattern (P1 ~ P3, P4) to be setting.
- ③ Press the switch one time.

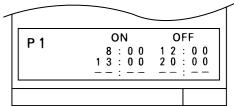
 $\textcircled{\sc 4}$ The schedule pattern setting screen is displayed.



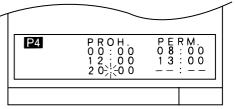
⑤ Press the ← ← ↑ ↓ switch to move the cursor position to the first ON (PROHIBITION) time.

P 1 ON OFF 8:00
:
::

- 6 Press the ^O_{CLOCK / PATTERN}
 (Time is changed by 10 minutes unit.)
 - Press the switch one time to set ON (PROHIBITION) schedule.
 (The cursor moves to the next setting position.)



- $\textcircled{\sc 8}$ Perform operation $\textcircled{\sc 6}$ to select OFF (PERMISSION) time.
- (9) Perform operation (7) to set the OFF (PERMISSION) time.
- Repeat operation (6) to (9) to set the second and third ON/OFF (PROHIBITION/PERMISSION) schedules in the same manner.
 When the second or third ON/OFF (PROHIBITION/PERMISSION) schedule is not used, the characters "-----" remain display and press the []] switch one time.



- ① To cancel the ON/OFF (PROHIBITION/PERMISSION) time that was set previously, use the ← ← ↑ ↓ switch to move the cursor to the time position to be cancelled and press the E switch.
- 0 When the P1 setting are completed, perform operation 0 to 1 as necessary to perform the setting for P2 or P3 or P4 .

NOTE: • To disable a function beyond the date line, set the "Disable Start Time" to "00:00". Also, item **P4** must be enabled for both dates.

(2) Set-back values and setting temperature setting

• Setting the set-back values and setting temperature can be performed only when selecting either "SET BACK" or "SET TEMP" on the user setting screen in the initial setting mode.

Set-back operation

Set-back operation is a method which reduces the air conditioner running cost by controlling the operation with specified time band for lowered load. In other words the unit operates at a few degrees higher for cooling and a few degrees lower for heating in the specified time band.

<<EXAMPLE>> When the reference temperature is 24°C / 75°F and the set-back value is set to 2°C / 4°F.

WED

FR

122

OFF

15:29

SA

: 0 0 : 0 0

Cooling operation: 24°C+2°C=26°C / 75°F+4°F=79°F
Heating operation: 24°C-2°C=22°C / 75°F-4°F=71°F

SCHEDULE

ΜΟ Τυ

200

24°C 24°C

G01

SU

P 1

Setting temperature operation

This operation sets the temperature when timer ON is set to a predesignated temperature regardless of the operation mode.

<Setting temperature selected>

WE

ON

 $\begin{array}{c} 8 & : & 0 & 0 \\ 1 & 3 & : & 0 & 0 \end{array}$

1F1ROOM

ΤН

<Set-back operation selected>

SCHEDULE WED 15:29								
6	G01			1F1R	001	1		
S	U	мо	τU	WE	тн	FR	SA	
-	_	—	—	_	—	—	_	
Р	1			ON		OF	F	
24	•	30 30 30	1	8 : 0 3 : 0 - : -		1 2 : 2 2 : :	00	
<u> </u>								I
			_ S	et-bao	ck va	lue		

Reference temperature

SCHE	DULE				WED	15:29
GC)1		1F1R	001	1	
SU	мо	τu	WE	тн	FR	SA
_	_	—	_	_	_	_
P 1			ON		OF	F
1	01	0	8 : 0) ()	12:	
24	_ 0°C		3 : 0) ()	22:	00
240	~ 0°C) –	- : -		:	

	Settin	 g tem	pera	ture			
Γ	SCHED	ULE				WED	15:29
	G01			1F1R0	JON	/	
	SU	мо	τu	WE	тн	FR	SA
	_	_	_	_	_	_	—
	P 1	25°C 24°C 24°C	1	ON 8 : 0 3 : 0 - : -	0 0	OF 1 2 : 2 2 : :	
F							

- Press the ←) ← ↑ ↓
 switch to move the cursor position to the set-back reference temperature or setting temperature.
- NOTE: The temperature display can be switched between Celsius (°C) or Fahrenheit (°F) (page 34).
- ② Press the ₅▲ / в▼
- (CLOCK/PATTERN) switch to select the following items. Set-back value;
- The reference temperature and set-back value for each ON time period are selected.
- Setting temperature: The setting temperature for each ON time period is selected.
- ③ Press the switch to make setting.
- ④ Repeat operations ② and ③ to set the set-back value or setting temperature for each ON/OFF schedule.
- (5) Press the switch, when finished.

(3) Weekly schedule setting

* The selecting range:

The set-back value

• The reference temperature for set-back operation

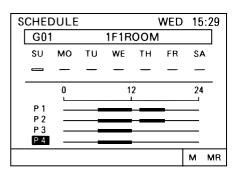
The schedule pattern P1 to P3, local remote control prohibition (P4), P1 to P3 of a composite pattern composed of P1 to P3 and P4, and non-timer operation (-) are set for each day.

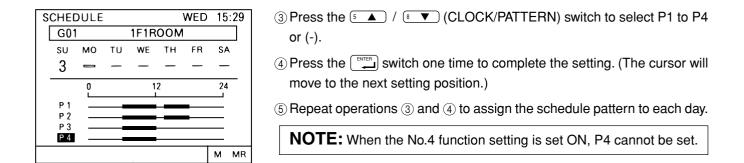
: 19°C ~ 28°C (1°C unit) / 67°F ~ 83°F (2°F unit)

: 0 ~ 9 degree (1 degree unit)

• The setting temperature: 19°C ~ 28°C (1°C unit) / 67°F ~ 83°F (2°F unit)

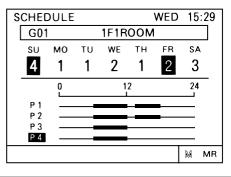
/0 ~ 18 degree (2 degree unit)



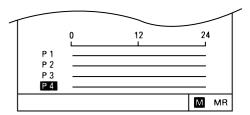


(4) Copying schedule content to other groups (memory, memory read)

- The schedule pattern P1 to P3, weekly schedule pattern, set-back value or setting temperature of one group can be recorded and copied to memory or to another desired group.
- Correction and modification can be easily performed after the copy operation is completed.



