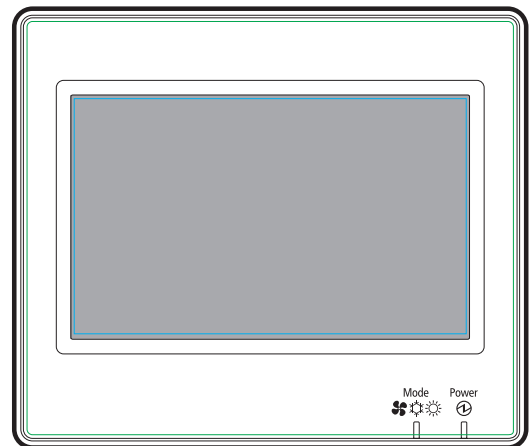


Operation Manual

- CCM01 -



IMPORTANT:

*READ AND UNDERSTAND
THIS MANUAL BEFORE USING
THIS MINI CENTRAL
CONTROLLER.
KEEP THIS MANUAL FOR
FUTURE REFERENCE.*

LIT-12012041 P5415511

Important Notice

- Johnson Controls Inc. pursues a policy of continuing improvement in design and performance in its products. As such, Johnson Controls Inc. reserves the right to make changes at any time without prior notice.
- Johnson Controls Inc. cannot anticipate every possible circumstance that might involve a potential hazard.
- This heat pump air conditioning unit is designed for standard air conditioning applications only. Do not use this unit for anything other than the purposes for which it was intended for.
- The installer and system specialist shall safeguard against leakage in accordance with local pipefitter and electrical codes. The following standards may be applicable, if local regulations are not available. International Organization for Standardization: ISO 5149 or European Standard, EN 378. No part of this manual may be reproduced in any way without the expressed written consent of Johnson Controls Inc.
- This heat pump air conditioning unit will be operated and serviced in the United States of America and comes with a full complement of the appropriate Safety, Danger, and Caution, warnings.
- If you have questions, please contact your distributor or dealer.
- This manual provides common descriptions, basic and advanced information to maintain and service this heat pump air conditioning unit which you operate as well for other models.
- This manual should be considered as a permanent part of the air conditioning equipment and should remain with the air conditioning equipment.

Product Inspection upon Arrival



1. Upon receiving this product, inspect it for any damages incurred in transit. Claims for damage, either apparent or concealed, should be filed immediately with the shipping company.
2. Check the model number, electrical characteristics (power supply, voltage, and frequency rating), and any accessories to determine if they agree with the purchase order.
3. The standard utilization for this unit is explained in these instructions. Use of this equipment for purposes other than what it designed for is not recommended.
4. Please contact your local agent or contractor as any issues involving installation, performance, or maintenance arise. Liability does not cover defects originating from unauthorized modifications performed by a customer without the written consent of Johnson Controls, Inc. and York. Performing any mechanical alterations on this product without the consent of the manufacturer will render your warranty null and void.

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1. Safety Summary

Signal Words

 WARNING	Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates information considered important, but not hazard-related (for example, messages relating to property damage).

General Precautions

 WARNING	To reduce the risk of serious injury or death, read these instructions thoroughly and follow all warnings or cautions included in all manuals that accompanied the product and are attached to the unit. <i>Refer back to these safety instructions as needed.</i>
--	--

- This system, including this controller, should be installed by personnel certified by Johnson Controls, Inc. Personnel must be qualified according to local, state and national building and safety codes and regulations. Incorrect installation could cause leaks, electric shock, fire or an explosion. In areas where Seismic Performance requirements are specified, the appropriate measures should be taken during installation to guard against possible damage or injury that might occur in an earthquake. If the unit is not installed appropriately correctly, injuries may occur because of a falling unit.
- Use appropriate Personal Protective Equipment (PPE), such as gloves, protective goggles and electrical protection equipment and tools suited for electrical operation purposes.
- When transporting, be careful when picking up, moving and mounting these units. Although the controller may be packed using plastic straps, do not use them for transporting from one location to another. Do not stand on or put any material on the controller.
- When installing the controller cabling to the units, do not touch or adjust any safety devices inside the indoor or outdoor units. All safety features, disengagement, and interlocks must be in place and functioning correctly before the equipment is put into operation. If these devices are improperly adjusted or tampered with in any way, a serious accident can occur. Never bypass, wire around, or jump-out any safety device or switch.
- Use only Johnson Controls recommended, provided as standardized, or replacement parts.
- Johnson Controls shall will not assume any liability for injuries or damage caused by not following steps outlined or described in this manual. Unauthorized modifications to Johnson Controls products are prohibited as they...
 - May create hazards which could result in death, serious injury or equipment damage;
 - Will void product warranties;
 - May invalidate product regulatory certifications;
 - May violate OSHA standards;

NOTICE	Take the following precautions to reduce the risk of property damage.
---------------	---

- Do not touch the main circuit board or electronic components in the controller or remote devices. Make sure that dust and/or steam does not accumulate on the circuit board.
- When installing the unit in a hospital or other facility where electromagnetic waves are generated from nearby medical and/or electronic devices, be prepared for noise and electronic interference Electromagnetic Interference (EMI). Do not install where the waves can directly radiate into the electrical box, controller cable, or controller. Inverters, appliances, high-frequency medical equipment, and radio communications equipment may cause the unit to malfunction. The operation of the unit may also adversely affect these same devices. Install the unit at least 10 ft. (approximately 3m) away from such devices.
- Locate the wireless controller at a distance of at least three feet (approximately 1m) between the indoor unit and electric lighting. Otherwise, the receiver part of the unit may have difficulty receiving operation commands.

- If the wired controller is installed in a location where electromagnetic radiation is generated, make sure that the wired controller is shielded and cables are sleeved inside conduit tubing.
- If there is a source of electrical interference near the power source, install noise suppression equipment (filter).
- During the test run, check the unit's operation temperature. If the unit is used in an environment where the temperature exceeds the operation boundary, it may cause severe damage. Check the operation temperature boundary in the manual. If there is no specified temperature, use the unit within the operation temperature boundary of 35° to 104°F (0 to 40°C).
- Read installation and appropriate user manuals for connection with PC or peripheral devices. If a warning window appears on the PC, the product stops, does not work properly or works intermittently, immediately stop using the equipment.

Installation Precautions



Take the following precautions to reduce the risk of electric shock, fire or explosion resulting in serious injury or death:

- If the remote sensors are not used with this controller, then do not install this controller...
 - In a room where there is no thermostat.
 - Where the unit is exposed to direct sunshine or direct light.
 - Where the unit will be in close proximity to a heat source.
 - Where hot/cold air from the outdoors, or a draft from elsewhere (such as air vents, diffusers or grilles) can affect air circulation.
 - In areas with poor air circulation and ventilation.
- Perform a test run using the controller to ensure normal operation. Safety guards, shields, barriers, covers, and protective devices must be in place while the compressor/unit is operating. During the test run, keep fingers and clothing away from any moving parts.

After installation work for the system has been completed, explain the "Safety Precautions," use, and maintenance of the unit to the customer according to the information in all manuals that accompanied the system. All manuals and warranty information must be given to the user or left near the Indoor Unit.

Electrical Precautions



Take the following precautions to reduce the risk of electric shock, fire or explosion resulting in serious injury or death:

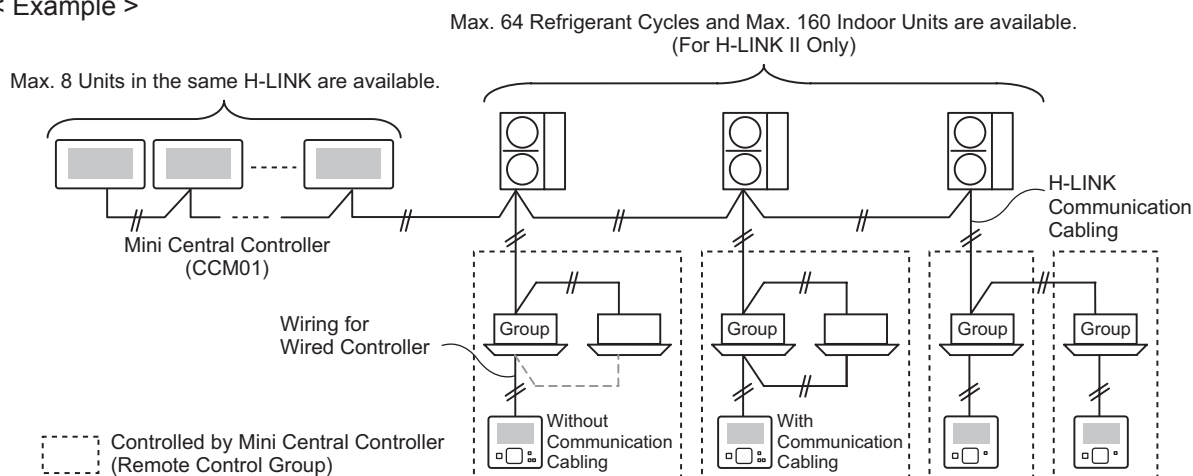
- Only use electrical protection equipment and tools suited for this installation.
- Insulate the wired controller against moisture and temperature extremes.
- Use specified cables between units and the controller.
- Communication cabling shall be a minimum of 18-Gauge, 2-Conductor, Stranded Copper. Shielded cable must be considered for applications and routing in areas of high EMI and other sources of potentially excessive electrical noise to reduce the potential for communication errors. When shielded cabling is applied, proper bonding and termination of the cable shield is required as per Johnson Controls guidelines. Plenum and riser ratings for communication cables must be considered per application and local code requirements.
- The polarity of the input terminals is important, so be sure to match the polarity when using contacts that have polarity.
- Highly dangerous electrical voltages may be used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause serious injury or death.
- Before installing the controller or remote devices, ensure that the indoor and outdoor unit operation has been stopped. Further, be sure to wait at least five minutes before turning off the main power switch to the indoor or outdoor units. Otherwise, water leakage or electrical breakdown may result.
- Do not open the service cover or access panel to the indoor or outdoor units without turning OFF the main power supply. Before connecting or servicing the controller or cables to indoor or outdoor units, open and tag all disconnect switches. Never assume electrical power is disconnected. Check with a meter and equipment.

- Use an exclusive power supply at the controller's rated voltage.
- Be sure to install circuit breakers (ground fault interrupter, isolating switch, molded case circuit breaker, and so forth) with the specified capacity. Ensure that the wiring terminals are tightened securely to recommended torque specifications.
- Clamp electrical wires securely with a cord clamp after all wiring is connected to the terminal block. In addition, run wires securely through the wiring access channel.
- When installing the power lines, do not apply tension to the cables. Secure the suspended cables at regular intervals, but not too tightly.
- Make sure that the terminals do not come into contact with the surface of the electrical box. If the terminals are too close to the surface, it may lead to failures at the terminal connection.
- Do not clean with, or pour water into, the controller as it could cause electric shock and/or damage the unit. Do not use strong detergent such as a solvent. Clean with a soft cloth.
- Check that the ground wire is securely connected. Do not connect ground wiring to gas piping, water piping, lighting conductor, or telephone ground wiring.

2. System Configuration

This mini central controller (CCM01) is connected to H-LINK and used for the central control and monitoring of the air conditioners.

< Example >



NOTE: When an indoor unit without a wired controller is connected, the mini central controller cannot be used.

3. Features

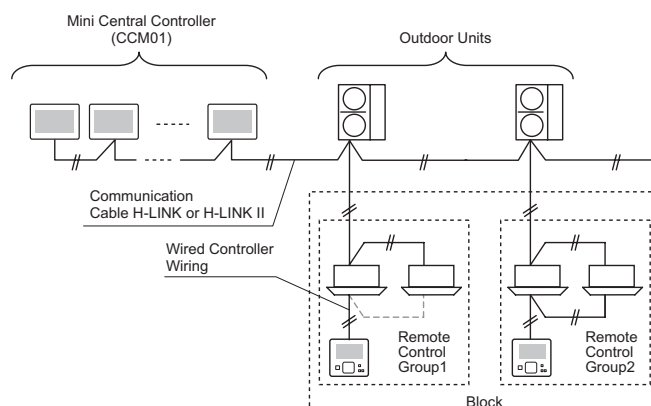
The following functions are available for the wired controller which is registered to All Groups, Blocks or each Block of the Air Conditioner unit.

1. Run/Stop, Operation Mode, Fan Speed Control, Swing Louver Direction Control, Temperature Setting, and Permitting/Prohibiting Operation by Wired Controller
2. Monitoring of Operating Conditions for Block/Groups
3. Schedule Operation (Run/Stop and Temperature Setting) for Block/Groups
4. Run/Stop, Emergency Stop and Demand Control by External Input
5. Run and Alarm Output by External Output
6. Control Exception Function of All Run/Stop Command for Selected Groups
7. Control Exception Function of All Run/Stop Command for Selected Groups by External Input
8. Indication and Calculation of Unit Accumulated Operation Time of Each Group
9. Indication of Alarm History Record
10. Registering Name of Blocks and Groups
11. Registration and Indication of Service Contact Information
12. Control Mode (Run/Stop Only) can be selected as follows:
 - Normal Mode
 - Control Mode of the main Run/Stop
13. Press the Icon Guide Button to indicate a description of the Icons

NOTE:

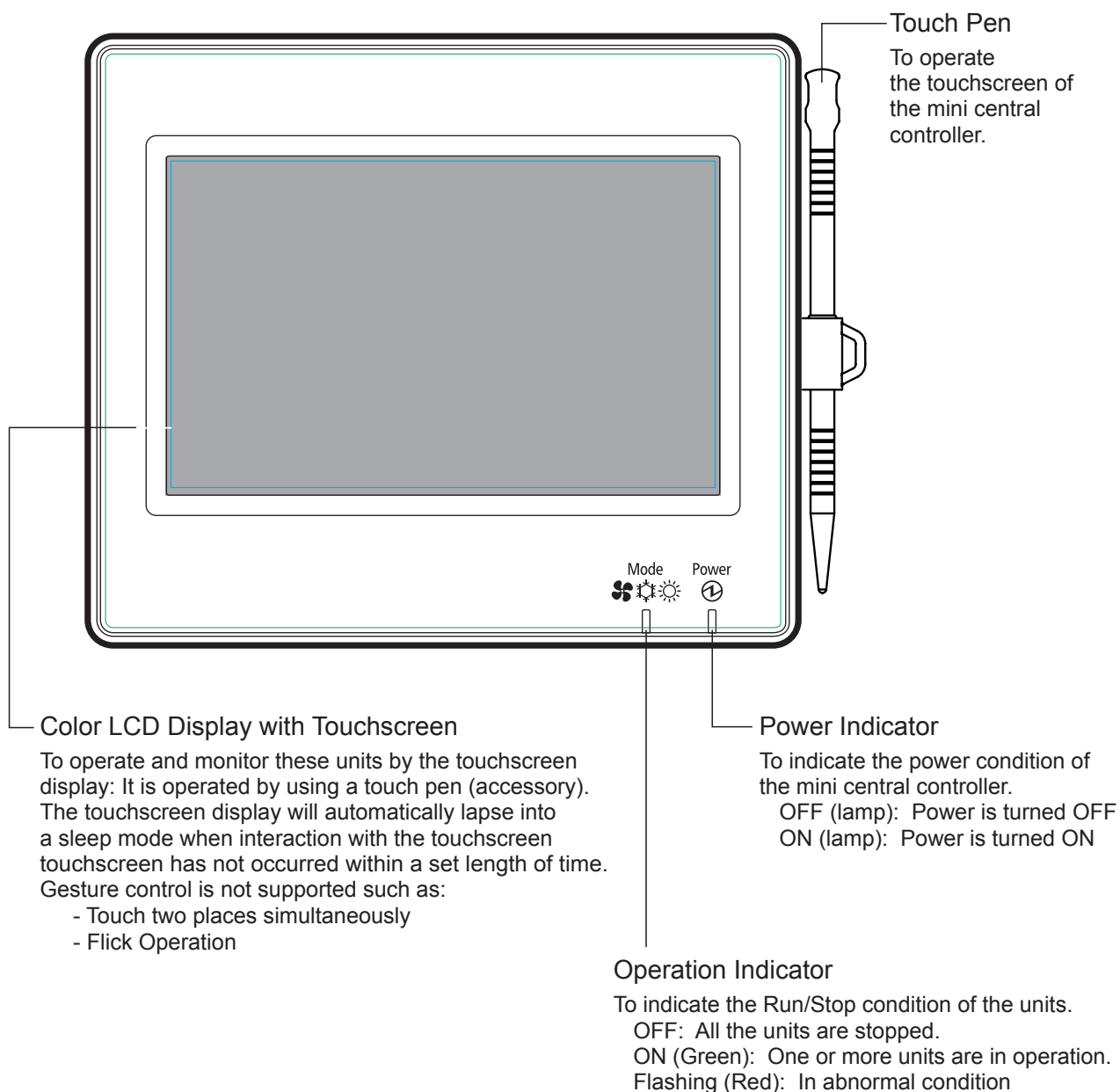
Group: Remote Control Group

Block: Collective of Remote Control Groups



4. Part Names and Functions

4.1 Part Names



NOTE:

Remove the protective film on the Liquid Crystal Display (LCD) before using this product.

4.2 Screen Display

"Monitor (All Groups)"

Present Indication
To display the present indication (all groups)

Unit Condition Icon
To indicate the unit condition such as "filter sign" or "demand".

Block Button
To change the screen display into "Block" <Monitor (Block)> indication by touching this button.

Group Button
To indicate the operating condition of each group as follows.
Green: Run
Gray: Stop
Red: Abnormal
If the target group button is touched, "Settings" of the target group screen will be displayed.
* (Refer to Section 7.5.)

"Alarm Inform." Button
To indicate any irregularity, Touch the button for details.

"Stop all gr." Button
To stop all the units simultaneously which are controlled by the mini central controller.

"Run all gr." Button
To run all the units simultaneously which are controlled by the mini central controller.

"Setting of all" Button
To change the setting of the units simultaneously which are controlled by the mini central controller.

"Menu" Button
To indicate the menu items such as "Filter Sign Reset", "Schedule Setting", and so on.

"Icon guide" Button
Touch this button to display an explanation of the Icons.

"Monitor (Block)"

Present Indication
To display the present indication (groups in block)

Unit Condition Icon
To indicate the unit condition such as "filter sign" and "demand".

Block Tab
To change the monitor display into "Block" or "All Groups" setting.

Group Button
To indicate the operating condition
Green: Run
Gray: Stop
Red: Abnormal
If the target group button is touched, "Settings" of the target group screen will be displayed. *
*(Refer to Section 7.5.)

"Display Condit." Button
The setting condition of the air conditioning unit is displayed.

"Air Temp Display" Button
The outside air temperature and the inlet temperature are displayed.

"Menu" Button,
"Icon guide" Button
"Alarm Inform." Button
same function as in the screen above.

"Setting by Block" Button
To change the setting of the all groups in the target block simultaneously.

"Run by Block" Button
To run the all groups operation in the target block simultaneously.

"Stop by Block" Button
To stop the all groups operation in the target block simultaneously.

*This function can be used when the Control Mode (Run/Stop Only) is set in "Disable" mode.

If Control Mode (Run/Stop Only) is in "Enable" mode, the Run/Stop operation will be switched by touching on the target.

NOTE: The screen image may appear different from the actual screen.

5. Quick Reference

5.1 Screen Structure

The table below shows the display on screen and its related function.

Screen Display	Function	Page
Monitor (All Groups)	To display the name of all groups and operating conditions	10
Monitor (Block)	To display the name of groups in the block and operating conditions	11
Menu	To display the list of menu items	22
Filter Sign Reset	To reset the filter sign	24
Schedule Settings	To set or change the weekly schedule	26
Schedule Timer Setting	To copy the schedule setting	28
	To delete the schedule timer setting	30
Holiday Setting	To specify days of suspended schedule setting	33
Schedule Timer ON/OFF Setting	To set schedule operation ON/OFF	34
Setting temp. range of the remote control	To adjust the setting temperature range of remote control	35
Date and time Settings	To adjust the date and time	36
Display of screen for cleaning	To lock the touchscreen for cleaning	36
Touchscreen Calibration	To calibrate the touch position on the touchscreen	37
Group Name Register	To register the name of block and group	38
	To copy the name of block and group	39
Screen Display Setting	To adjust the back-lit brightness of the display screen	40
Brightness	To set the displayed language	41
Language	To set the temperature unit	42
Temperature Unit	Displays the sum total operation time on this unit	43
Accumulated Operation Time	To display the service contact address (if registered)	45
Contact Information	Used to set daylight savings time operation	45
Daylight Saving Time Setting	Use of this function is restricted to service personnel only. Do not use. If this function is used while the service menu is displayed on screen, select "Previous Screen". The screen will return to the previous menu.	-
Service Menu		

5.2 Functions

The table below shows the main functions.

< Operation Procedure >

Display All Groups in a List (All of Air Conditioner Registered to Mini Central Controller)	10
Display of Specified Block	11
Simultaneous Run/Stop for All Groups	12
Simultaneous Run/Stop for Each Block	13
Run/Stop for Each Group	14
Operation Mode Change	16
Fan Speed Setting	17
Louver Swing Direction	18
Temperature Setpoint	19
Permitting/Prohibiting Operation from Wired Controller	20

< Menu Function >

Menu (Menu Items and Details)	22
Menu	23
Filter Sign Reset	24
Schedule Operation	26
Adjusting Setting Temperature Range of Remote Control	35
Date and Time Settings	36
Display of Screen for Cleaning	36
Touchscreen Calibration	37
Registering Groups/Blocks Name	38
Screen Display Setting	40
Total accumulated Operation Time of Unit	43
Contact Information	45
Daylight Saving Time Setting	45

6. Initial Power Activation Settings

< Preparation 1 >

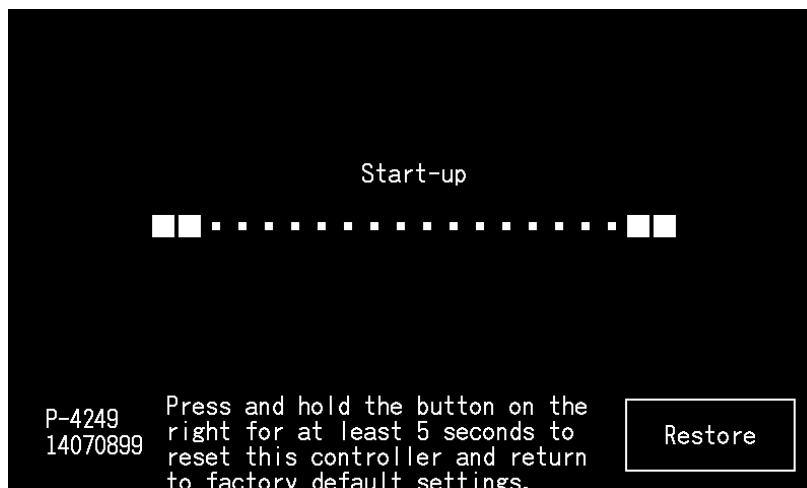
Turn ON the power supply for the air conditioners.

To protect the compressor unit, the power supply should be energized 12 hours before the startup operation is begun. Do not turn OFF the power supply during in-season heating or cooling operation.

< Preparation 2 >

After **Preparation 1** is completed, turn ON the power supply for the mini central controller.

“Start-up” will be displayed for a while and the screen changes to “Monitor (All Groups)”.



NOTE:

Setting date and time may be required after a long-term pause or power failure.

In that case, “**Set Date/Time**” will be displayed on screen. If “Set” is selected, “Date and Time settings” will be displayed.



Refer to item 8.6 for setting the date and time.

7. Operational Procedure

7.1 Display of All Groups

1*

2

1. Select "All Groups" on the touchscreen display.
* The tab of marked with (1), "All Groups" will not be displayed if only one Block has been registered.
2. All groups are displayed on the touchscreen.
The operational status of each item is defined by the color of the Group button as follows:
 Green: Run
 Gray: Stop
 Red: Abnormal
 - The "All Groups" screen may be different depending on the Control Pattern. The screen on the left indicates Pattern A; (4 Blocks × 8 Groups) set by the Control Pattern.

NOTE:

The touchscreen display will automatically lapse into sleep mode when interaction with the touchscreen has not occurred within a set length of time.