- ① Display the original group on the weekly schedule setting screen.
- (2) Press the \frown \frown \uparrow \downarrow switch to move the cursor to "M".
- ③ Press the setting date in memory.
 *To erase date from the memory, return to the user operation menu screen.



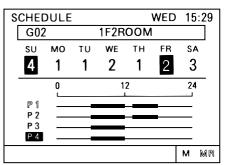
- ④ "M" is displayed in reverse with blinking.
- ⑤ Press the GROUP → switch to select the group to which the data is to be copied.

S	CHED	DULE				WED	15:	29
	G02		1F2ROOM					
	SU	мо	τu	WE	тн	FR	SA	
	—	_	_	_	—	—	_	
		0		1	2		24	-
	Р1							
	Р2							
	P 3							
	P 4							
							М	MR

- 6 Press the (-) (-) (+) (+) switch to move the cursor to "MR".
- Press the switch to set the contents which will be the same as the setting data in memory.

The same contents are displayed.

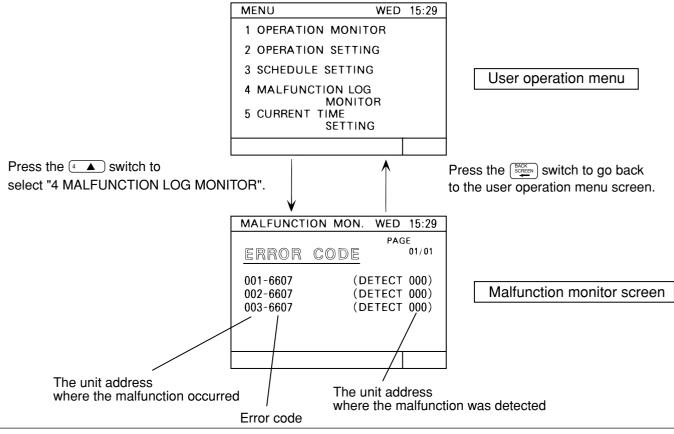
The contents stored in memory can be copied to other groups any number of times because these contents will not be erased even if the memory read operation is used.



4 - 4 Malfunction

- The malfunction monitor function is used for conforming to the details of the malfunction condition when a malfunction is displayed on the operation monitor screen.
- The malfunction monitor function can display data describing up to nine malfunctions in the address number sequence on one page. This data contains the unit address where the malfunction occurred, the error code and the unit address where the malfunction was detected.
- After checking the unit address where the malfunction occurred and the error code, please contact your dealer or technical representative as soon as possible.

< Shifting to the malfunction monitor screen >



NOTE: When there is no malfunction taking place, [NO ERROR] lights up instead of [ERROR CODE].

Page change operation

The page change operation is performed by the - - 1 + switch.

Pressing the \rightarrow or \uparrow switch shows the current display page +1.

Pressing the - or - switch shows the current display page -1.

Malfunction reset operation

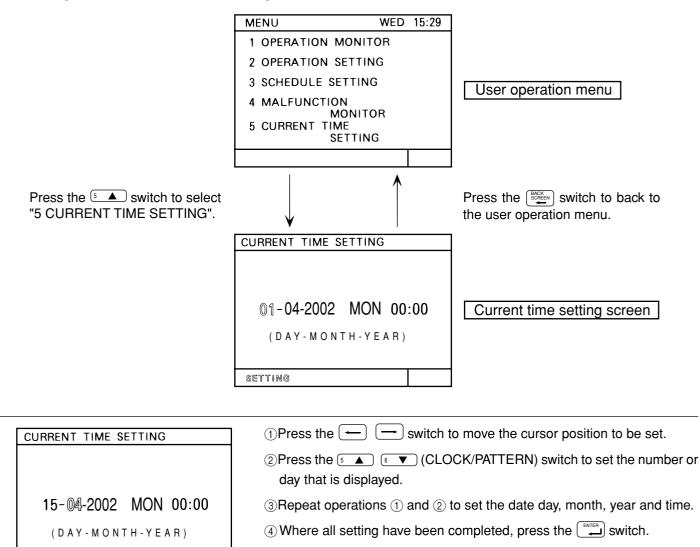
Press the reset $\boxed{\text{EE}}$ switch to reset all malfunctions. The reset operation can be performed on any page.

NOTE: When operation of the G-50A is prohibited, reset operation is invalid.

4 - 5 Current time setting

The current time, day, month and year are set on the current time setting screen.

< Shifting to the current time setting screen >



CURRENT TIME SETTING
15-12-2002 SUN 12:34
(
done
SETTING

SETTING

(5) The current time setting is executed and "done" is displayed with blinking for two seconds to indicate the current time setting completed and the clock count will start with the second reset to 0.

5. Initial setting

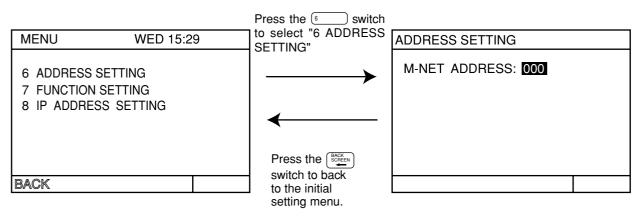
5 - 1 Shifting to initial setting menu

- Shift to the initial setting menu by continuously pressing <u>t</u> + <u>J</u> (2 seconds or longer) on the user operation menu screen. (Refer to section "3-2".)
 Shift to the user operation menu by continuously pressing <u>t</u> + <u>J</u> (2 seconds or longer) on the initial setting screen. (Refer to section "3-2".)
- When group information is not saved, the following initial setting screen is displayed when power is turned on at this controller.

MENU	WED 15:2	9
1 ADDRESS 2 FUNCTION 3 IP ADDRE 4 GROUP SE	I SETTING ESS SETTING	
PLEASE SI INITIAL SE		

5 - 2 M-NET address setting

- (1) Select 6 dDDRESS SETTING" (or 1 dDDRESS SETTING").
- (2) Set the controller address by pressing the \bigcirc to \bigcirc ms switches (000,201 ~ 250).
- (3) When the $\mathbb{C}_{\mathcal{A}}^{\text{BACK}}$ switch is pressed after setting, the screen returns.