(To awaken, touch anywhere on the screen surface.)

7.2 Display of Specified Block

<Monitor (All Groups)>

<Monitor (Block)>

1

2

3

4

1. Select the target block from the screen display: "Monitor (All Groups)" or "Monitor (Block)".
2. Groups in the selected block will be displayed on the touchscreen. The operation status of each item is indicated by the color of the Group button as follows:
Green: Run
Gray: Stop
Red: Abnormal
 - The "Block" screen may be different depending on the Control Pattern. The screen on the left indicates the Pattern A: (4 Blocks × 8 Groups) as set by the Control Pattern.
3. Touch on "Air Temp Display" to display the outside air temperature and the air inlet temperature.
 - It may take time to display the temperature.
 - The inlet temperature is displayed only while the unit is in operation.
4. Touch on "Display Condit." to display the condition of the operation.

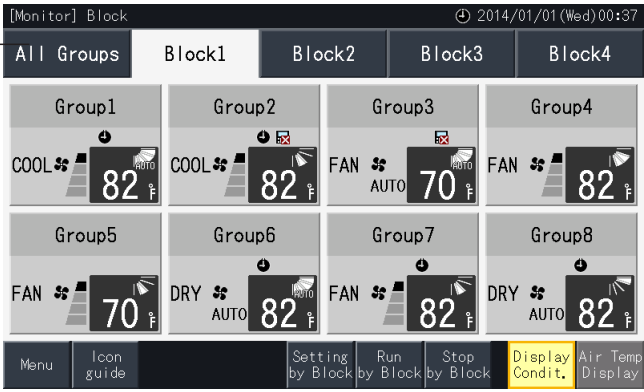
NOTE:

The touchscreen display will automatically lapse into sleep mode when interaction with the touchscreen has not occurred within a set length of time.


(To awaken, touch anywhere on the screen surface.)

7.3 Simultaneous Run/Stop for All Groups

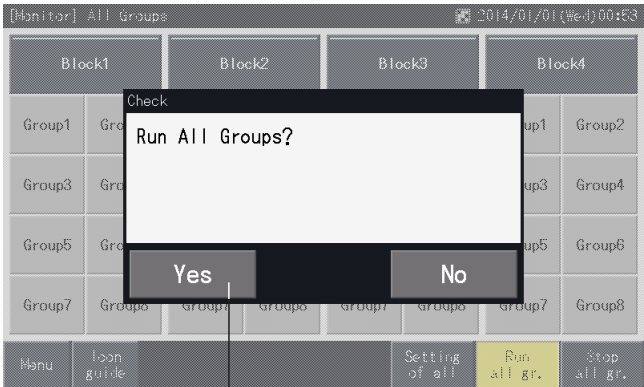
1



↓



↓



3

1. Touch on “All Groups” on the touchscreen display.

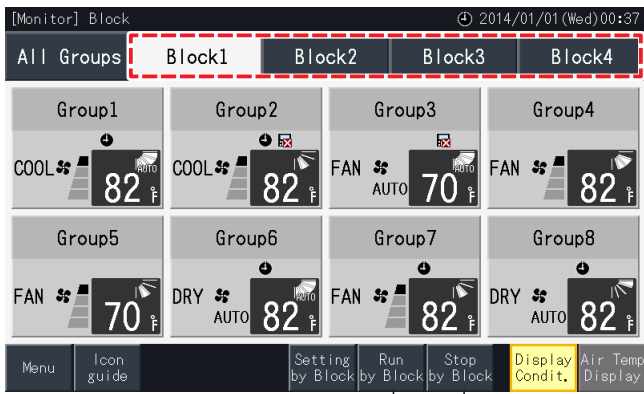
2. Touch “Run all gr.” when all groups run simultaneously. Touch “Stop all gr.” when all groups stop simultaneously.

3. The confirmation screen will display: Touch on “**Yes**”. (All indoor units connected to this mini-central controller will go into simultaneous operation.) Touch on “**No**” to cancel this command.

NOTES:

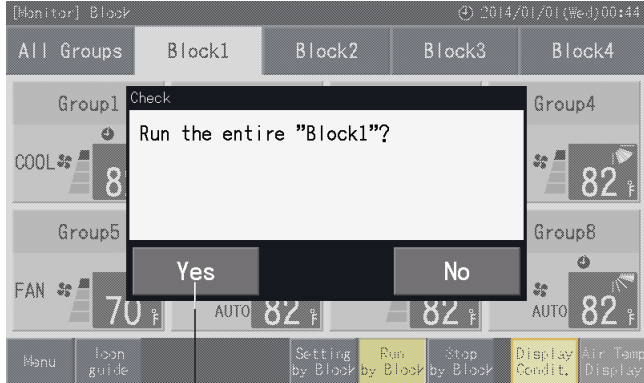
- The “Run/Stop all gr.” command will not exercise control over the groups specified in “Exception Setting of Run/Stop Operation”.

7.4 Simultaneous Run/Stop for Each Block



1

2



3

1. Select the target block from the touchscreen display to set a simultaneous Run/Stop operation.
2. Touch on "Run by Block" when the selected Block runs simultaneously. Touch on "Stop by Block" when activity in the selected Block stops simultaneously.
3. The confirmation screen will be displayed. Touch on **"Yes"**. All groups (all indoor units) in the selected block connected to the mini-central controller go into simultaneous operation. Touch on **"No"** to cancel this command.

NOTES:

- The "Run/Stop by Block" command will not exercise control over the blocks specified in "Exception Setting of Run/Stop Operation".

7.5 Run/Stop for Each Group

The mode differs, depending on the setting of the Control Mode (Run/Stop Only).

Control Restricted (Run/Stop Only): Control Method when set as “Disable” Refer to item 7.5.1.

Control Restricted (Run/Stop Only): Control Method when set as “Enable” Refer to item 7.5.2.

7.5.1 Run/Stop for Each Group (Control Restricted (Run/Stop Only): “Disable”)

<Monitor (All Groups)> 1 <Monitor (Block)> 1

▼

2 3

1. Select the “Monitor (All Groups)” or “Monitor (Block)” screen. Select the Group to set by touching on the Group button.
2. The selected group setting will be indicated on the touchscreen display. Touch on: “ON” or “OFF”.
3. Touch on: “Monitor screen” to return to Monitor screen.

7.5.2 Run/Stop for Each Group (Control Restricted (Run/Stop Only): “Enable”)

<Monitor (All Groups)>

1

2

1. Select the target group on the “Monitor Screen (All Groups)” in “Run/Stop Only” mode.
2. The selected group operation is alternately changed by touch as follows.

“Stop” ↔ “Run”

In this mode, simultaneous Run/ Stop operations for all groups is available by “Run all gr.” and “Stop all gr.” buttons. Refer to the item 7.3 for details.

<Monitor (Block)>

1

2

1. Select the target group at “Monitor (Block)” screen inside the “Run/ Stop Only” mode.
2. The selected group operation is alternately changed by touch as follows.

“Stop” ↔ “Run”

In this mode, simultaneous Run/ Stop operations for this Block are available on the “Run by Block” and “Stop by Block” buttons. Refer to the item 7.4 for details.

7.6 Operation Mode Change

1. Select the target group: "Monitor (All Groups)" screen or "Monitor (Block)" screen to change the operation mode setting. The pop-up: "Setting" for the selected Group is displayed on the touchscreen.

2. Touch "△" or "▽" at the Operation Mode to switch in order to "COOL", "HEAT", "DRY", "AUTO" and "FAN".

3. Touch "Monitor screen" to return to the Monitor screen.

1. Select the target group: "Monitor (All Groups)" screen or "Monitor (Block)" screen to change the operation mode setting. The pop-up: "Setting" for the selected Group is displayed on the touchscreen.

2. Touch "△" or "▽" at the Operation Mode to switch in order to "COOL", "HEAT", "DRY", "AUTO" and "FAN".

3. Touch "Monitor screen" to return to the Monitor screen.

NOTES:

- By touching on "<" or ">" at the detailed setting screen, a Group will switch to another Group within the same Block.
- Control Restricted (Run/Stop Only): If the condition "Enable" is selected, each change of settings will apply for all Groups or Blocks. Settings Changes are not possible for each Group.
- Some operational modes cannot be set depending on the type of air conditioner unit. Contact your distributor for detailed information.
- If the settings are mixed when multiple groups are selected, the display will remain blank.

7.7 Fan Speed Setting

<Monitor (All Groups)>

<Monitor (Block)>

1. Select the target Group on the "Monitor (All Groups)" screen or "Monitor (Block)" screen to change the fan speed setting. The pop-up: "Setting" for the selected Group is displayed on the touchscreen.

[Setting]

2. Touch "△" or "▽" at the Fan Speed, to switch in this order: "LOW", "MEDIUM", "HIGH", "HIGH2", "AUTO".

3. Touch "Monitor screen" to return to Monitor screen.

- Settings "HIGH2" or "AUTO" may not be an option depending on the type of air conditioner.

NOTES:

- By touching "<" or ">" at the detailed setting screen, the Fan Speed will be switched to another group in the same block.
- Control Restricted (Run/Stop Only): If the condition "Enable" is selected, each change of settings will apply to ALL Groups or Blocks. Settings changes are not possible for each Group.
- Actual fan speed during dry operation will be "LOW" regardless of the fan speed setting.
- The figure above shows an example of a connected air conditioner unit. Fan speed may not be displayed in certain instances.
- If the settings are mixed when multiple groups are selected, the display will remain blank.

7.8 Louver Swing Direction

1. Select the target Group on the "Monitor (All Groups)" screen or "Monitor (Block)" screen to change the louver swing direction. The pop-up "Setting" for the selected Group is displayed on the touchscreen.
2. By touching "△" or "▽" of the "LOUVER", the louver swing direction will be changed alternately as follows.

LCD Indication	Icon	Angle Range
COOL DRY	Auto Swing	← Angle Range →
HEAT FAN	Auto Swing	← Angle Range →

Auto swing operation will be started.

3. Touch "Monitor screen" to return the Monitor screen.

NOTES:

- By touching "<" or ">" at the detailed setting screen, the Louver Swing Direction will be switched to another group in the same block.
- Control Restricted (Run/Stop Only): In case of "Enable", each Setting Change applies for all Groups or Blocks. Setting Change is not possible for each Group.
- Depending on the model of the air conditioner, the setting may not be possible or may be calibrated automatically.
- Louver position on the LCD and the actual louver position do not always match during the auto swing operation.
- The actual Louver Swing Direction may not stop immediately after the switch is pressed.
- If the settings are mixed when multiple groups are selected, the display will remain blank.

7.9 Temperature Setpoint

1. Select the target Group on the “Monitor (All Groups)” screen or “Monitor (Block)” screen to change the temperature setpoint. The pop-up “Setting” for the selected Group is displayed on the touchscreen.
2. Touch “△”, and the temperature is increased by 1°F (0.5°C). (Max. 86°F (30°C))
Touch “▽”, the temperature is decreased by 1°F (0.5°C).
 - At Cooling, Dry, Fan, and Auto operation: Min. 66°F (19°C),
 - At Heating operation: Min. 62°F (17°C).
3. Touch “Monitor screen” to return to Monitor screen.

NOTES:

- By touching “<” or “>” at the detailed setting screen, the Temperature Setpoint will be switched to another group in the same block.
- Control Restricted (Run/Stop Only): If the condition “Enable” is selected, each settings change will apply to all Groups or Blocks. A settings change is not possible for each Group.
- The figure above shows an example of the temperature setpoint for a connected Air Conditioner Unit. The temperature setpoint range may not be an option in certain cases.
- If the settings are mixed when multiple groups are selected, the display will remain blank.
- The temperature reading; 76°F (Fahrenheit) may be displayed in Celsius as 24°C or 24.5°C.
- The temperature reading; 78°F (Fahrenheit) may be displayed in Celsius as 25.5°C or 26°C.

7.10 Permitting/Prohibiting Operation from Wired Controller

This function is used for prohibiting the operation from the wired controller.

When the wired controller is set as prohibited (by Item/ All Items), control of the selected item will no longer be available. Those features that can be selected are: Run/Stop, Operation Mode, Fan Speed, Louver Swing and Temperature.

NOTE:

Pay attention to the following when the group support is prohibited.

- When setting “Remote control operation”, do not use the function control lock of the wired controller.
 - When using at the same time, “Remote control operation” and control lock functions, “Remote control operation” is prior and the control lock function cannot be set.
 - When changing settings from “All prohib.” to “All permit”, at “Remote control operation”, all settings for the control lock of the wired controller will be canceled.

<Monitor (All Groups)>

<Monitor (Block)>

- Select the target group on the “Monitor (All Groups)” screen or “Monitor (Block)” screen to set the function of “RCS Operation Prohibited”. The pop-up “Setting” for the selected Group is displayed on the touchscreen.

[Setting]

- Select “Remote control operation” by touching.

[Setting]

- Select “Permitted” or “Prohibit.” for each item. The Icon “>” will be indicated when the item selected is “Prohibit.” If all the items are set as “Permitted” or “Prohibit.”, “All Permitt.” or “All Prohib.” can be selected.

[Setting]

- Touch “Monitor screen” to return to the Monitor screen.

NOTES:

- By touching "<" or ">" at the detailed setting screen, the wired controller Permitted/Prohibited will be switched to another group in the same Block.
- Control Prohibited (Run/Stop Only): If the condition "Enable" is selected, each settings change will apply to ALL Groups or Blocks. A setting change is not possible for EACH Group.
- Even if a wired controller is set to "Prohibit.", it is possible to cease operation with the wired controller while running. It is also possible to restart operation using the wired controller. However, the Stop operation will be only used in case of an emergency. Do not use it in normal operation.
- If "Power Supply ON/OFF" (**d1, d3**) is set, do not set the wired controller to "Prohibit". If the wired controller is restricted when using "Power Supply ON/OFF", the function "Control lock" for the wired controller shall be used.
- If a communication error occurs, the wired controller "STOP" (by item) may be canceled. In this case, repeat the setting.

8. Menu

The table below shows menu item features and their functions.

Feature	Function	Page
Filter Sign Reset	This function is used for turning off the Filter Sign of the connected indoor units. Regardless of the occurrence or not of the Filter Sign, it is possible to reset the Filter Sign time display of the air conditioner unit.	24
Schedule Setting	This function is used as a Run/Stop control of air conditioner operation at any desired time.	26
Schedule Timer Setting	This function is used for setting time (by the minute), "Run/Stop" and temperature 66~86°F(19~30°C). For a weekly schedule setting, up to 10 scheduled items can be set per day. It is also possible to copy the settings contents.	26
Holiday Setting	This function is used for suspending the scheduled operation temporarily. The scheduled operation will be suspended when the day is set as "Holiday". This function is used for setting irregular holidays such as national holidays.	33
Schedule Timer ON/OFF Setting	"Schedule Timer OFF Setting" is used for suspending the schedule operation for the target group. The scheduled operation will not be available when the Schedule Timer is OFF. This function is used for a long holiday, sudden shutdowns, and national holidays.	34
Adjusting Temperature Setpoint Range of Remote Control	This function is used for adjusting the temperature setpoint range. It is possible to set a minimum cooling temperature or maximum heating temperature.	35
Date and Time Settings	This function is used for adjusting date and time.	36
Display of Screen for Cleaning	This function is used for cleaning the Liquid Crystal Display (LCD) of the mini central controller. The screen will return to "Menu" after 10 seconds of not being touched.	36
Touchscreen Calibration	This function is used for calibrating the touch position for the touchscreen. This function is used if the operation does not perform smoothly when the button on the touchscreen is touched.	37
Group Name Register	This function is used for registering a name of a block and group. The registrable number of character is a maximum of 16 characters for the name of each block or group. It is also possible to copy the name. If the group/block is registered without a name, it will be registered as "Group 1" or "Block 1" automatically.	38
Screen Display Setting	This function is used for setting the touchscreen display.	40
Brightness	This function is used for adjusting the brightness of the touchscreen display.	40
Language Setting	This function is used for changing the displayed language.	41
Temperature Unit	This function is used for changing the temperature of the unit.	42
Accumulated Operation Time of Unit	This function is used for indicating the accumulated operation time of the air conditioner. <ul style="list-style-type: none"> The accumulated operation time value will be indicated by month. The operation time is indicated for 16 months, including the current month. "Thermo ON Time" can be indicated by setting the controller option. 	43
Contact Information	This function is used for indicating the service contact address and the latest alarm code.	45
Daylight Saving Time Setting	This function is used for setting the daylight saving time operation.	45

8.1 Display Menu Screen

The setting items for the indoor unit and mini-central controller are laid out in the menu.

<Monitor (All Groups)>

<Monitor (Block)>

1. Touch "Menu" on the screen for "All Groups" or "Block".

2

2. The "Menu" screen will be displayed.
3. Select the item from the "Menu" screen.

8.2 Exit Menu Screen

1. Touch on "Monitor screen" to return to the Monitor screen.

8.3 Filter Sign Reset

8.3.1 Reset Filter Sign

The diagram illustrates the process of resetting the filter sign through five steps:

- Step 1:** From the 'Menu' screen, select 'Filter Sign Reset'.
- Step 2:** In the 'Filter Sign Reset' screen, select the target groups to reset. Groups 1, 2, 6, 7, and 8 are highlighted in yellow. A red dashed box indicates the selection area.
- Step 3:** Touch the 'Execute reset' button.
- Step 4:** A confirmation dialog 'Reset filter sign?' appears with 'Yes' and 'No' buttons. Touch 'Yes'.
- Step 5:** Touch the 'Menu' button to return to the main menu.

1. Select "Filter Sign Reset" from the "Menu" screen.
(This is available only when the filter sign is displayed.)
2. Select the target to reset the Filter Sign.
 - Touch "Display with Sign" to display only the group with the Filter Sign.
 - The target Groups are indicated in Yellow.
 - When selected, the Group button will be indicated with a "✓" sign.
3. Touch "Execute reset".
4. Touch "Yes" on the confirmation screen.
 - Filter Sign and operating time will be reset.
 - Touch "No" to return to the Filter Sign Reset screen.
5. To reset the filter notification, press "Yes".
6. Touch "Menu" to return to the Menu screen.

NOTES:

- This screen may be different depending on the control pattern.
The screen above displays pattern A (4 blocks × 8 groups) set by the control pattern.
- The Filter Sign will be displayed if the elapsed operating time of the filter reaches the time set.

8.3.2 Reset Filter Operation Time

The process is shown in five steps:

- Step 1:** The 'Menu' screen is displayed. The 'Filter Sign Reset' option is selected (indicated by a red line and number 1).
- Step 2:** The 'Filter Sign Reset' screen is shown. It displays a grid of blocks (Block1 to Block4) and groups (Group1 to Group8). The 'All Groups selection' option is chosen (indicated by a red line and number 2).
- Step 3:** A confirmation dialog 'Reset filter sign?' is displayed. The 'Yes' option is selected (indicated by a red line and number 3).
- Step 4:** The 'Filter Sign Reset' screen is shown again, indicating the reset is complete (indicated by a red line and number 4).
- Step 5:** The 'Menu' screen is displayed, indicating the user has returned to the main menu (indicated by a red line and number 5).

1. Select "Filter Sign Reset" from the "Menu" screen.
This is available only when the filter sign notification is activated.
2. Select the target to reset the Filter operating time.
 - Touch "Display All Groups" to target all groups.
 - The target Groups are indicated in Yellow.
 - When selected, the Group button will be indicated with a "✓" sign.
3. Touch "Execute reset".
4. Touch "Yes" on the confirmation screen.
 - An indicated group for Filter Sign will reset the Filter Sign and Filter operation time.
 - A Group that did not display Filter Sign will reset only the Filter operation time.
 - Touch "No" to return to the Filter Sign Reset screen.
5. Touch "Menu" to return to the Menu screen.

NOTES:

- The screen may be different depending on the control pattern.
The screen above displays pattern A (4 blocks × 8 groups) set by the control pattern.
- Filter Sign will display if the elapsed operation time of the filter reaches the time limit.

8.4 Schedule Operation

8.4.1 Schedule Setting

< Timer Setting for Weekly Schedule >

1. [Menu] 2014/01/01 (Wed) 01:33

Filter Sign Reset	Schedule Settings	Setting temp. range of the remote control	Date and time Settings
Display of screen for cleaning	Touchscreen Calibration	Group Name Register	Screen Display Setting
Accumulated Operation Time	Contact Information	Daylight Saving Time Setting	
			Service Menu

2. [Schedule] Submenu 2014/01/01 (Wed) 00:54

Schedule Timer Setting	Holiday Setting	Schedule Timer ON/OFF Setting
------------------------	-----------------	-------------------------------

3 (Block)

3 (Group)

3 (All Groups)

4

5

to Next Page

1. Select "Schedule Settings" from the "Menu" screen.
2. Select "Schedule Timer Setting" from the "Schedule Settings" screen.
3. Select the target (All Groups, Block or Group).
 - The blue button indicates the Group with a setup schedule.
 - The white button indicates the Group without a setup schedule.
4. Select the target day of the week. (from Monday to Sunday.)
5. Select the scheduled item number (from 1 to 10).

6

7

8

9

6. Set the Scheduled Time, RUN/ STOP operation and temperature.
 - Select the schedule item number (1 through 10) and set the time.
 - Select “ON” , “OFF” or “Unspe.”.
 - Set the temperature by touching “Δ” or “▽”.
 - “- -” will be shown when the time and temperature are not set.
7. Touch on “Setting completed” to confirm the setting. If “Cancel” is selected, the setting currently displayed will be canceled and the screen will return to the Scheduled Setting screen.
 - To set the same day of the week, refer to item(5).
 - To set other days of the week, refer to item (4).
8. Touch on “Return to Group sel.” to set the schedule timer for other Groups. The screen will return to Schedule Control selection screen.
 - After the schedule is set, the registered schedule number (1 through 32) will be shown in the Group button. (The scheduled Group button color changes to blue.)
 - In an instance where the setting is the same, the same registered schedule number will be displayed.
 - Touch on “Submenu” to return to the “Schedule Setting” screen.
 - The reading; 76°F (Fahrenheit) may be displayed in Celsius as 24°C or 24.5°C.
 - The reading; 78°F (Fahrenheit) may be displayed in Celsius as 25.5°C or 26°C.

NOTES:

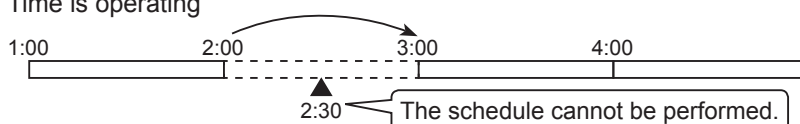
- Make sure that the time and RUN/STOP are set for the timer setting. (It is not necessary to set the temperature.)
- The schedule control selection screen may be different depending on the control pattern.

Daylight Saving Time (DST)

■ Schedule process when Daylight Saving Time is operating

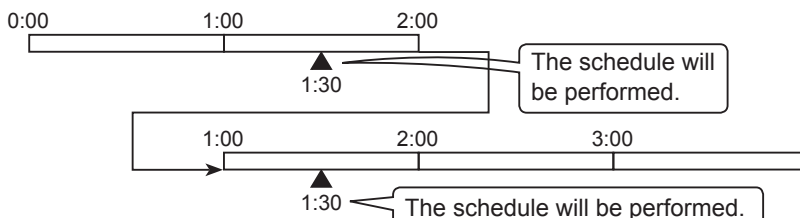
<Starting Time>

When starting at 2:00 with a 1 hour shifting time, the schedule set at 2:30 cannot be performed.