• When the controller is shipped from the factory, the address is set to "000". (Always set the address to "000" When the K transmission converter is managed.)

 NOTE:
 Observe the following precautions when this controller manages the M-NET models and K control models by using the K transmission converter (PAC-SC25KAA).

 Refer to the K transmission converter instruction manual for further details.
 • Address of this controller

 Always set the address of this controller to "000".
 • Function select setting of this controller

 Always set the No.3 function setting to ON.
 • Indoor unit address

 Set all the M-NET models of indoor units from 001, next, set the address of the K control indoor unit.

 Indoor unit address
 001 ~ M-NET indoor unit maximum address < K control indoor unit minimum address ~ 050</td>

 * Assign the address of the smallest K-control indoor unit in the group as the group number.

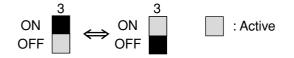
5 - 3 Function setting

- The functions of this controller are set according to the function settings.
- The functions selects are set to OFF when the controller is shipped from the factory.
- (1) Select ⁷ ▼ "7 FUNCTION SETTING" (or ² "2 FUNCTION SETTING").
- (2) Switch the function by pressing the function No. you want to change, or the 1 to 5 switch of the same number.

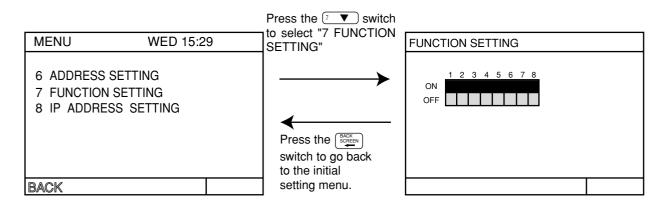
Each time the switch is pressed, the ON/OFF state of that No. is switched. (NO. 1 and NO. 2 cannot be changed.)

<Operation example>

1)When Input 3 switch was pressed.



(3) When the screen returns.

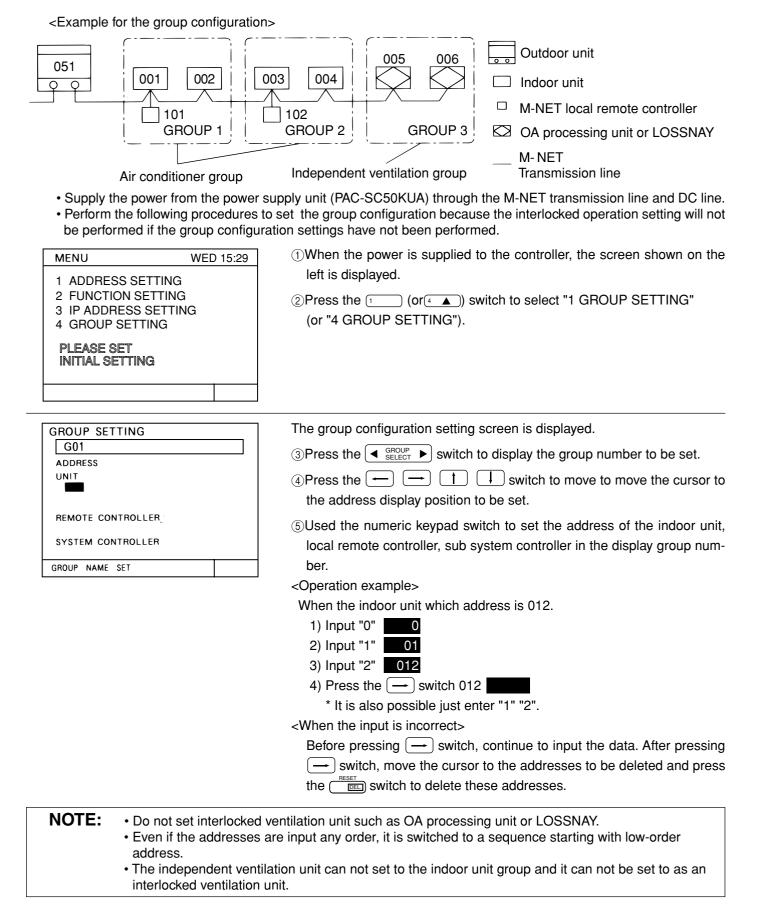


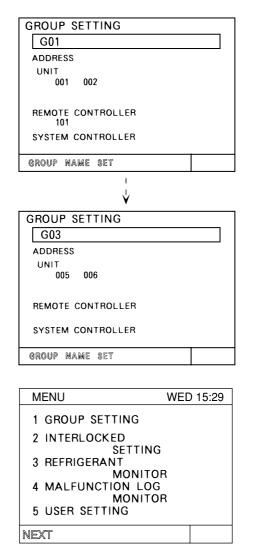
<Function selects>

- No. 1 _____ Reserved for future use (Leave this switch set to OFF)
- No. 2 _____ Reserved for future use (Leave this switch set to OFF)
- No. 3 _____ OFF: No K transmission converter installed
- No. 4 _____ OFF: Operation prohibit setting valid No. 5 _____ OFF: Emergency stop broadcast enabled (Be sure to use)
- ON: K transmission converter installed
 ON: Operation prohibit setting invalid
 - / ON: Emergency stop broadcast disabled
- No. 6 ______ External input changeover (refer to section "7. External input/output function") No. 7 ______
- No. 8 _____ The range of a controller which the operation is prohibited
 - OFF: Both of the system controller and the local remote controller / ON: Only the local remote controller

5 - 4 Group configuration setting

- Registration can be made for the indoor units, local remote controllers and sub system controllers in the same group.
- Registration can be also performed for the group which is composed of only OA processing unit or LOSSNAY. (Independent ventilation group)





Set all the units and controllers to be registered in the displayed group number.

(6) Repeat operation (3) to (5) to set all groups managed by this controller.

⑦When all setting are completed, press the (BACKEN) switch.

- NOTE: When there are M-NET local remote controllers in the system, always be sure to set the local remote controller address. The local remote controller will not operate if the address setting is not performed. However, when the local remote controller is an MA re
 - mote controller (PAR-20/21MAA) or K-control type remote controller, setting is not performed.
 - If there is a K transmission converter is a component in the system, do not perform the group configurations setting of this controller for the K transmission converter.

(8) The following initial setting screen is displayed.

When the interlocked operation settings are performed, refer to section "5-5 Interlocked operation setting".

When the group name settings are performed, refer to section "5-6 Group name setting".

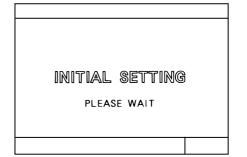
When the user settings are performed, refer to section "5-7 User setting".

Additions Group configuration date collective deletion

• Display "G00" in the group configuration setting screen and press the 🔲 switch two times continuously to delete the all group configuration data and all interlocked operation data.

NOTE: • When this unit is set to the sub system controller by the function select, group registration can not be made. However confirmation of the contents of group registration is possible.

• Simultaneously press the 1 and 4 keys on the user operation menu screen for 2 seconds to perform group configuration setting. The initial setting menu screen is displayed. Select "1 GROUP SETTING" on the setting menu screen, wait for the group setting screen to appear, and change the setting.

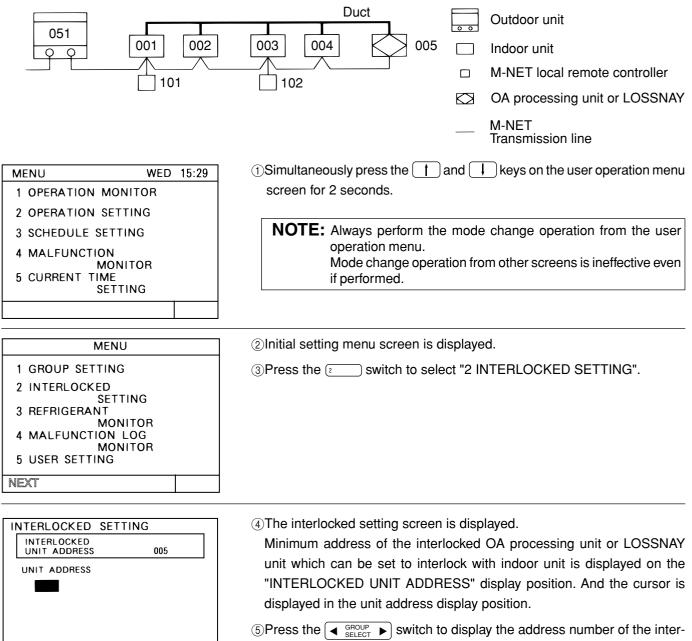


When the necessary initial settings are complete, simultaneously press the 1 and 4 keys on the user operation menu screen for 2 seconds. When returned to the user operation screen, register processing for the group configuration information and initial set up processing for each unit and each controller is executed. (This process takes approximately 5 ~ 7 minutes.)

5 - 5 Interlocked operation setting

• Registration of interlocked operation of Ventilation unit (OA processing unit and LOSSNAY) with single or multiple indoor unit is performed. All indoor units to be interlocked with ventilation unit for operation should be registered for the interlocking with ventilation unit.

<Example for the interlocked group configuration>



⑤ Press the (◀ GROUP → Switch to display the address number of the interlocked OA processor unit or LOSSNAY that the setting will be performed on.

11	NTERLOCKED	SETTING			
	INTERLOCKED UNIT ADDRESS		005		
	UNIT ADDRESS				

(6) Used the numeric keypad switch to set the address of the indoor unit that operates with displayed interlocked OA processing unit or LOSSNAY. <Operation example>

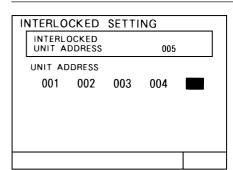
When the indoor unit which address is 012.

- 1) Input "0" 0
- 2) Input "1" 01
- 3) Input "2" 012
- 4) Press the → switch 012

* It is also possible just enter "1" "2".

<When the input is incorrect>

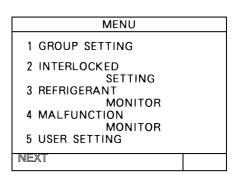
Before pressing \longrightarrow switch, continue to input the data. After pressing \longrightarrow switch, move the cursor to the address to be deleted and press the \bigcirc switch to delete these addresses.



⑦Set all the indoor units that operate with displayed interlocked OA processing unit or LOSSNAY.

(B) Repeat operation (5) to (7) to set the indoor units of all interlocked operation units managed by this controller.

(9) When all settings are completed, press the $\mathbb{S}_{-}^{\text{BCK}}$ switch.



Initial setting screen is displayed.

This ends the interlocked operation setting.

When the interlocked operation settings are performed, refer to section "5-5 Interlocked operation setting".

When the group name settings are performed, refer to section "5-6 group name setting".

When the user setting are performed, refer to section "5-7 user setting".

Simultaneously press the 1 and 4 keys on the initial setting menu screen for 2 seconds to complete user operation. After the initial setting processing is completed (The initial setting screen will be displayed), refer to section "4. User operation (page 10)" and perform user operation.

NOTE: When this unit is set to sub system controller by No.2 function select, interlocked operation settings cannot be adjusted. However monitoring of the contents of the interlocked operation settings is possible.

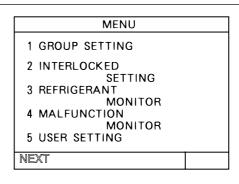
5 - 6 Group name setting

(1) Setting method

- Specify new group name.
- Either alphabet, numeric characters, hyphens or spaces can be used for name setting.
- Maximum of ten characters can be set.
- When the group name is displayed on the operation monitor screen, the first three characters of the group name are displayed.