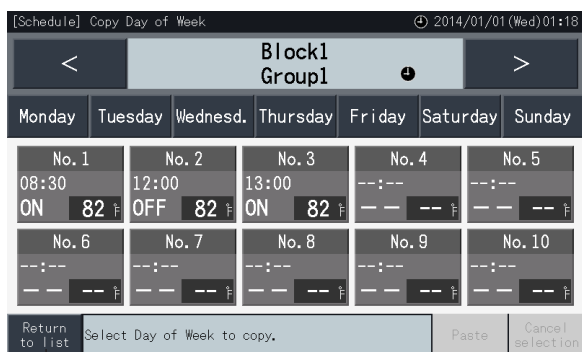
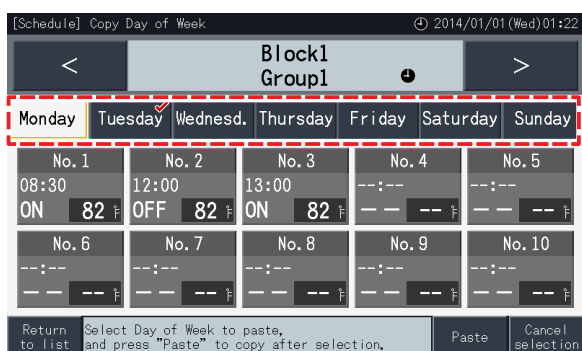
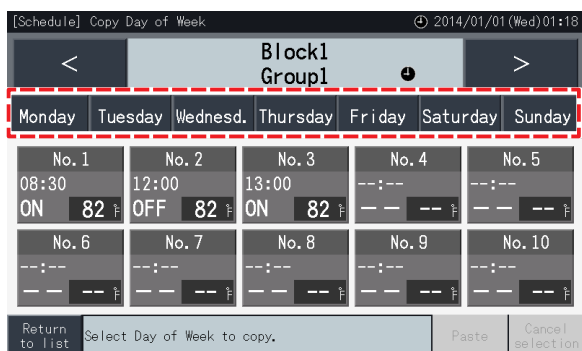
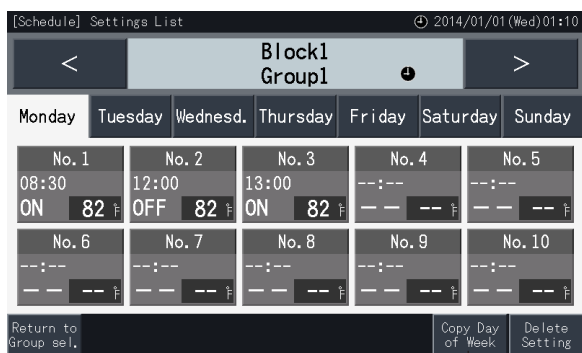


<Ending Time>

When ending at 2:00 with a 1 hour shifting time, the schedule set at 0:30 will be performed twice.

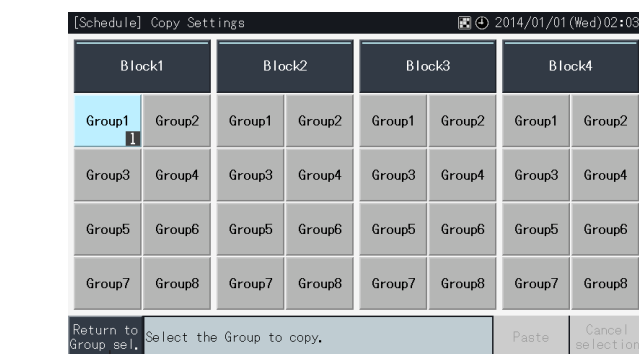
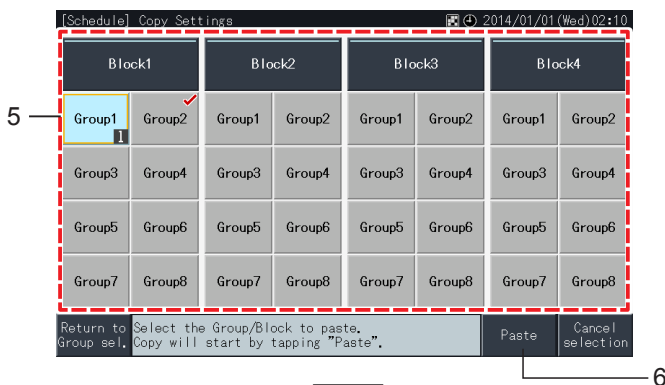
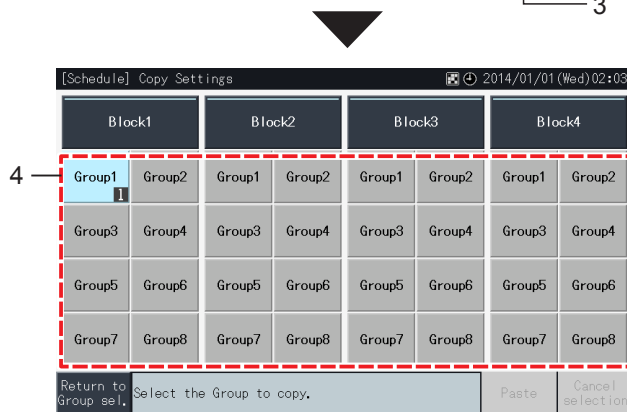
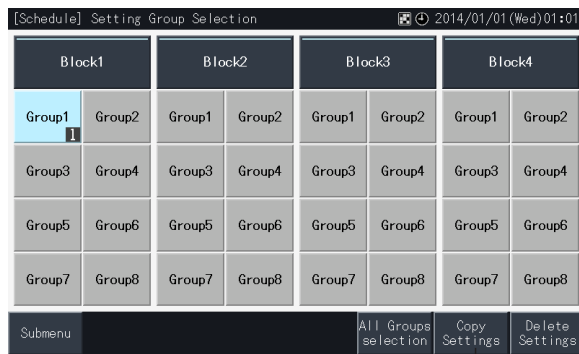


< Copying Schedule Setting by Days of Week >



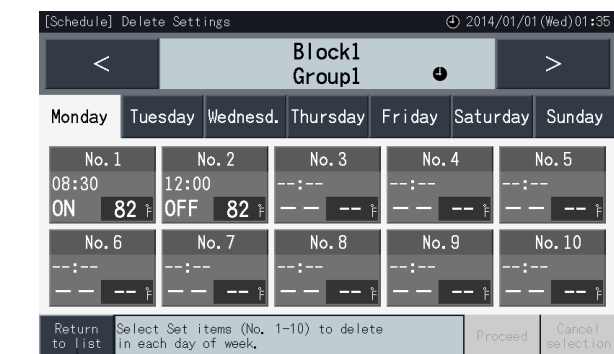
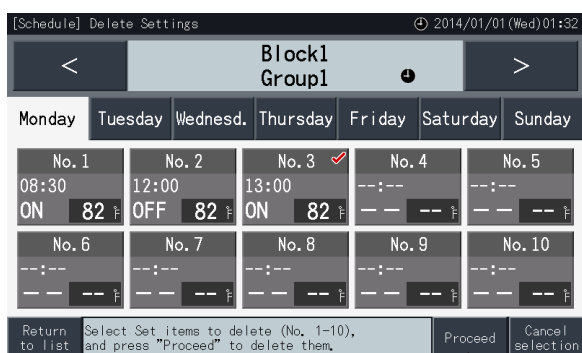
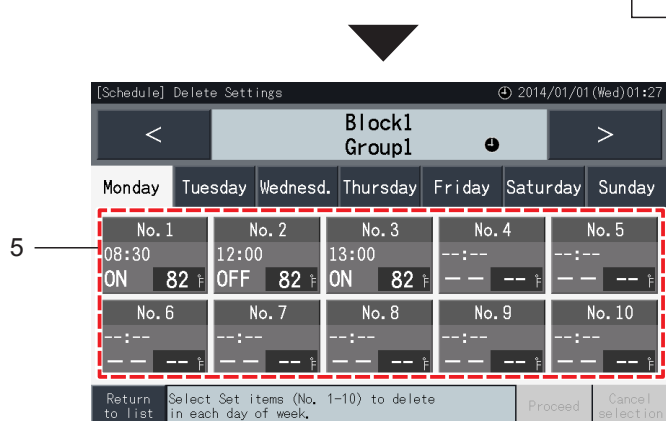
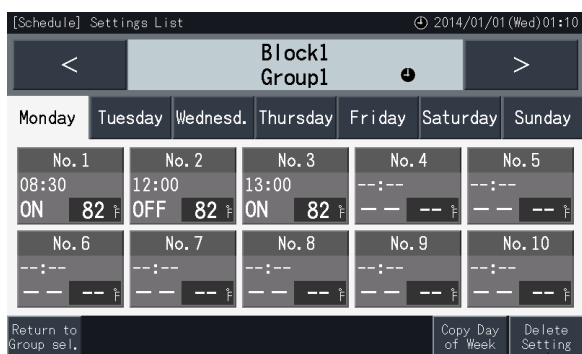
1. Select "Schedule Settings" from the "Menu" screen.
2. Select "Schedule Timer Setting" from "Schedule Setting".
3. Select the target (All Groups, Block or Group).
4. Touch "Copy Day of Week".
5. Select the day of the week to copy. The selected day will be indicated in orange.
6. Select the day of the week tabs to paste.
 - After the day of the week is selected, a check mark "✓" will appear in the day of the week tab.
 - Multiple selections of days of the week are available to copy.
 - Touch "Day of Week" for reselecting the day of the week tabs.
7. Touch "Paste". The Schedule Setting is copied.
 - To copy the schedule for other days of the week, refer to item (5).
 - To finish, refer to item (8).
8. Touch on "Return to list" to return to the "Schedule setting" list screen.

< Copying Schedule Setting by Each Group >



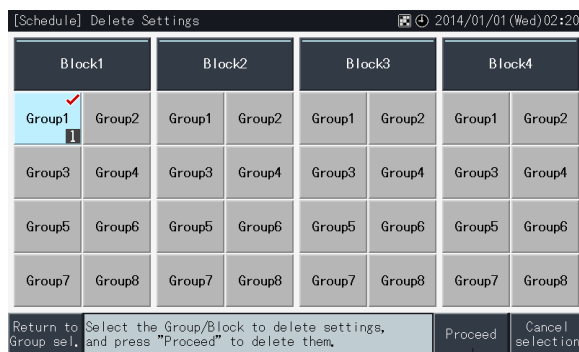
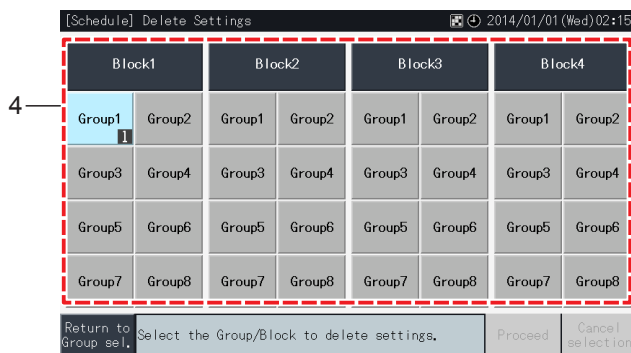
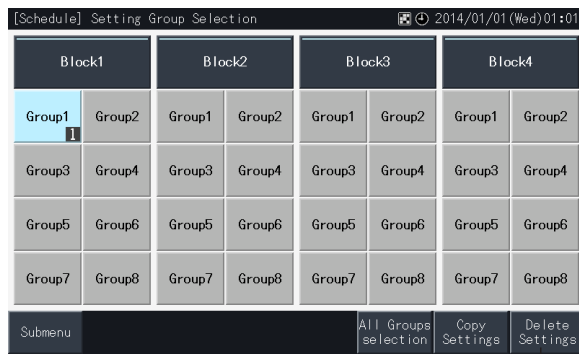
1. Select "Schedule Settings" from the "Menu" screen.
2. Select "Schedule Timer Setting" from the "Schedule Settings" screen.
3. Touch on "Copy Settings".
4. Select the Group to copy.
(Block cannot be selected to copy.)
 - The selected Group button will be trimmed with an orange outline.
 - Touch on the selected Group again to cancel the selection. The orange outline goes away.
5. Select the group (block) to paste.
 - A check mark "✓" will be displayed in the button.
 - Multiple selections of the Group (including Block) are available to paste.
 - To cancel the selection, press the selected group again, the check mark "✓" will vanish.
6. Touch on "Paste".
The schedule setting is copied.
 - To copy the schedule for other Groups, refer to item (4).
 - To finish, refer to item (7).
7. Touch "Return to Group sel." to return to Group Selection.