MENU 1 GROUP SETTING 2 INTERLOCKED SETTING 3 REFRIGERANT MONITOR 4 MALFUNCTION LOG MONITOR 5 USER SETTING NEXT	①Press the ¹ (or ⁴) switch to select "1 GROUP SETTING" (or "4 GROUP SETTING") of the initial setting menu.
GROUP SETTING G01 ADDRESS UNIT 001 002 REMOTE CONTROLLER 101 SYSTEM CONTROLLER GROUP NAME SET	 ②The group configuration setting screen is displayed. ③Press the switch to move the cursor to the "GROUP NAME SET". ④Press the switch one time.
GROUP NAMEG01 $\blacksquare \leftarrow \leftarrow \rightarrow \rightarrow \rightarrow \rightarrow$ 1 2 3 4 5 6 7 8 9 0 -ABCDEFGHIJKLMNOPQRSTUVWXYZM MR	 The group name setting screen is displayed. ⑤ The character " ← " is displayed in reverse. ⑥ Press the
GROUP NAME $G01$ M $\leftarrow \leftarrow \leftarrow \leftarrow \leftarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow$ 1 2 3 4 5 6 7 8 9 0 - □ ABCDEFGHIJKLM NOPQRSTUVWXYZ	The selected character is displayed in the group name display area. (a) Repeat operation (b) or (7) and set the group name. When incorrect character is set, refer to section "Group name correction method (page 32)". Group name display area

GROUP NAME (9) When the group name setting is completed, press the switch. MEETING A G01 $\leftarrow \leftarrow \leftarrow \rightarrow \rightarrow \rightarrow$ 1234567890 -ABCDEFGHIJKLM NOPQRSTUVWXYZ M MR GROUP SETTING The group configuration setting screen is displayed. MEETING A G01 (1) Repeat operation (3) to (9) and perform the group name setting for each ADDRESS group. UNIT 001 002 (f) When all the group name settings are complete, press the switch. REMOTE CONTROLLER SYSTEM CONTROLLER GROUP NAME SET



(2) The initial setting menu screen is displayed.

To perform the setting, refer to section "5-7 User setting (page 34)".

Simultaneously press the 1 and 4 keys on the initial setting menu screen for 2 seconds to complete user operation. Next refer to section "4 User operation" and perform user operation.

<Group name correction>
GROUP NAME
G01 MEETING A $\leftarrow \leftarrow \leftarrow \rightarrow \rightarrow \rightarrow$ 1 2 3 4 5 6 7 8 9 0 ABCDEFGHIJKLM
NOPQRSTUVWXYZ
M MR

Group name cursor Group name cursor movement mark

When performing corrections to the group name, move the group name cursor to the character to be correct.

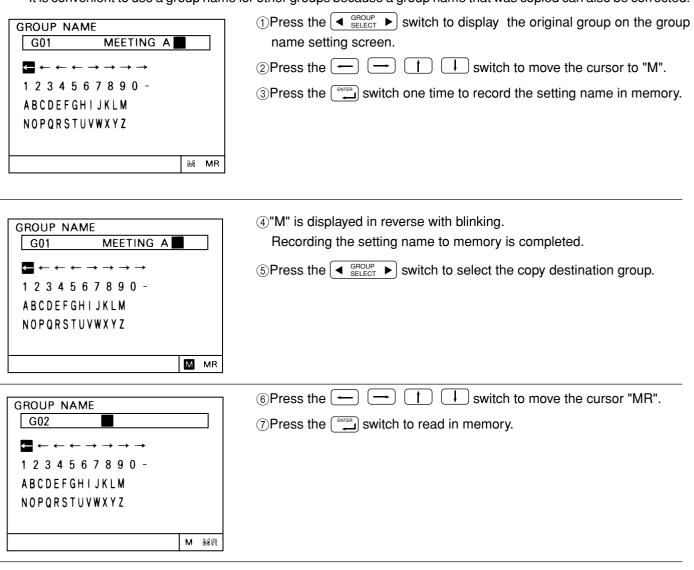
Group name cursor movement method

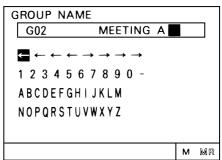
Move the cursor to one of the group name cursor movement mark using the - - + + switch.

Insertion methods
 Move the group name cursor to the location where character is to be
 insert and press the
 Insert and press the
 Insert and press the

(2) Group name copy

- A certain group name can be copied to another group.
 - (This method use the "M" (memory) and "MR" (memory read) functions.)
- It is convenient to use a group name for other groups because a group name that was copied can also be corrected.





⁽⁸⁾Performed the memory read for the group name.

Refer to section "(1) Setting method (page 31)" and perform the correction of the group name.

5 - 7 User setting

• To match the needs for the user this menu is to specify some of the indications and functions that appear on the user operating screen.

	MENU	1)Press the (5 A) switch to select "5 USER SETTING" on the initial set-
1 GBC		ting menu screen.
	ERLOCKED	
	SETTING	
	RIGERANT MONITOR	
4 MA	LFUNCTION MONITOR	
5 USE	ER SETTING	
NEXT		
		The user setting screen is displayed.
	SETTING ATION MONITOR	(2) Press the (-) (-) (1) (1) switch to select the items to be set.
GRO	UP NO./NAME IT ADDRESS	
2 SCHE	DULE DATA BACK/SET TEMP	③When all the selection are completed, press the selection to return to
3 FILTER	DNE	the initial setting menu screen.
NON	IE/INDICATE JP NO. DISPLAY	
	IE/INDICATE	
6 ROON	M TEMPERATURE NE/INDICATE	
7 TEMP.	? UNIT °C / °F	
Item 1.	lition before delivery from to Operation monitor scre	-
item i.	"GROUP NO."	: Groups are indicated by group number on the operation monitor screen.
	"NAME"	: Groups are indicated by their first three characters of the group name on the
	"UNIT ADDRESS"	operation monitor screen. : Individual units are indicated by their unit address on the operation monitor screen.
ltem 2.		alue and the setting temperature used in conjunction with schedule operation. or the setting temperature setting are possible when operation is linked with the
	"SET-BACK"	: Allows setting set-back value used in conjunction with ON/OFF patterns during schedule operation.
	"SET TEMP"	: Allows setting of the setting temperature used in conjunction with ON/OFF patterns during schedule operation.
	"NONE"	: The schedule operation is only performs normal ON/OFF patterns.
Item 3.	Setting filter sign indic	
	"INDICATE" "NONE"	: Allows the indication of filter sign. : Filter sign is not indicated.
11 4		
Item 4.	Group number display "INDICATE"	: Enable display of group number on the operation setting screen and the schedule setting screen.
	"NONE"	: Group number is not indicated.
ltem 5.	Change to the sequen	
	"2001-1-1"	: Current time indicate in a sequence of year, month and date on the current time
		setting screen.
	"1-1-2001"	: Current time indicate in a sequence of date, month and year on the current time setting screen.
ltem 6	Room temperature ind	lication
ltem 6.	Room temperature ind "INDICATE"	
Item 6.		lication : Indicated every each group : Not indicated every each group
Item 6. Item 7.	"INDICATE" "NONE" Temperature unit	: Indicated every each group
	"INDICATE" "NONE"	: Indicated every each group

5 - 8 IP address setting

• This function allows setting of the IP address and mask address needed at LAN connection.

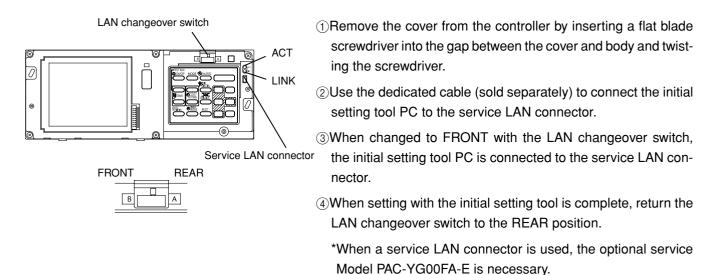
MENU 6 ADDRESS SETTING 7 FUNCTION SETTING 8 IP ADDRESS SETTING	①Select the 6 switch select "8 IP ADDRESS SETTING" on the initial setting menu screen.
BACK	
IP ADDRESS SETTING	The IP address setting screen appears.
IP ADDRESS:	 2 Move the cursor to the address setting position by pressing the -, , 1 and 4 keys.
SUBNET MASK: 255.255.255.000	③Set the address with the 0 to 9 numeric switches.④When all address setting are complete, return to the initial setting menu

5 - 9 Initial setting tools connection function

- This function connects the initial setting tool PC by LAN.
- Group setting, interlocked setting, and other information can be downloaded to this unit by using the initial setting tool.

screen by pressing (BACK SCREEN) switch.

Refer to the initial setting tool manual for an explanation of the initial setting tool functions and operating procedures.

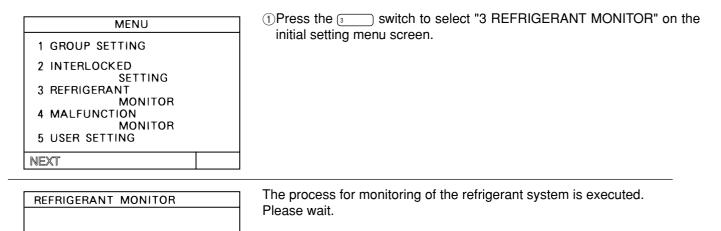


NOTE: The same settings that are made with the Initial Setting Tool can be made from the Initial Setting Web.
Refer to the Operation Manual for Initial Setting Web for the functions and operation of the Initial Setting Web.

6. Maintenance

6 - 1 Refrigerant system monitor

• This function allows monitoring of the address of the outdoor units, and BC controller connected to the refrigerant system. It is useful for checking address settings, transmission line connection during installation.



г																					_
1	RE	F	R	I	GE	R	A	N	Т	Ν	10	Ν	I١	0	R						
		õ	Ŭ	T	D	õ	0	Ŗ		A	D	Ď	R S	Ē	S	S		5	1		
		В	С	/	0	S		A	D	D	к	F	5	5				5	2		
	0 0 1	U 1 8 5	Ν	I 0 1	T296		A 0 1	D 30	D	R 0 1	E 4 1	S	S 0 1	5 2		0	6 3		0	7 4	_
L																					

UNDER MONITORING

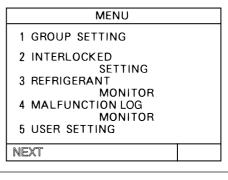
The refrigerant system monitor screen of the lowest outdoor unit address is displayed.

Press the \bigcirc group \searrow switch to change the displayed refrigerant system.

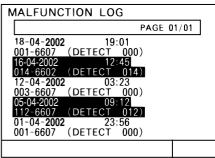
When the monitoring is end, press the switch to back to the initial setting menu screen.

6 - 2 Malfunction log monitor

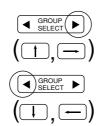
- This function allows monitoring of a log of the last 64 malfunctions.
- The contents of malfunction and time the malfunction occurred is displayed. The contents of malfunction is the address of the unit where it occurred, the error code and the address of the unit that detected the malfunction.
- This data are remains in the memory even if supplied power is cut off.
- The malfunction log data can be deleted using the malfunction log reset operation. If the malfunction log data is reset after the system is serviced, the log will provide a convenient record of the malfunction that have occurred after that time when the system is next serviced.



() Press the A switch to select "4 MALFUNCTION LOG MONITOR" on the initial setting menu screen.



The malfunction log monitor screen is displayed. (2) Changing pages on the malfunction log monitor screen.



Each time this switch is pressed, the current page +1 is displayed.

Each time this switch is pressed, the current page -1 is displayed.

③Malfunction log reset operation

Press the reset switch to clear the malfunction log.

7. External input/output function

* External signal input requires the external I/O adapter (Model: PAC-YG10HA-E) sold separately.

* Refer to Instalation Manual for detail.

7 - 1 External input function

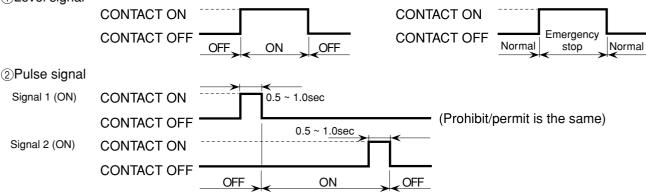
(1) The function of external input

• Emergency stop/normal, run/stop and prohibit/enable of local remote controller operation can be controlled for all air conditioners by using a voltage (DC12V or DC24V) contact signal from an external source. (Select with the function select setting.)

Nia			ction	Remarks		
No.	Function of external input signal	No.6	No.7	nemains		
1	External input signal not used	OFF	OFF			
2	Perform emergency stop with level signal	OFF	ON	During emergency stop, only ON/OFF of the central controller and local remote controller's operation will be prohibit.		
3	Perform ON/OFF operation with level sig- nal	ON	OFF	Only the ON/OFF operation of the central controller and the local remote controller will be prohibit.		
4	Perform ON/OFF operation, prohibit/per- mit operation with pulse signal	ON	ON	Set the pulse width while the contact is ON to 0.5 to 1.0 second.		