< Deleting Schedule Setting by Operation No. >



1. Select "Schedule Settings" from the "Menu" screen.
2. Select "Schedule Timer Setting" from the "Schedule Settings" screen.
3. Select the target (All Groups, Block or Group).
4. Touch on "Delete Setting".
5. Select the schedule item number for deleting schedule.
 - If other days of the week tabs are touched, the schedule item number for other days of the week can be selected.
 - If the schedule item number is selected, a check mark "✓" appears. Multiple selection of schedule item numbers are available.
6. Touch on "Proceed".
The selected scheduled item number will be deleted.
 - To delete another schedule number, refer to item (5).
 - To finish, refer to item (7).
7. Touch on "Return to list" to return to the "Schedule Timer Setting" screen.

< Deleting Schedule Setting by Each Group >



1. Select "Schedule Settings" from the "Menu" screen.
2. Select "Schedule Timer Setting" from the "Schedule Settings" screen.
3. Touch on "Delete Settings".
4. Select the Groups or Blocks to delete the setting.
 - If the Groups or Blocks are selected, a check mark "✓" is displayed.
 - Multiple selections of Groups and Blocks are available for deletion.
 - To cancel a selection, press the selected Group again and the check mark "✓" goes away.
5. Touch on "Proceed" and the confirmation screen will be displayed.
6. If "Yes" is selected, the scheduled setting will be deleted.
 - To delete the schedule for other Groups, refer to item (4).
 - To finish, refer to item (7).



[Schedule] Delete Settings 2014/01/01 (Wed) 01:04

Block1		Block2		Block3		Block4	
Group1	Group2	Group1	Group2	Group1	Group2	Group1	Group2
Group3	Group4	Group3	Group4	Group3	Group4	Group3	Group4
Group5	Group6	Group5	Group6	Group5	Group6	Group5	Group6
Group7	Group8	Group7	Group8	Group7	Group8	Group7	Group8

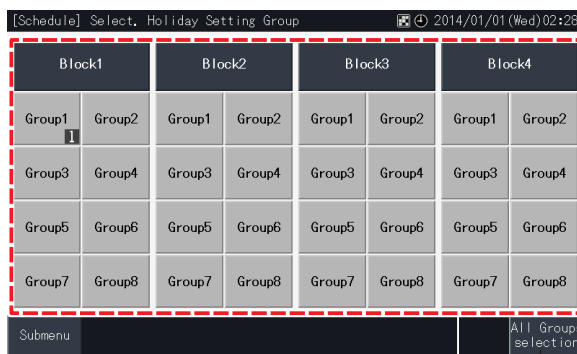
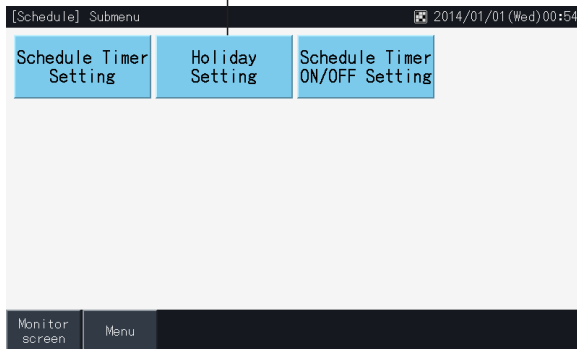
Return to Group sel. Select the Group/Block to delete settings. Proceed Cancel selection

7

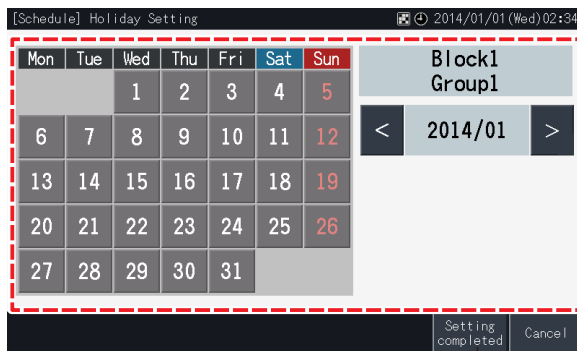
7. Touch on "Return to Group sel." to return to Setting Group Selection.

8.4.2 Holiday Setting for Operation Suspended

2



3



4

5

1. Select "Schedule Settings" from the "Menu" screen. (Refer to Section 8.3.1.)
2. Select "Holiday Setting" from the "Schedule Settings" screen.

3. Select the target (All Groups, Block or Group).
A calendar will be displayed.

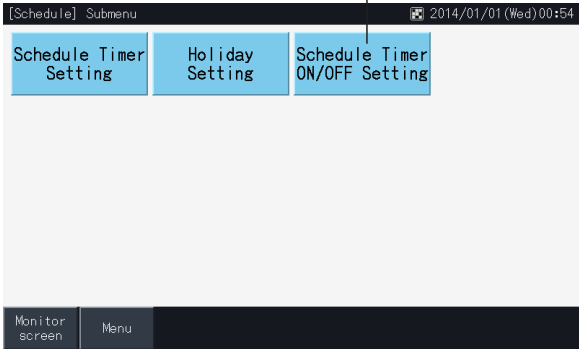
- The Blue button is displayed for the Group with a Holiday Setting.
- Grey Button is for the Group without a Holiday Setting.

NOTE:

"Holiday" means "Operation Suspended Day".

4. Set the date to suspend the scheduled operation.
 - The calendar will scroll forward or backward by touching on "<" or ">".
 - By touching on the date on the calendar, the "Holiday" is set and displayed as "□". The "Holiday Setting" is canceled by touching the same date again.
 - A Holiday setting is not available for the days just prior to the present day.
 - A "□" symbol will be displayed for the day with the holiday setting.
 - With "All Groups" or "Block" selected, a check mark "☑" will appear, indicating the day when the Groups with holiday setup and the Groups without setup holiday are intermixed.
5. Touch on "Setting Completed" to confirm settings content and return to the "Holiday Setting" selection screen.
6. Touch on "Sub menu" at the Holiday Setting selection screen to return to Schedule Setting screen.

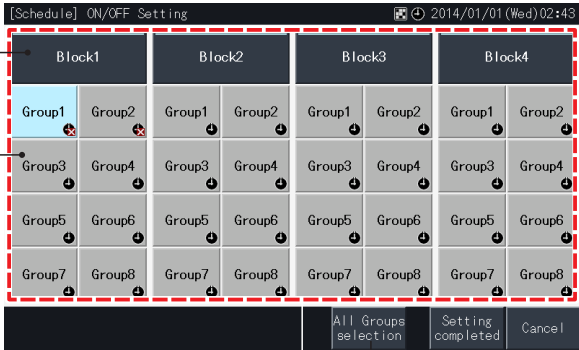
8.4.3 Schedule Timer ON/OFF Setting




2

3 (Block)

3 (Group)



3 (All Groups)



4

1. Select on "Schedule Settings" from the "Menu" screen. (Refer to Section 8.4.1.)
2. Select "Schedule Timer ON/OFF Setting" from schedule setting.
The screen will be changed to the "Schedule Timer ON/OFF Setting". At first, the setting is "ON" displayed as "⬆".
3. Select the target (All Groups, Block or Group).
By pushing the button for All Groups, Blocks or Groups, the selection is changed to the "OFF" setting as displayed as "⬇".
By touching on All Groups, Block or Group, the display begins to alternately indicate a "⬆" symbol and a "⬇" symbol.
 - The Blue button indicates the Group with a schedule set.
 - The Grey Button indicates a Group without a schedule setting.
 - Schedule is turned ON: ⬆
 - Schedule is turned OFF: ⬇
4. Touch on "Setting completed" to confirm the settings content and to return to the "Schedule Settings" screen.

8.5 Adjust Setting Temperature Range of Remote Control



1. Select "Setting temp. range of the remote control" from the Menu screen.
 - If the air conditioner does not support this function, the control target cannot be selected.
2. Select the target to set a temperature range. (All Groups/Block/Group)*
 - The Blue button indicates the Group with a temperature range setting.
 - The Grey button indicates a Group where a temperature range setting is not available.
 - The button is inactive for the Group with no temperature range setting.
 - Do not set in Group using IR Receiver kit.
 - The following cannot be selected:
 - Without a wired controller
 - The representative wired controller Group is not the standard unit supporting H-LINK II (temperature setpoint range is from 66 to 86°F for COOL, and from 62 to 86°F for HEAT).
3. Touch "Δ" or "▽" to set cooling minimum temperature or heating maximum temperature.
4. Touch "Setting completed" to confirm the setting and to return to the Selection screen.
5. If "Cancel" is selected, the setting displayed will be canceled and the screen will return to the selection screen.

8.6 Date and Time Settings

The first screenshot shows the 'Menu' screen with the following options: Filter Sign Reset, Schedule Settings, Setting temp. range of the remote control, Date and time Settings, Display of screen for cleaning, Touchscreen Calibration, Group Name Register, Screen Display Setting, Accumulated Operation Time, Contact Information, Daylight Saving Time Setting, and Service Menu. The 'Date and time Settings' option is selected.

The second screenshot shows the 'Date/Time setting' screen with the date and time set to 2014/01/01 00:46. The date is displayed as '2014 01 01' and the time as '00 46'.

The third screenshot shows the 'Date and time display format' screen with the following options: dd/mm/yyyy, mm/dd/yyyy, and yyyy/mm/dd. The 'yyyy/mm/dd' option is selected.

The fourth screenshot shows the 'Setting completed' button.

1. Select "Date and Time Settings" from the "Menu" screen.
2. Set in the following order: Year, Month, and Day
3. Touch or press-and-hold "Δ" or "▽" to adjust the date and time.
4. Touch "Setting completed" to return to the Menu screen.

NOTES:

- According to the backup function of the mini-central controller, the clock operates for approximately 10 days after the electric power failure. Set the date and time again after any long-term electric power failure.
- Periodical clock adjustments are recommended. (Clock accuracy: difference ± 70 sec. per month)

8.7 Display of Screen for Cleaning

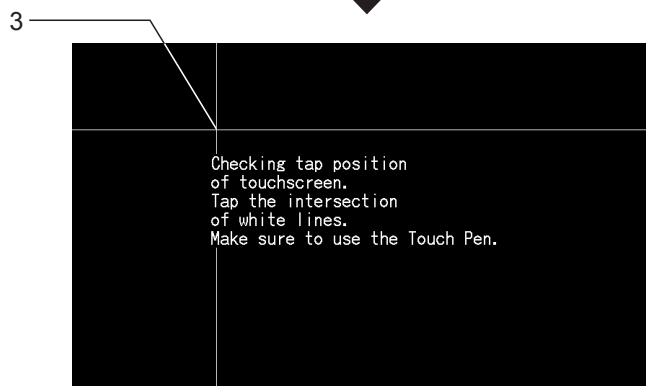
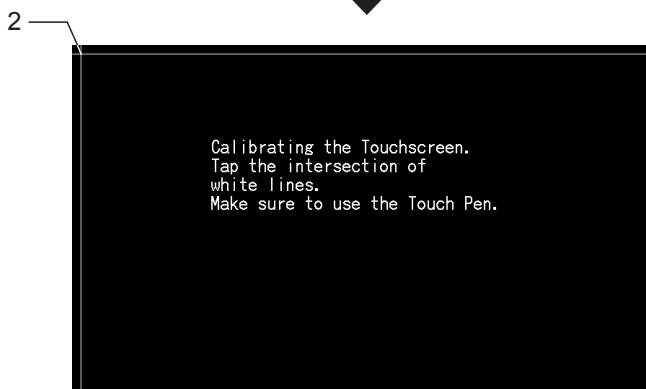
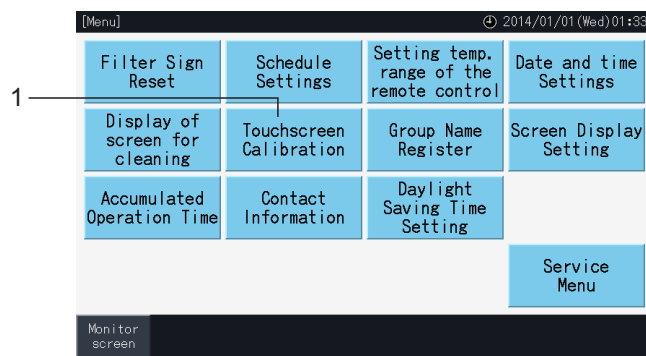
The first screenshot shows the 'Menu' screen with the following options: Filter Sign Reset, Schedule Settings, Setting temp. range of the remote control, Date and time Settings, Display of screen for cleaning, Touchscreen Calibration, Group Name Register, Screen Display Setting, Accumulated Operation Time, Contact Information, Daylight Saving Time Setting, and Service Menu. The 'Display of screen for cleaning' option is selected.