(2) Level signal and pulse signal





(3) Specification of external input interface

CN2	Lead wire	Emergency stop/normal level signal	ON/OFF level signal	ON/OFF, prohibit/permit pulse signal
No.5	Orange	Emergency stop/normal input	ON/OFF input	ON input
No.6	Yellow	Not used	Not used	OFF input
No.7	Blue	Not used	Not used	Local remote controller prohibit input
No.8	Gray	Not used	Not used	Local remote controller permit input
No.9	Red	Common (DC12V or DC24V)		

(A) Level signal

(1) When the level signal is selected, the operation (only ON/OFF operation) for the central controller and the local remote controller are prohibited (except during normal operation).

②When the emergency stop/normal operation signal is selected, the status will be changed from normal operation to emergency stop when the external input signal contact turns OFF to ON, and will be changed from emergency stop to normal operation when external input signal contact turns ON to OFF. Air conditioning units that come to an emergency atop will remain atopped after the emergency stop is com-

Air conditioning units that came to an emergency stop will remain stopped after the emergency stop is cancelled. Manually start up each unit to restore the previous operation.

③When ON/OFF input signal is selected, the status will be changed from OFF to ON when the external input signal contact turns OFF to ON, and will be changed from ON to OFF when the external input signal contact turns ON to OFF.

- (B) Pulse signal
 - ①Even if the ON signal is input during ON, the status will remain at the ON status.
 - ⁽²⁾When the local remote controller is prohibited, the ON/OFF operation, operation mode selection and temperature setting from the local remote controller is prohibited.
 - ③Set the pulse width (contact ON time) to 0.5 to 1.0 second.

7 - 2 External output function

(1)The function of external output

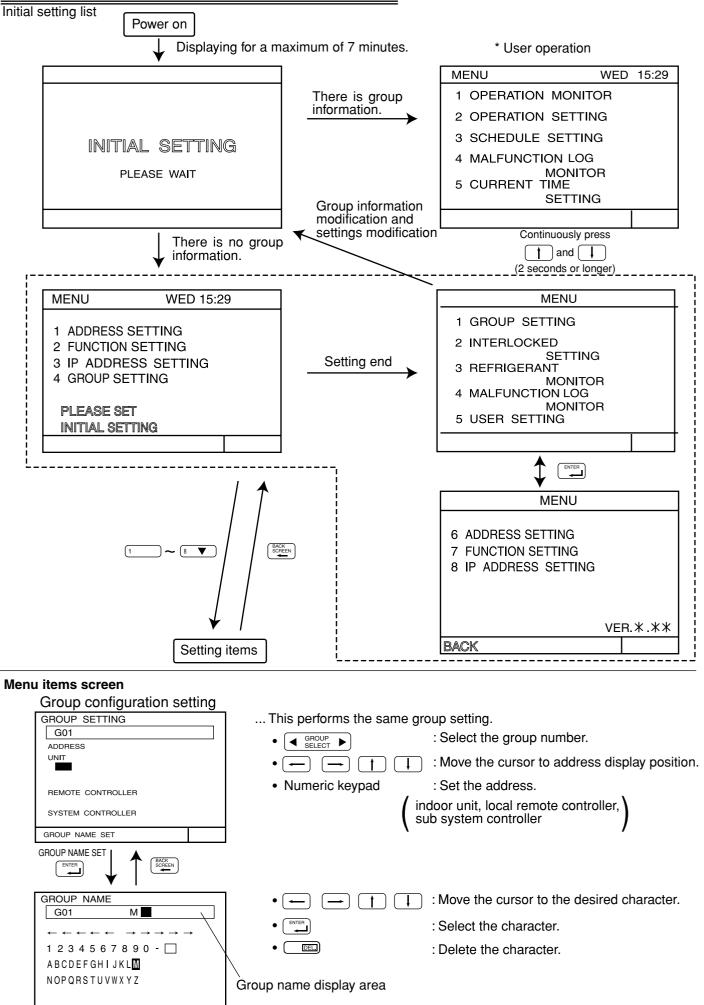
- •The "ON" signal is output when one or more air conditioner are in the ON operation.
- •The "Malfunction" signal is output when one or more air conditioner malfunctions.

(2)Specification of external output interface

CN2	Lead wire	Description of each terminal					
No.1	Green	Common (0V)					
No.2	Black	ON/OFF					
No.3	Brown	Malfunction/Normal					

①"ON" signal and "Malfunction" signal will both be output.

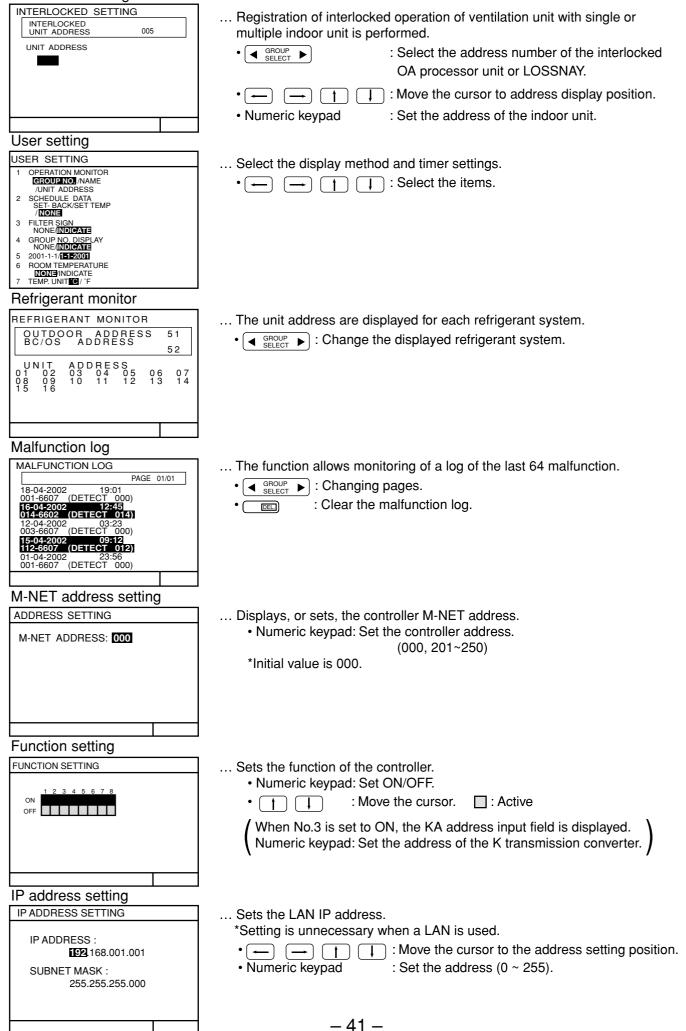
Appendix 1: Initial setting (abridged)