The second screenshot shows the 'Display of screen for cleaning' screen with a message: "Return to the previous screen when not tapping for 10 seconds. After cleaning, wait without touching the screen. ... 10 s left".

1. Select "Display of screen for cleaning" from the "Menu" screen.
2. The screen will be changed as shown in figure (2). The screen will be locked during the cleaning. The screen will return to the Menu screen after 10 seconds of no interaction.

- Clean and wipe the display with a dry, soft cloth.
- For oily fingerprint marks on the touchscreen, use diluted neutral liquid detergent. Before cleaning, wring out the water from the cloth. After that, again wipe down the display with dry, soft cloth.
- Do not use any benzine type thinners or active surface agents in order to protect the touchscreen and casing from damage or deterioration.

8.8 Touchscreen Calibration



1. Select "Touchscreen Calibration" from the "Menu" screen.

2. <Calibrating Touchscreen>
Touch on every intersection of white lines sequentially as indicated on screen.

After that, the screen will be changed. See figure (3).
If the intersections of white lines are not selected (touched) in sequence, "Calibration is canceled" will be displayed.
The screen will automatically revert to the "Monitor (All Groups)" screen or "Monitor (Block)" screen without calibrating.

3. <Checking Position Touchscreen>
Touch on the intersection of white lines in sequence according to what is indicated on screen at left.
 - White dots will display when touching on anything other than the intersection of white lines.
 When all intersections of white lines are selected in sequence, the screen will automatically revert to the "Monitor (All Groups)" screen or "Monitor (Block)" screen.

8.9 Registering Groups/Blocks Name

8.9.1 Registering Name of Group (Block)

The diagram illustrates the process of registering a group name through three sequential screens:

- Menu Screen:** A grid of settings options. 'Group Name Register' is highlighted in the second row, third column.
- Group Name Register - Group Selection Screen:** A grid showing four blocks (Block1 to Block4). Each block contains eight groups (Group1 to Group8). A red dashed box highlights the entire grid.
- Group Name Register - Text Input Screen:** A screen for entering the group name. It features a numeric keypad and a character set row at the bottom. The character set row includes 'ABC', 'abc', 'Symbols 1', 'Symbols 2', 'Symbols 3', 'Register', and 'Cancel'. A red dashed box highlights the character set row.

1. Select "Group Name Register" from the "Menu" screen.
2. Select the target (Block or Group) to register the name.
3. The Character Input screen will be displayed.
 - Select the letter type from "ABC", "abc", "Symbols 1", "Symbols 2", or "Symbols 3".
 - The heading will be only displayed in 1 line, even if a new line is entered to display the title of the Group (Block).
 - The title of the Group (Block) cannot be registered as blank. If it is left blank and "Register" is selected, the title of the factory default will be displayed.
4. Enter the Group (Block) name.
5. Touch on "Delete" to delete the character to the left.
6. When Input Character is completed, touch on "Register" to confirm the name. The screen will return to the Selection screen (2).
7. When Register Group name is completed, touch on "Menu" at the Selection screen (2) to return to the Menu screen.

NOTES:

- The name of the Group (Block) input is possible with a maximum of 16 characters. With a display of eight characters per line, the ninth character will have to start on the second line.
- The name of the Register selection screen may be different depending on the control pattern.

8.9.2 Copying Name of Group (Block)



1. Touch "Group Name Register" from the "Menu" screen. (Refer to Section 8.9.1.)
2. Select the source Group (Block) to copy.
 - Selected group (Block) button is trimmed with an orange outline.
 - Press the selected Group (Block) again to cancel the selection. The orange outline goes away.
3. Select the destination Group (Block) to paste.
 - A check mark "✓" will appear inside the button.
 - Multiple selections of Groups and (Blocks) are available to paste.
 - To cancel the selection, press the selected Group, (Block) again, and the check mark of "✓" goes away.
4. Touch "Paste". The name of the Group (Block) is copied.
 - To copy the names of other groups, refer to item (3).
 - To finish, refer to item (6).
5. Touch "Return to Group sel." to return to the Group Name Register selection screen.

8.10 Screen Display Setting

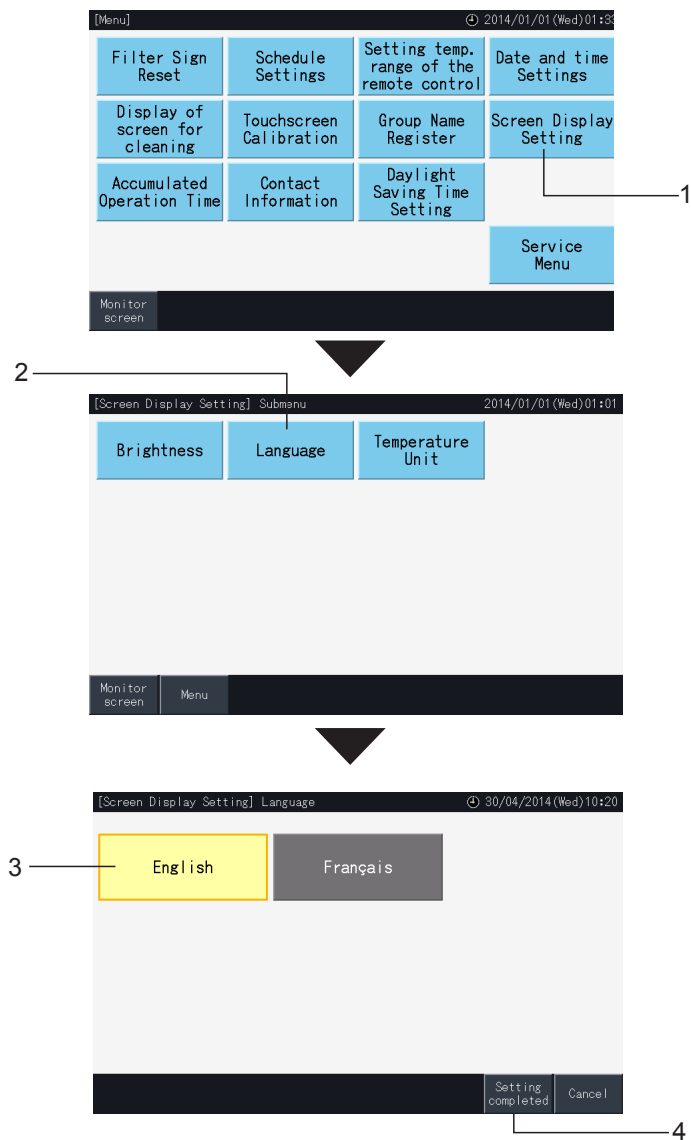
8.10.1 Adjusting Backlight Brightness of Touchscreen Display

The process is shown in three sequential screenshots:

- Screen 1 (Menu):** Shows a grid of settings. 'Screen Display Setting' is highlighted with a line and the number 1.
- Screen 2 ([Screen Display Setting] Submenu):** Shows options: 'Brightness', 'Language', and 'Temperature Unit'. 'Brightness' is highlighted with a line and the number 2.
- Screen 3 ([Screen Display Setting] Brightness):** Shows a slider with a dot at the left end and a line with the number 3. Below the slider are '<' and '>' buttons. At the bottom right are 'Setting completed' and 'Cancel' buttons, with a line and the number 4 pointing to 'Setting completed'.

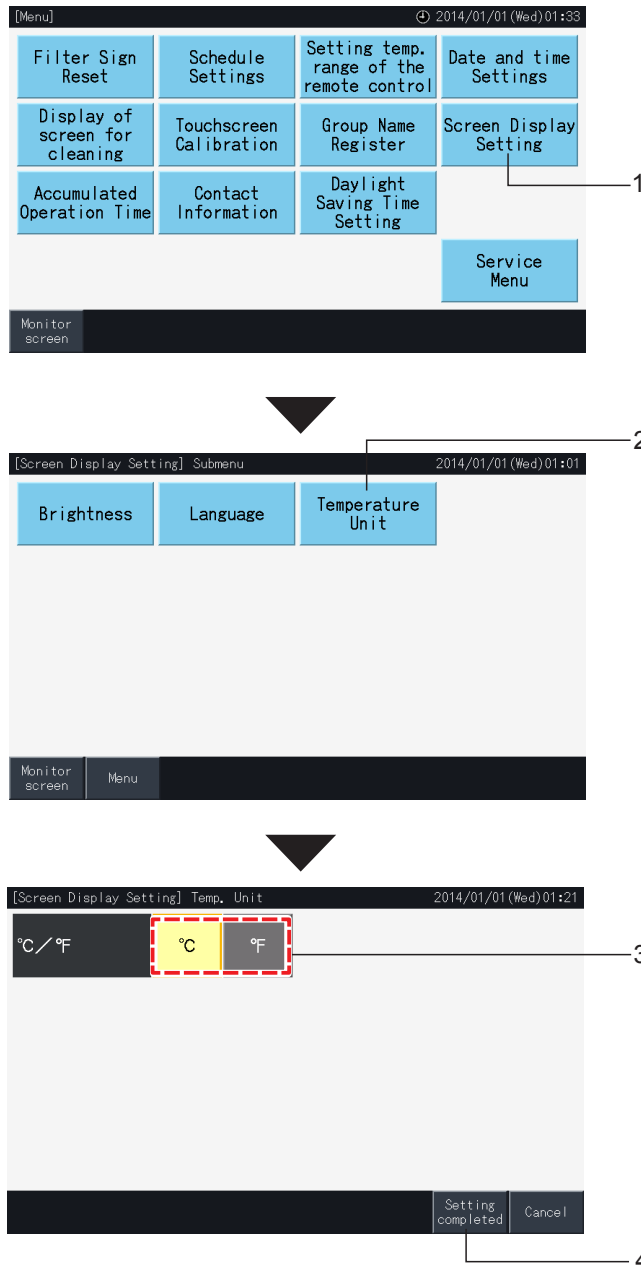
1. Select "Screen Display Setting" from the "Menu" screen.
2. Select "Brightness" from the "Screen Display Setting" screen.
3. Touch "<" or ">" and adjust the brightness of the back lighting.
4. Touch "Setting completed" to return to the Menu screen.

8.10.2 Language Setting



1. Select "Screen Display Setting" from the "Menu" screen.
2. Select "Language" from the "Screen Display Setting" screen.
3. The confirmation screen is displayed when selecting the language button.
4. Touch "Setting completed" to return to the "Screen Display Setting" screen.

8.10.3 Temperature Unit Setting



1. Select "Screen Display Setting" from the "Menu" screen.

2. Select "Temperature Unit" from the "Screen Display Setting" screen.

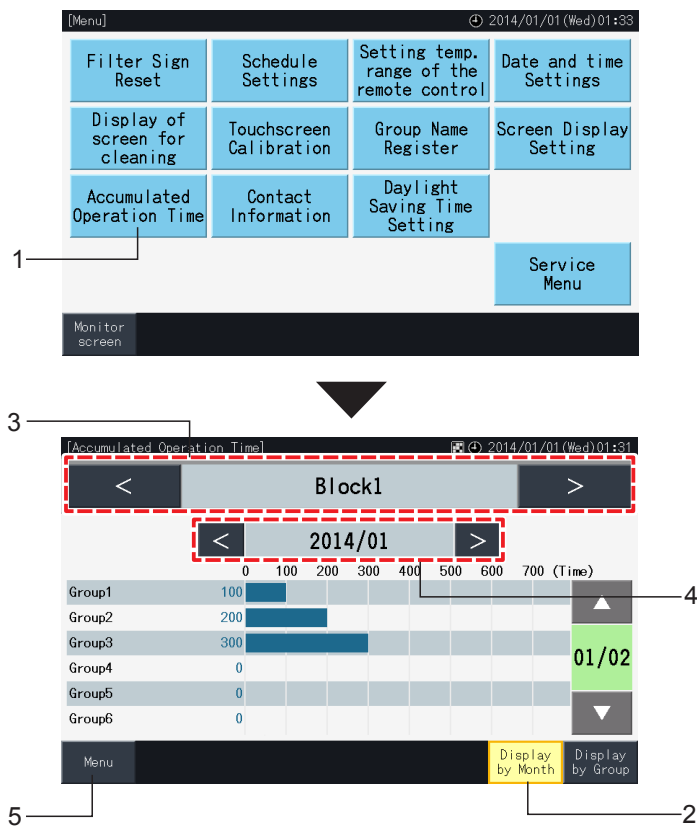
3. Select "°C" or "°F" for the operating button indication. The selected button color is changed.

4. Touch "Setting completed" to return to the "Screen Display Setting" screen.

5. Set the same temperature unit to the remote control and the central controller in the air conditioning system.

8.11 Accumulated Operation Time of Unit

8.11.1 Display by Month



1. Select "Accumulated Operation Time" from the "Menu" screen.

2. Touch "Display by Month".

3. Touch "<" or ">" to select the target Block.

4. Touch "<" or ">" to select the target Year and Month.

5. Touch "Menu" to return to Menu screen.

8.11.2 Display by Group

1. Select "Accumulated Operation Time" from the "Menu" screen.

2. Touch "Display by Group".

3. Touch "<" or ">" to select the target Block.

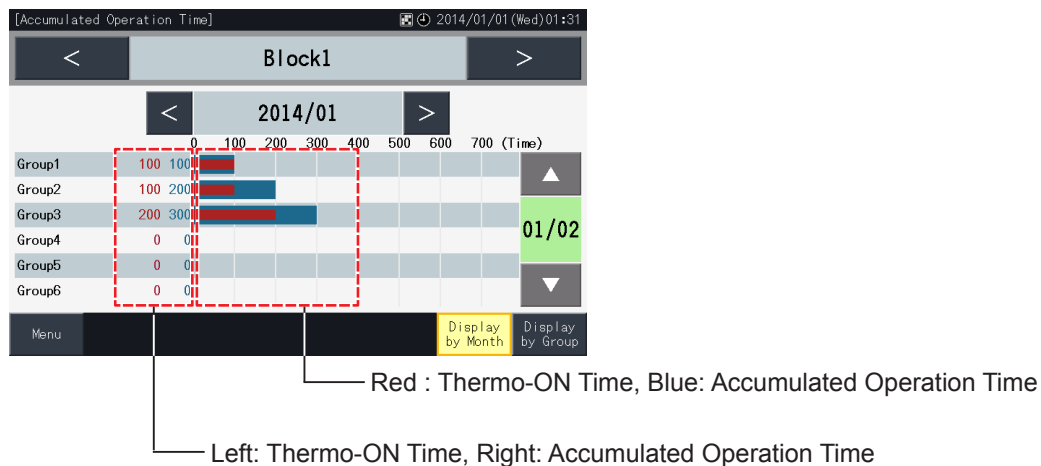
4. Touch "<" or ">" to select the target Group.

5. Touch "Menu" to return to the Menu screen.

1. Select "Accumulated Operation Time" from the "Menu" screen.
2. Touch "Display by Group".
3. Touch "<" or ">" to select the target Block.
4. Touch "<" or ">" to select the target Group.
5. Touch "Menu" to return to the Menu screen.

NOTES:

- Accumulated operation time of this mini-central controller is only for reference. Warranty is not determined from accumulated run time stated at the controller, but rather is based on the installation date or shipping date, whichever is applicable.
- "Thermo-ON Time" can be displayed with the function selection setting. Contact your distributor for detailed information.



8.12 Contact Information

1

2

1. Select "Contact Information" from the "Menu" screen.
The following information will be displayed:
 - Contact address
 - Block/Group name of the latest alarm
 - Latest alarm code
2. Touch "Menu" to return to the Menu screen.

NOTES:

- This function is not available if there is no contact address registered.
- Without an alarm occurrence, the name of the target Block/Group and the alarm code will not appear.

8.13 Daylight Saving Time Setting

1









2

3

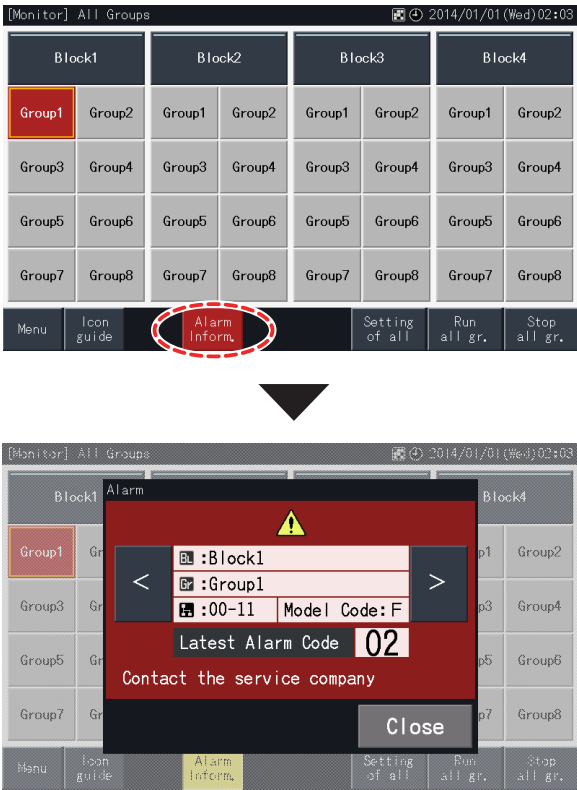
1. Select "Daylight Saving Time Setting" from the "Menu" screen.
2. Select the function concerning each item.
The color of the selected function will change.
3. Touch "Setting completed" to confirm and return to the Menu screen.

9. Other Indications on LCD

9.1 In Normal Condition

Schedule		Displays when schedule is set.
Filter Sign		Displays when the filter or the dust box for the automatic cleaning filter needs cleaning. After cleaning, clear the display using the Filter Sign reset menu.
Filter Automatic Cleaning Error		Displays when there is an abnormal stop of the unit with auto-cleaning. Please contact your distributor where the product was purchased.
Demand		Displays when demand input is set by the optional external input function. The icon blinks during the demand control. Contact your distributor for detailed information.
Demand (Schedule)		Displays when the optional outdoor unit capacity control schedule is enabled and blinks during the control. Apart from the schedule, when the demand input of the external input function is set, the icon will blink during the demand control too. Contact your distributor for detailed information.
Heat Storage Operating		Indicates that the heat storage is operating. During this time, the air conditioner cannot operate.
Emergency Stop		Indicates when an emergency stop signal is set by an optional external input function. During the emergency stop, the indoor unit is stopped and operation by wired controller is not available. Contact your distributor for detailed information.
Wired Controller prohibited		Indicates a Group when operation by the wired controller is prohibited. The item set cannot be operated by the wired controller.

9.2 In Abnormal Condition

<p>Abnormality</p>  <p>The 'Abnormality' screen displays a grid of blocks (Block1 to Block4) and groups (Group1 to Group8). The 'Alarm Inform.' button is highlighted with a red dashed circle. Below it is a screenshot of the 'Alarm Inform.' screen showing details for Block1, Group1, with the latest alarm code 02 and a message to contact the service company.</p>	<ol style="list-style-type: none"> 1. The operational status indicator will be flashing (red) when an abnormal condition has been identified in an air conditioning unit. 2. The red button is also displayed on screen when a fault has developed in a group of units. 3. The "Alarm Inform." message will display on the lower screen. Touch "Alarm Inform." to display the following items: <ol style="list-style-type: none"> a. Refrigerant cycle number, address and model number of the faulted air conditioning unit. b. Alarm code 4. If there are generated faults identified in multiple indoor units, the information details for those generated faults is displayed as described above. In this instance, the affected Group can also be selected by touching "<" or ">" on the "Alarm" information screen. Check the information and root cause of the LCD alarm and contact your distributor for details. <ul style="list-style-type: none"> • Note that the model number may not be indicated depending on the type of air conditioner unit.
<p>Power Failure</p>	<ol style="list-style-type: none"> 1. The display is OFF. 2. Once the unit is stopped by a power failure, the unit will not start again after the power recovery. Perform the starting procedures again. 3. If there is an instantaneous power failure within two seconds, the unit will automatically start again.
<p>Noise</p>	<p>There could be an instance where the display is OFF and the unit is stopped. This is caused by the activation of the micro computer for the protection of the unit from electronic interference (EMI). When the unit has stopped, perform starting procedures again.</p>
<p>The Display "Start-up" Continue</p>	<p>There is a possibility that a communication error has occurred. Contact your distributor for detailed information.</p>

10. Troubleshooting

Check the following table before contacting your distributor for maintenance.

Condition	Cause
Indications on the touchscreen are not displayed.	<ul style="list-style-type: none"> • Check that the wiring for the power supply is connected to the plug. • Check that the power supply is turned ON.
The touchscreen display is "asleep".	<ul style="list-style-type: none"> • The touchscreen will automatically lapse into sleep mode when interaction with it has not taken place for a given length of time. Touch on the screen to awaken.
A part of the touchscreen is not turned ON or is constantly turned ON.	<ul style="list-style-type: none"> • There may be non-functioning areas of pixelation on the LCD. This is not faulty.
A button on the touchscreen cannot operate even if touched. The button next to the touched button will react.	<ul style="list-style-type: none"> • When the mini-central controller is used over a long period of time, the touchscreen may not match the position of what is indicated on the display. Refer to Section 8.8 for Touchscreen Calibration.
The air conditioning unit does not run.	<ul style="list-style-type: none"> • Check to see if the air conditioning unit is in heat storage mode. (Simultaneous heat storage units are an exception.) The air conditioner cannot operate while the heat storage unit is operation.
The setting of louver direction returns to the previous setting.	<ul style="list-style-type: none"> • When the operation mode is "AUTO", the direction of the louver is automatically corrected depending on the settings for the indoor unit model.
Scheduled operation does not run.	<ul style="list-style-type: none"> • Check to see if the Holiday Setting is turned ON. If so, cancel the Holiday Setting according to Section 8.4.2. • Check to see if the setting for scheduled operation is turned OFF. If so, the scheduled operation should be turned ON according to Section 8.4.3.
The "- -" symbol is indicated for the date and time.	<ul style="list-style-type: none"> • The "- -" symbol is displayed when electrical power has been shut down for a prolonged period of time. Set the date and time again according to Section 8.6.
The setting is not changed.	<ul style="list-style-type: none"> • When the mini-central controller is operated immediately after activating the air conditioners, the mini-central controller might not be able to operate because the air conditioners were started first. If this controller is operated immediately after turning ON the Air Conditioner, it is possible that this controller cannot be controlled in order to prioritize the starting process of the Air Conditioner. Please operate after a short interval of time.
The air conditioner unit does not RUN/STOP simultaneously.	<ul style="list-style-type: none"> • Check if Exception Set. Run/Stop Operation is selected. If so, cancel the setting.
The wired controller does not match-up with the main controller when the indoor unit is recovering from a power failure.	<ul style="list-style-type: none"> • The power supply became temporally unstable while recovering from a power failure. The power supply was temporarily unstable when recovering from a power failure. Perform control by the main controller and synchronize the conditions of the wired remote controller and the main controller.

11. Maintenance

- Clean and wipe the display with a dry, soft cloth.
- For oily fingerprints on the touchscreen, use a diluted neutral liquid detergent mixed with water to clean. Before cleaning, wring-out the cloth well. After that, again wipe down the display with dry, soft cloth.
- Do not use benzine type thinners or active surface agents in order to protect the display and its casing from damage.

12. Reference

Model	CCM01
Outer Dimension <WxHxD+(Built-in Part)>	5-33/64 × 4-23/32 × 0-55/64 + (2-5/64 for wall embedding) inch (140 × 120 × 22 + (52.7 for wall embedding) mm)
Net Weight	1.1 LBS (0.5 kg) (Approximately)
Installation Location	Indoor Use
Installation Method	Wall embedded using the steel box (option)
Connected Indoor Unit (Qty.)	160 (Maximum)
Clock Accuracy	± 70 seconds/month (at normal temperature)
Ambient Temperature	41 to 95°F (5 to 35°C)
Ambient Humidity	35 to 90%
Display	5.0" TFT Color Liquid Crystal Display (800 x 480 dots)
Rated Power Supply	24VAC, 60Hz
Electrical Power Consumption	10W (Maximum)

Block/Group Registration Table for Mini-Central Controller

[illegible]