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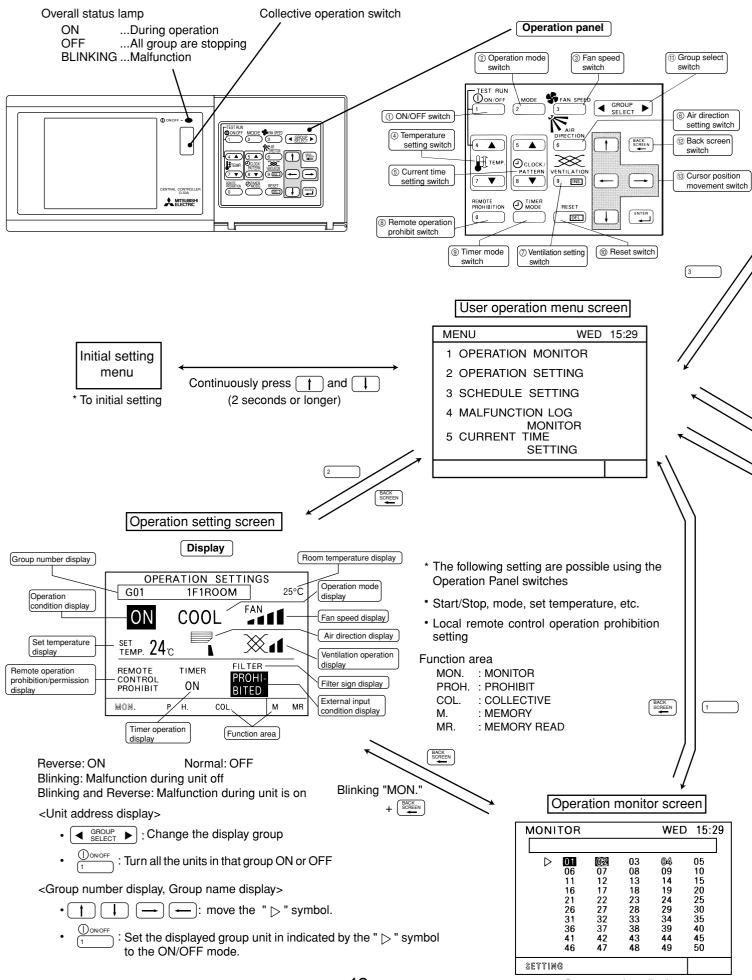
M MR

Interlocked setting



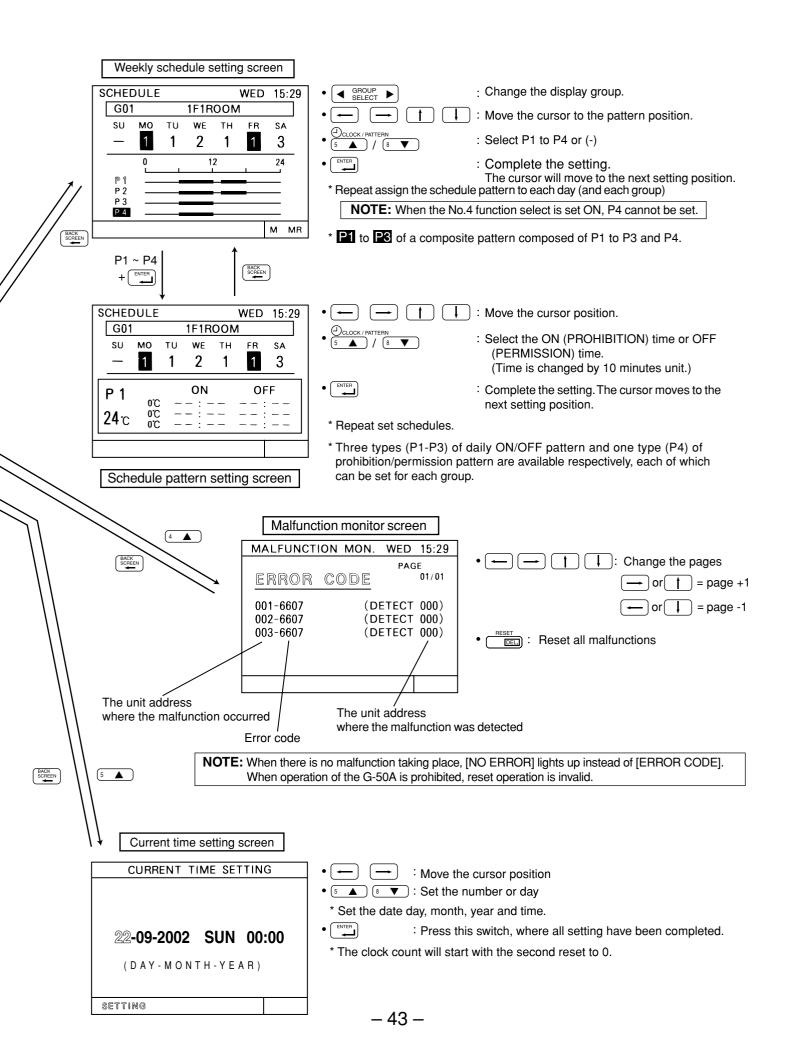
Appendix 2: User operation (abridged)

Shows the operation panel, screen, etc. for user operation.



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<Group number display>



This product is designed and intended for use in the residential, commercial and light -industrial environment.

The product at hand is based on the following EU regulations:

- Low Voltage Directive 73/23/EEC
- Electromagnetic Compatibility Directive 89/ 336/EEC

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio / TV technician for help.



HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN