Intelligent controller (CZ256ESMC2)

**Limitation contents for prohibited operation**

Prohibition means limitation of the operation contents from the remote controller. It is also possible to change the prohibition items.

**Limitation contents (Limitations can be user defined)**

- **Individual**
  - There is no limitation for the operation of the remote controller. However, the contents will be changed to the contents of the controller operated last. (Last-pressed priority)

- **Prohibition 1**
  - The remote controller cannot be used for ON/OFF. (All other operations are possible from the remote controller.)

- **Prohibition 2**
  - The remote controller cannot be used for ON/OFF, operation mode change and temperature setting. (All other operations are possible from the remote controller.)

- **Prohibition 3**
  - The remote controller cannot be used for operation mode change and temperature setting. (All other operations are possible from the remote controller.)

- **Prohibition 4**
  - The remote controller cannot be used for operation mode change. (All other operations are possible from the remote controller.)

*Note: Avoid joint use of the AMY system and the intelligent controller on the same indoor/outdoor operation line.*

Max. 256 indoor units (4 systems x 64 units) can be controlled. In case of three or more systems, a communication adapter CZCUN2 must be installed on the outside.

**Operation is possible as batch, in zone units, in tenant and in group units.**

**Communication adapter (CZCUN2)**

**ON/OFF, operation mode setting, temperature setting for fan speed setting, air flow direction setting (when used without a remote controller), and remote controller local operation prohibition (prohibition 1, 2, 3, 4) can be done.**

A system without a remote controller is possible. Joint use with a remote controller or a system controller is also possible.

Use of a scheduler and holiday setting is also possible.

Proportional distribution of the air conditioning energy is possible. Including CSV-file export via CF-card (supplementary accessory).

NEW function: Pulse signal input from electric/gas consumption meter.

In case of joint use with a wireless remote control system, there are limitations for the control mode. Please use only with "Permission" and "Prohibition 1".

Required to connect three or more linked wiring systems (indoor/outdoor operation lines) to the intelligent controller.

As required for connection of PAIMS.

Two linked wiring systems can be connected to one CZCUN2, but max. 4 systems can be connected for the entire intelligent controller.

*As this is not a splash-proof design, it must be installed indoors or in the control panel, etc.*
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8. Intelligent Controller (CZ-256ESMC2)

Control of 2WAY SYSTEM
2 Features of the System

The Intelligent Controller is a centralized air conditioning management system dedicated to PAC and GHP for small and medium sized buildings.

- **Number of connectable units**
  - By connecting communication adaptors to one Intelligent Controller, up to 256 indoor units can be connected.
  - Up to 120 outdoor units can be connected.

- **Display**
  - Touch panel type 6.5-inch TFT color (640x480 pixel VGA) LCD display

- **Operation functions**
  - Start and stop, temperature settings, operation mode selection, fan speed settings, fan direction settings, ventilation etc.

- **Operating monitoring**
  - All unit monitoring of operation status (operating/stopped, operation mode, alarms)
  - Display of alarm logs
  - One-operation checking of all filter cleaning signs and engine oil inspection signs
  - External output of all errors, external output of all operations (relay connections)

- **Program timers**
  - Up to 50 types of weekly timers can be programmed by combining 50 types of daily timers (50 times per day).

- **Air conditioning energy distribution**
  - Recording and display of accumulated operating time and total number of operations for each indoor unit.
  - Calculation of gas and electricity distribution ratios and energy amounts used (m³, kWh) for each indoor unit and each tenant.
  - Distributions are available in two modes: the “simple distribution” calculated based on the operating time and “loaded distribution” calculated based on the actual air conditioning capacity, respectively. (In order to make operation in the “Loaded distribution” mode, the air conditioner side needs to be adaptable to the “Loaded distribution”).
  - Distribution by time zones (regular hours, out of hours, special days).
  - Recording of up to past 24 months of cut-off data.

- **Printing display**
  - All operating screens can be printed out with a dedicated printer connected (handcopy).

Terms and abbreviations used in this manual and in the system software:

<table>
<thead>
<tr>
<th>Full term</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptor address</td>
<td>Adapter</td>
</tr>
<tr>
<td>Link system address</td>
<td>Link system</td>
</tr>
<tr>
<td>Outdoor unit system address</td>
<td>Outdoor unit system, Outdoor unit, Outdoor systems, Outdoor, O/U</td>
</tr>
<tr>
<td>Indoor unit address</td>
<td>Indoor unit, Indoor, I/U</td>
</tr>
<tr>
<td>Distribution group number</td>
<td>Distribution group No., Distribution group</td>
</tr>
<tr>
<td>Tenant number</td>
<td>Tenant No., Tenant</td>
</tr>
<tr>
<td>Zone number</td>
<td>Zone No., Zone</td>
</tr>
<tr>
<td>Unit name</td>
<td>Unit</td>
</tr>
<tr>
<td>Air conditioning distribution ratio</td>
<td>Distribution ratio, Distr ratio</td>
</tr>
<tr>
<td>Central control address</td>
<td>Central address, CNTR</td>
</tr>
<tr>
<td>Thermostat</td>
<td>T/S</td>
</tr>
</tbody>
</table>

* For more information about terms, see “11 Terms”.

---

3 System Configuration

### Example

**Intelligent Controller**

**Inter-unit control wire** (non-polar)

**Link system**

**Communication adaptor**

**Communication adaptor control wire** (RS-485, polar)

**Pulse meter**

G: Gas flow meter
W: Electricity meter

### System Configuration Example

- **Maximum number of connections**
  - Indoor units: 256 (64/link x 4)
  - Outdoor units: 120 (30/link x 4)
  - Communication adaptors: 7
  - Link systems: 4

* When connecting link systems (inter-unit control wires), always connect beginning with LINK1 and LINK2 on the Intelligent Controller. Up to 4 link systems can be connected.
4 Names and Functions of Parts

Front Panel

- **Power indicator**
  - Lights to show that the intelligent controller is powered on.

- **Touch panel type color LCD display**
  - Displays operating screens. Use the supplied touch pen to operate.

- **PC Card and touch pen storage cover**
  - Push the cover to open it. The compartment inside is used to store the touch pen and to insert and eject PC Cards for backup.

- **Touch pen**
  - Used to carry out operations on the LCD display.

- **PC Card socket**
  - Used to insert optional PC Cards for backup.

Rear Panel

- **Power connector panel**
  - AC 100V-240V power connector panel.

- **Power switch**
  - Powers the Intelligent Controller on and off.

- **Rear cover**
  - Dangerous. Do not open.

- **USB**
  - Used when connecting a dedicated printer (to be locally procured).

- **LAN**
  - Used for connection to LAN.

8. Intelligent Controller (CZ-256ESMC2)

Control of 2WAY SYSTEM
4 Names and Functions of Parts

1. Right side panel

5 Quick Reference

Menu List

1. Status/Control
   - Sub Menu
     - 1. Each tenant
     - 2. Each tenant details
     - 3. Each zone
     - 4. Each zone details
     - 5. All units
     - page 31

2. Total data/Cut-off
   - 1. Each I/D unit
   - 2. Each tenant
   - 3. Each O/D unit
   - 4. Pulse meter
   - page 39

3. Distrib. ratio/Usage
   - 1. Each I/D unit
   - 2. Each tenant
   - page 46

4. Maintenance/Test Run
   - 1. Inspection sign
   - 2. Alarm log
   - 3. Test run
   - page 49

5. Initial settings
   - 1. Date/Distrib.
   - 2. CNTR/Unit/Ten. No.
   - 4. Pulse meter setting
   - 5. Clear accum. data
   - page 22

6. Auxiliary settings
   - 1. Zone name
   - 2. ZoneNo./Mgr. target
   - 3. Program timer
   - 5. Prohibit R/C
   - 6. Distribution time zone
   - 7. Special distr. day
   - 8. I/D unit settings
   - 9. Other settings
   - 10. WEB settings
   - 11. User settings
   - page 53
5 Quick Reference

Menu List
Listed are only typical functions.

How to operate air conditioners
- Operating all units collectively desired
- Operating units individually desired
- Operating units by tenant desired
- Operating units by zone desired
- Varying operation modes desired
- Varying setting temperatures desired
- Resetting filter signs desired
- Varying fan direction and speed
- Prohibiting remote controlling desired

Monitoring status of air conditioner operation
- Monitoring status of inspection signs desired
- Monitoring operation status collectively desired
- Checking the alarm history desired
- Checking current and past total calculation times desired
- Checking current and past distribution ratios and energy consumption desired

Setting the system
- Changing the unit names desired
- Changing tenant names desired
- Changing zone names desired
- Adjusting dates and times desired
- Changing type of pulse meter (power meter or gas meter)
- Setting timer operation desired
- Setting security displayed on the screen desired
- Stopping or sounding the buzzer

Others
- Backing up PC cards desired
- Powering off Intelligent Controllers desired
- Outputting distribution in progress desired
- Printing desired
- Calibrating touch panel deviations

6 Using the System

6.1 Powering the System On
Check the wiring, (air conditioners, communication adaptors, etc.) and then turn the power switch on (see page 12). The system starts automatically.

When the system is powered on for the 1st time, about 10 minutes are required for the normal system screen to appear. Wait until it appears.

6.2 Names and Functions of Screen Parts

6.2.1 Initial communications screen
The figure below shows the initial communications screen, which appears when the Intelligent Controller starts.

H System power off procedure H
Always use the following procedure to power the Intelligent Controller off.

In the “Other settings” menu, select the last item Power off.

The message “Exit this program?” appears. Press the OK button.

The message “It is now safe to turn off the Intelligent Controller.” appears (±). Turn the power off.
(± Several minutes may be required before the message appears.)
6 Using the System

6.2.2 Operating screen example

The figure below shows a typical operating screen.

- **Main menu**
- **Sub menu**
- **Timer operation mark**
- **Filter cleaning sign**
- **Outputs hardcopies by the printer.**
- **Filter cleaning sign**
- **Tenant selection window**
- **Displays tenant name.**
- **Displays unit name.**
- **Scrolls the display of tenants.**
- **Displays the current date and time.**
- **Reset button**
- **Displays the columns displaying indoor units.**
- **Notification column**
- **Displays alarms, errors, and other messages.**

* Selection windows

When you touch [Tenant] (or whatever is displayed in blue between the scroll buttons) shown on the previous page, the items available for selection appear in a list as follows, enabling direct selection.

**[Tenant] list**

A similar list appears for the other buttons.

**[I/D unit] list**

**[Weekly timer] list**

**[Tenant holiday] [Date] list**

*See next page for details.*

Filter cleaning signs are issued only as approximate guides. We recommend that filters be cleaned regularly, even if no sign has been issued.
6 Using the System

6.3 Initial Settings

The items in the "Initial settings" menu (main menu 5) must be set in order to use the Intelligent Controller. Be sure to set these items.

Before making the settings, read the following and decide what kind of information you want to obtain from the system.

1. Setting central addresses
   Central addresses must be set on the "CNTR/Unit/Ten.No." screen. Be aware that using them along with the system controller, ON/OFF-controller and so on, may affect zone control classification.

2. Decide whether or not to use distribution ratios. (See "6.3 Setting the date, cut-off date, and distribution ratio calculation method").
   Question: Do you need to display and record distribution ratios for each indoor unit and each tenant?
   Yes: Select "T/S ON-OFF time" or "T/S ON time" as calculation target of power distribution.
   No: Select "No Distrib." as calculation target of power distribution.

If all you need to do is to monitor air conditioning status, operate the system, and view total data for operating time and so on, you should select "No". (Information you do not need will not be displayed.)

When you select "No", the following displays are disabled.

   Setting items : Distribution group registration in Main Sub 22 55
   Display items : Time zones in Main Sub 11 22 and Main Sub 22 22
   Menus : Main Sub 11 33 and Main Sub 22 33, Main Sub 66 66, Main Sub 66 77, and Main Sub 66 88

3. If you will be using distribution ratios, decide which calculation method to use. (See "6.3 Setting the date, cut-off date, and distribution ratio calculation method").
   Question: Do you need to consider electricity of indoor units?
   Yes: Select "T/S ON-OFF time" as calculation target of power distribution.
   No: Select "T/S ON time" as calculation target of power distribution.

If pulse (electricity) meters are installed for measuring both indoor and outdoor units, select "T/S ON-OFF time".

If only outdoor units are measured, select "T/S ON time".

4. Pulse meter settings (See "6.3.5 Making pulse meter settings").
   Question: Do you require monthly energy usage display?
   Yes: Install a pulse meter for each distribution group.
   No: Pulse meter installation is unnecessary.

When pulse meters are not set, "0" is displayed for usage.

You can remove connected units from management by this system. For details, see "6.8.2 Setting zone numbers and management targets".

8. Intelligent Controller (CZ-256ESMC2)
6 Using the System

### Clear accum. data
- Note 6

### Zone name
- Note 7

### ZoneNo./Mng. target
- Note 7

1. Zone No.
2. Management target

### Program timer
- Note 7

1. Daily timer
2. Weekly timer

### Ten.Ho/TimerSp.Day
- Note 7

### Prohibit R/C
- Note 7

### Distribution time zone
- Note 7

### Special distrib. day
- Note 7

### I/D unit setting
- Note 9

1. Indoor unit capacity
2. Electric heater capacity

### Other settings
- Note 10

1. Checking system configuration
2. Set/Clear password
3. No-communications mode
4. Buzzer
5. Initialization
6. Auto display off
7. Touch panel calibration
8. Power off

### WEB settings
- Note 17

### User settings
- Note 17

1. Manual cut-off
2. Data backup
3. Restore

### Cut-off/Data backup
- Note 17

1. Manual cut-off
2. Data backup
3. Restore

### I/D unit setting
- Note 17

1. Indoor unit capacity
2. Electric heater capacity

### Other settings
- Note 17

1. Checking system configuration
2. Set/Clear password
3. No-communications mode
4. Buzzer
5. Initialization
6. Auto display off
7. Touch panel calibration
8. Power off

### Note 1
- Settings are necessary when you would like to monitor operation accumulated time only and distribution ratio is not needed.

### Note 2
- Settings are necessary only when air-conditioners include a 3-Way type unit.

### Note 3
- Make settings even when no distribution is made, if you would like to control units as a bundle of the group of tenants.

### Note 4
- Settings are necessary only when the indoor unit has a interface adaptor and is set at almighty.

### Note 5
- Settings are necessary only for the indoor unit set at almighty.

### Note 6
- Immediately before delivery, execute “Clear accum.data” to clear total data taken during test runs. When clearing the test run data after storing it, make “Cut-off” manually.

### Note 7
- Make the settings when you would like to operate the unit by optional grouping.

### Note 8
- When using the unit along with the system controller or ON/OFF-controller, the controller-side control classification needs to be taken into consideration. The system controller or ON/OFF-controller-side zone varies as varying central addresses from the Intelligent Controller.

### Note 9
- Settings are necessary only for interface adaptor.

### Note 10
- Settings are unnecessary for the simple distribution as they will be taken into consideration in calculation only for the loaded distribution.

### Note 11
- Always set the mode at “NO (Normal)”.

### Note 12
- Do not make any initialization imprudently as it may cause missing of all the set and cut-off data.

### Note 13
- The system works only with the backup PC card inserted, which is separately available.

### Note 14
- Always make the cut-off processing in advance to vary the method of distribution.

### Note 15
- Although the touch panel is adjusted before factory shipment, calibrate deviations if any.

### Note 16
- Do not restore any data imprudently as it may return them to their backed-up status.

### Note 17
- Settings are necessary when you would like to control/monitor the unit via network.
6 Using the System

6.3.2 Setting the date, cut-off date, and distribution ratio calculation method

Use this screen to set the current date and time, and make settings related to time. These settings are needed for program timers and distribution ratio calculation, so be sure to make them before starting operation of the system.

Procedure
Select [Initial settings] in the main menu and [Date/Distrib.] in the sub menu, then proceed as follows.

1. Set the current date and time.
   Under "(1) Current time", select the current [year, month, day, hour, minute, and second] from the drop-down lists( ).
   The day of the week is shown automatically. Press the [Set] button to set the settings.

2. Set the monthly cut-off day.
   Under "(2) Cut-off day", select a number from [1 to 28 or End] (to select the last day of the month) from the drop-down list( ).

- **Status/Control**
  1. **Initial settings**
  2. **Date/Distrib.**
  3. **Total data/Cut-off**
  4. **Distrib. ratio/Usage**
  5. **Maintenance/Test Run**
  6. **Auxiliary settings**

   - **Initial settings**
     - **Date/Distrib.**
       - **Initial settings**
       - **Date/Distrib.**

   - **Date/Distrib.**
     - **Initial settings**
     - **Date/Distrib.**

   - **Total data/Cut-off**
     - **Initial settings**
     - **Date/Distrib.**

   - **Distrib. ratio/Usage**
     - **Initial settings**
     - **Date/Distrib.**

   - **Maintenance/Test Run**
     - **Initial settings**
     - **Date/Distrib.**

   - **Auxiliary settings**
     - **Initial settings**
     - **Date/Distrib.**

- **Main Sub**
  1. **Initial setting**
  2. **Date/Distrib.**
  3. **Status/Control**
  4. **Total data/Cut-off**
  5. **Distrib. ratio/Usage**
  6. **Maintenance/Test Run**
  7. **Auxiliary settings**

If the time set is ahead of the current time, the program timer set in that period becomes invalid and transmission is not performed.
6 Using the System

6.3.3 Setting central addresses, unit names and tenant numbers

Use this screen to set central addresses, names of units connected to the system and tenant numbers.

Procedure

Select [Initial settings] in the main menu and [CNTR/Unit/Ten. No.] in the sub menu, then proceed as follows.

- **Central address**
  - Input a number 1 to 64 to set central address. When you touch [Auto], the central address will be automatically set.
  - Two identical central address settings cannot be used within a link system. If you input an existing address, the input data is cancelled.
  - It may take several minutes before the central address settings are reflected in the display.

- **Unit name**
  - Use the keyboard to enter an unit name. Unit names can be up to 12 characters long.
  - You can copy and paste text using the [Copy] and [Paste] buttons. See “7.2 Entering Text” for details.

- **Tenant number**
  - The tenant number range is from 1 to 256.

When you touch a central address column, a screen will be displayed as shown on the right. Input a number 1 to 64 to set central address.

When you touch [Auto], the central address will be automatically set.

* The tenant number range is from 1 to 256.
6 Using the System

6.3.4 Setting tenant names and distribution groups

Use this screen to set tenant names and distribution groups.
You can also use this screen to set the product type (PAC, GHP, HOT, etc.) of indoor units.

Procedure
Select "Initial settings" in the main menu and "Tenant name/Distrib. Gr." in the sub menu, then proceed as follows.

1. Touch a tenant name. A keyboard window appears. Use the keyboard to enter the tenant name.
   - Tenant names can be up to 20 characters long.
   * See "7 Entering Text and Numbers" for details about entering text on software keyboards.
   * The tenant number range is from 1 to 256.

2. Touch a distribution group. A keyboard window like the one shown above appears. Use the keyboard to enter a distribution group number and to select the product type from among PAC, GHP and HOT.
   - Select "Simple" or "Load" in the distribution methods.
   * Refer to "10. Calculating air conditioner distribution" for details.
   * The tenant set at "Load" distribution will have its "No." box display in light blue.
   * The distribution group number range is from 1 to 8.
   * This button is invalid when "No Distib." has been set. (Refer to "Status/Control")
   * The distribution group column set at loaded distribution has no product type such as "PAC" and "GHP" displayed.
   * Make manual cut-off in advance to change the distribution method.

3. Press the "Type" button to select "PAC" or "GHP" for the following unit that is unable to automatically recognize product type.
   - Interface Adaptor
   * This is only for "Simple distribution" setting.
   * Specify which distribution method, "Simple" or "Load," to apply to the selected distribution group.

4. Touch "Set" to confirm the setting, or "Cancel" to cancel it.

- PAC, GHP, and HOT cannot be mixed in the same group. Set up a separate distribution group for each type.
- HOT multi units cannot be recognized automatically (they are recognized as PAC). Manually set the product type to HOT.
- HOT Tenants cannot be set at the "Load" distribution.
- "Load" distribution tenants cannot be set at "HOT".
- Air conditioners unadaptable to loaded distribution cannot be set at "Load" Distribution.
- Interface Adaptors are also unadaptable to loaded distribution.
6 Using the System

6.3.5 Making pulse meter settings

If you have connected pulse meters, use this screen to set the target distribution groups and the amount of electricity or gas per pulse.

Procedure
Select **5. Initial settings** in the main menu, and **4. Pulse meter setting** in the sub menu.

1. Select the pulse meter connection destination.
2. You can change the type of pulse meter (power meter or gas meter). The above indicates the factory default state. When you touch the Meter type area, the Meter type window appears so that you can select the type of pulse meter to use.
3. Touch a distribution group number. A numeric keypad appears for the distribution group. Use the keyboard to enter the distribution group number.
   - The distribution group number range is from 1 to 8.
   - The distribution group buttons are disabled when you have chosen not to perform distribution rate calculations (see Main Sub 11).
4. Touch the pulse unit amount column and enter the amount of electricity (kWh) or gas (m³) per pulse.
5. If the product type is HOT Multi, select the unit for fuel metering.
6. Select this check box for ice heat accumulation night power meters. (Enabled during loaded distribution setting only.)
   - This cannot be set for electricity meters configured for use with HOT Multi or simple distribution.
7. For the night power meter set in 6, select which outdoor system to meter ice heat accumulation by selecting the address.
6 Using the System

6.3.6 Clear accumulation data

Use this screen to erase total data after test runs, and to restart total calculations for operating time, operating counts, and so on.

Procedure
Select 5. Initial settings in the main menu and 5. Clear accum. data in the sub menu, then proceed as follows:

1. Touch Clear accum. data.
   A window like the following appears.

   Touch Yes. Total data up to now is erased, and calculation of total operating time restarts.

6.4 Status Monitoring and Operation Screens

6.4.1 Displaying general information by tenant

Use this screen to display information about all connected indoor units by tenant.

Procedure

The indoor units for each tenant are displayed.

Meaning of symbols

- : COOL
- : DRY
- : FAN
- : HEAT
- : TIMER
- : Clean filter sign
- : AUTO Mode/SPEED
- : SWING
- : VENTILATION
- : Accept remote controller
- : Prohibit remote controller setting No.1
- : Medium fan speed
- : Low fan speed
- : High fan speed

If an Interface Adaptor is used, the color becomes light purple during the ON operation.
6 Using the System

6.4.1.1 Operating units individually

Use this screen to operate individual indoor units.

Procedure

Select 1.Status/Control in the main menu and 1.Each tenant in the sub menu.

When you touch the unit that you want to set, a remote control window for individual on/off operations appears.

When you touch , a remote control window appears. This window allows you to make detailed settings for operations on individual units.

- a. Closes the remote control window.
- b. Sets to either Start or Stop.
- c. Sets the operating mode.
- d. Sets the temperature.
- e. Sets the fan speed.
- f. Sets the fan direction. This setting is applied to the entire group. You cannot change the sub unit setting independently.
- g. Sets and cancels timer operation.
- h. Sets timer number from No. 1 to No. 50.
- i. Displays a window that allows you to check timer setting status and remote control prohibition status.
- j. Displays one of “Prihbt1/ Prihbt2/ Prihbt3/ Prihbt4/ Accept”.
- k. Turns the ventilation function ON and OFF. (You cannot press the button when air conditioners have no ventilation functions).
- l. Resets filter cleaning signs.

• For multiple units, the operation mode for one unit may not be varied while another indoor unit is under operation. In such a case, once stop the unit, hold it for several minutes, and then vary the operation mode.

• In the remote control window, the first 16 characters for tenant names and the first 12 characters for unit names are displayed.

6.4.1.2 Operating all units by tenant

Use this screen to operate all connected indoor units of each tenant.

Procedure

Select 1.Status/Control in the main menu and 1.Each tenant in the sub menu.

When you touch a tenant name, a remote control window appears. This window allows you to perform on/off operations for all units of the tenant.

When you touch , a remote control window appears. This window allows you to make detailed settings for operations on all units of the tenant.
6 Using the System

6.4.1.3 Operating all connected units

Use this screen to operate all connected indoor units.

Procedure

Select 1.Status/Control in the main menu and 1.Each tenant in the sub menu.

1. When you touch All units, a remote control window appears. This window allows you to perform on/off operations for all connected units.
2. When you touch Tenant name, a remote control window appears. This window allows you to make detailed settings for all connected units.

6 Using the System

6.4.2 Displaying detailed information by tenant

Use this screen to display detailed settings and operating for each tenant.

Procedure

Select 1.Status/Control in the main menu and 2.Each tenant details in the sub menu.

1. When you touch a unit name, a remote control window for individual operations appears.
2. When you touch a tenant name, a remote control window for operating all tenant units appears.
3. When you touch All units, a remote control window for operating all connected units appears.
6 Using the System

6.4.3 Displaying general information by zone

Use this screen to display the state of all units in a zone and to operate those units.

Procedure
Select [Status/Control] in the main menu and [Each zone] in the sub menu.

- When you touch a unit name, a remote control window for individual operations appears.
- When you touch a zone name, a remote control window for operating all units in the zone appears.
- When you touch All units, a remote control window for operating all connected units appears.

Move the display position on the screen up and down one line.

The first twelve characters are displayed for zone names and unit names.

8. Intelligent Controller (CZ-256ESMC2)

6 Using the System

6.4.4 Displaying detailed information by zone

Use this screen to display detailed settings and operating for each zone.

Procedure
Select [Status/Control] in the main menu and [Each zone details] in the sub menu.

- When you touch a unit name, a remote control window for individual operations appears.
- When you touch a zone name, a remote control window for operating all units in the zone appears.
- When you touch All units, a remote control window for operating all connected units appears.
6 Using the System

6.4.5 Displaying and operating all indoor units

Use this screen to display information about the state of all indoor units and to operate all indoor units at once.

Procedure

Select "Status/Control" in the main menu and "All units" in the sub menu.

One screen displays up to 100 indoor units in order of their tenant. The units can be operated individually or all at once.

- When you touch a unit name, a remote control window for individual operations appears.
- When you touch "All units," a remote control window for operating all connected units appears.

1. Status/Control
2. Total data/Cut-off
3. Distrib. ratio/Usage
4. Maintenance/Test Run
5. Initial settings
6. Auxiliary settings

1. Each I/D unit
2. Each tenant
3. Each zone
4. Each zone details
5. All units

The first four characters are displayed for unit names.
6 Using the System

6.5.2 Displaying total data by tenant

Use this screen to check total data such as the operating time and the number of operations for each tenant.

Procedure

Select 2. Total data/Cut-off in the main menu and 2. Each tenant in the sub menu.

1. Selects the distribution group to display.
2. Selects either the current or the past (maximum 24 months) cut-off data.
3. Selects the time zone to display.

* This button will be invalid when setting the mode at "No Distrib." (see main sub).

4. If you want to display operating time by fan speed, touch Operating time. The display changes as shown below.

4. Using the System

6.5.3 Displaying total data by outdoor unit

Use this screen to check total data such as the operating time and the number of operations for each outdoor unit.

Procedure

Select 2. Total data/Cut-off in the main menu and 3. Each O/D unit in the sub menu.

1. Selects the connection destination link system to display.
2. Selects either the current or the past (maximum 24 months) cut-off data.

* You should make frequent checks of the running time after oil exchange. When the time approaches for an oil exchange, contact your dealer or service provider to request an early oil exchange. The engines of GHP type outdoor unit can be damaged by operation without exchanging the oil.
* For double multiple models comprising two or more outdoor units with the same address, data with a typical unit are displayed.
* Depending on the model of the outdoor unit, some items may not be displayed.
* Monthly values are displayed for “Operating time” and “Operating count”. (The values reset to “0” after cut-off processing.)
* Cumulative values from the starting point are displayed for “Running time after oil exchange (Hour)” and “Power output (kW)”. (The values do not reset to “0” even after cut-off processing.)
6 Using the System

6.5.4 Displaying pulse meter total data

Use this screen to check the pulse count and other such cumulative data for pulse meters.

**Procedure**

1. Select **Total data/Cut-off** in the main menu, and **Pulse meter** in the sub menu.

- Selects the pulse meter connection destination.
- Selects either the current or the past (maximum 24 months) cut-off data.
- Selects the time zone to display.

*This button will be invalid when setting the mode at “No Distrib.” (see page 44)*

If the product type is HOT Multi, unit amount will be displayed in m³ or liters. The meter type will be “Fuel metering”.

6.5.5 Performing manual cut-off processing and saving data

Use this screen to perform manual cut-off processing, and to back up setting and total data to optional PC Cards.

**6.5.5.1 Manual cut-off processing**

Proceed as follows to manually perform cut-off processing.

**Procedure**

1. Select **Total data/Cut-off** in the main menu and **Cut-off/Data backup** in the sub menu.

   1. Touch **Cut-off**.

   2. When a window like the one shown below appears, touch the **OK** button.

   3. When a window like the one shown below appears, touch the **Check** button.

   > When a window like the one shown below appears, touch the **OK** button.

   > When a window like the one shown below appears, touch the **Check** button.
6 Using the System

6.5.5.2 Saving data
Proceed as follows to back up setting data and totals data to optional PC Cards.

Procedure
Complete the cut-off processing described in “6.5.5.1 Manual cut-off processing” and then execute the following backup procedure.

1. Insert a PC card and touch the Backup button.
2. When a window like the one shown below appears, touch the OK button.

* When keeping the PC card inserted in a unit, data therein are automatically backed up once a day (at every 0 o'clock at midnight).

6.5.5.3 Outputting distribution data in progress
Save distribution data (total data) in progress before cut-off processing in PC cards (optional available) following the procedure stated below.

Procedure
1. Insert a PC card and touch the Distrib. dt out button.
2. When a window like the one shown below appears, touch the OK button.

As data output by pressing the Distrib. dt out button are strictly in progress, it is impossible to apply these data for cut-off processing for the tenant who leaves halfway. (Manual cut-off processing is necessary).

6.5.5.4 Restoring data
Proceed as follows to restore setting data and total data from optional PC Cards.

Procedure
1. Insert a PC card and touch the Restore button.
2. When a window like the one shown below appears, touch the OK button.

* When trying to restore data backed up using an old-version Intelligent Controller, a message “Unsupported file version. Perform Restore?” will be displayed; confirm the message and touch “Yes”. After completing restoring, “Rebooting.” will be displayed and then touch “OK”. The data restored will be effective after rebooting. (After “Converting data” is displayed for a while, the system will automatically reboot again.)
* Everyday, at 23:30 to 00:00, cut-off processing take place, when you cannot press the Restore button.

Use the special optional PC Cards to back up and restore Intelligent Controller data. For details about using PC Cards, refer to the instructions of the PC Cards. Depending on the amount of data, backup and restore operations may require up to 15 minutes.
6 Using the System

6.6 Air Conditioning Distribution Ratios and Energy Usage

6.6.1 Displaying distribution ratios and energy usage by indoor unit

Use this screen to check the distribution ratios and energy usage of indoor units.

Procedure
Select [Distrib. ratio/Usage] in the main menu and [Each I/D unit] in the sub menu.

Select the tenant to display.
Selects either the current or the past (maximum 24 months) cut-off data.
Selects the time zone to display.
Switches the gas distribution ratio and gas usage display between values for air conditioning and values for power generation.

When “Gas usage” is displayed: Gas distribution ratios and usage for air conditioning are shown.
When “Gas use/PwrGen” is displayed: Gas distribution ratios and usage for power generation are shown.
For air conditioning units without a power generation feature, “-” appears under gas usage for power generation and gas distribution ratio.

1. Status/Control
2. Total data/Cut-off
3. Distrib. ratio/Usage
4. Maintenance/Test Run
5. Initial settings
6. Auxiliary settings

1. Each I/D unit
2. Each tenant

1. All hours
2. Regular hours
3. Out of hours
4. Special Day

- If the product type is HOT Multi, unit amount will be displayed in m³ or liters.
- If no pulse meter is connected, power usage and gas usage are not displayed.
- Gas usage and distribution ratios are not displayed for PAC units.

6.6.2 Displaying distribution ratios and energy usage by tenant

Use this screen to check the distribution ratios and energy usage by tenant.

Procedure
Select [Distrib. ratio/Usage] in the main menu and [Each tenant] in the sub menu.

Selects the tenant to display.
Selects either the current or the past (maximum 24 months) cut-off data.
Selects the time zone to display.
Switches the gas distribution ratio and gas usage display between values for air conditioning and values for power generation.

When “Gas usage” is displayed: Gas distribution ratios and usage for air conditioning are shown.
When “Gas use/PwrGen” is displayed: Gas distribution ratios and usage for power generation are shown.
For air conditioning units without a power generation feature, “-” appears under gas usage for power generation and gas distribution ratio.

- If the product type is HOT Multi, unit amount will be displayed in m³ or liters.
- If no pulse meter is connected, power usage and gas usage are not displayed.
- Gas usage and distribution ratios are not displayed for PAC units.
6 Using the System

6.6.3 Time zone totals and distribution
The Intelligent Controller provides functions for recording total operating time and calculating
distribution ratios for four time zones: All hours, Regular hours, Out of hours, and Special days.

When using these functions, be aware of the following points.

n Margin of error in time zone operating totals
The Intelligent Controller acquires operating time data accumulated by individual indoor units via
communication adaptors. The Intelligent Controller itself has an internal communication
adapter function.

When the Intelligent Controller requests data from a communication adapter, the adapter queries
indoor units for their operating time data, and forward it to the Intelligent Controller after all totals
have been calculated.

For this reason, there is a margin of error of up to several minutes that may arise in count totals
around the transitions from one time zone to another. For example, cases such as the following are
possible.

Case 1) Indoor units are stopped at the exact end of the Regular hours time zone (or
immediately before the end of the zone). For this reason, several minutes are
counted in the Out of hours total.

Case 2) Indoor units are operated for the same length of time before and after the transition
from Regular hours to Out of hours, but the totals for the two zones are not the same.

n Note about daily timer settings
For communications reasons, there is a slight delay before units can be stopped by a timer.
Therefore you should avoid setting timers that stop units exactly at the transition between two time
zones.

For example, if you simultaneously stop a large number of indoor units at the transition from
Regular hours to Out of hours, a certain period of time is required for the indoor units to actually stop.
This time is counted as Out of hours time.

If you need to set a timer to stop units before a time zone transition, you should avoid setting it within
10 minutes of the transition. (This is only an approximately guideline, since results vary depending on
communications conditions.)

n Communications errors and data totals
Data totals may not be accurate if communications errors occur in the Intelligent Controller, indoor
units, or communication adaptors.

For example, if a communications error occurs in the Regular hours time zone, and normal
communications are restored in the Out of hours time zone, all data received by the Intelligent
Controller will be counted in the Out of hours time zone.

Totals data received by the Intelligent Controller is counted in the time zone in which it is received.

n Usage for “All hours”
The usage of “all hours” is calculated from the ratio of distributed portion of the entire group based on
the total of operation data in all time zones. Therefore, it is not consistent with the total usage of “Regular
hours”, “Out of hours”, and “Special day.”

6.7 Maintenance and Test Runs

6.7.1 Checking inspection signs
Use this screen to check for indoor units for which filter cleaning signs have been issued, and
outdoor units (GHP) for which engine oil inspection signs have been issued.

Procedure
Select 5.Maintenance/Test Run in the main menu and 1.Inspection sign in the sub menu.

If filter cleaning signs or engine oil inspection signs have been issued, contact your dealer or
service provider to request cleaning or oil exchange.
6 Using the System

6.7.2 Checking the alarm logs

Use this screen to check logs of up to the past 14 alarms and errors for individual indoor units.

Procedure

2. Select the tenant to display.
3. Select the indoor unit to display.

- Touch the Del this unit button to delete the alarm logs of the selected unit only, or touch the Del all units button to delete the alarm logs of all units.

When a window like the following appears, touch the Yes button.

[O/D comm. error log] logs the history of errors in communication between the outdoor unit and the Intelligent Controller or the communication adaptor.

[Adapter alarm log] logs the history of warnings as determined by the Intelligent Controller or the communication adaptor.

(Duplicate adaptor addresses, communication error between the Intelligent Controller and adaptor, etc.)
6 Using the System

6.7.3 Executing test runs

Use this screen to display list of each indoor unit for outdoor unit system addresses. You can execute test runs, either for each outdoor unit system address or individually.

Procedure
Select 4. Maintenance/Test Run in the main menu and 3. Test run in the sub menu.

> Select a connection destination link system.
> Select the outdoor unit to operate.

To operate an individual unit, touch a unit name and operate with the individual control remote control window.

To operate all units in an outdoor unit system, touch the outdoor unit system address column. A remote control window for operating an outdoor unit system appears. Use this window to execute a test run. Select Cool, Heat, or Fan as the operating mode.

6.8 Auxiliary Settings

6.8.1 Registering zone names

You can assign names to zones. Zones are unrelated to distribution, so you can mix GHP, PAC, and HOT units, and make settings that extend across link systems.

Start/stop, monitoring, timer operation and so on can be done all at once for all units in a zone.

Procedure
Select 4. Auxiliary settings in the main menu and 1. Zone name in the sub menu.

> Select a name to register or modify. A software keyboard appears.
> Enter the name with the keyboard.

Names can be up to 20 characters long.

See “7 Entering Text and Numbers” for details about entering text in keyboard windows.

Zones name can be registered in the range 1 to 128.
6 Using the System

6.8.2 Setting zone numbers and management targets

Use this screen to set the zone number and management category for individual indoor units. Be sure to assign a central address to each unit.

Procedure

Select [Auxiliary settings] in the main menu and [ZoneNo./Mng.target] in the sub menu.

- A window like the one shown at right appears when you touch the zone number column. Enter digits specify to the zone number.
  * Zone No. can be registered in the range 1 to 128.

- A window like the one shown at right appears when you touch the management column. Select one from among Target, Individual operation, or Not Target.

  - Individual operation:
    Display, total, distribution, and individual operation are possible with individual units, but all-unit operations (all tenant units, all zone units, all connected units, external all stop input, external all start input, etc.) are not possible.
    However, external all-unit alarm output and external all-unit operation output are possible.

  - Not Target:
    No operations are possible for Not Target units, including information display (except for and totals calculation, and distribution.)
6 Using the System

6.8.3 Programming timers

Up to 50 types of daily timers and 50 types of weekly timers can be programmed. It is also possible to set holidays or timer special days for tenants.

6.8.3.1 Programming daily timers

Up to 50 types of daily timers can be programmed, with up to 50 times per day. Start/stop, operation mode, temperature settings, and remote control prohibition can be programmed.

Procedure

Select "Auxiliary settings" in the main menu and "Program timer" in the sub menu.

1. With Daily Timer, select a timer number (D1 to D50, Holiday, Sp1 to Sp5).
   The Holiday number is reserved for tenant holiday settings.
   The timer numbers Sp1 to Sp5 are reserved for setting timer special days.

2. Touch the "Set time" column.

3. Select the time to set.

4. Touch the "Start/Stop" column and set in the following window.
   Closes the window.

5. Touch the "Op mode" column and set in the following window.
   Closes the window.

6. Touch the "Stop" column.
   Programs the timer to stop the unit.

7. Touch the "Cancel" column.
   Closes the window.

8. Touch the "Confirm" column.
   Confirms the setting.

Sets the operating mode. Select from among Heat, Cool, Fan, Dry, and Auto.

Cancels the setting.

Confirms the setting.
6 Using the System

8. Intelligent Controller (CZ-256ESMC2)

6.8.3.2 Programming weekly timers

You can program weekly timers by assigning any daily timer to each day of the week. Up to 50 types of weekly timers can be programmed.

Procedure
Select Auxiliary settings in the main menu and Program timer in the sub menu.

1. Weekly timer
2. Status/Control
3. Total data/Cut-off
4. Distrib. ratio/Usage
5. Maintenance/Test Run
6. Initial settings
7. Auxiliary settings
8. Program timer
9. Zone name
10. ZoneNo./Mng.target
11. Program timer

Select existing daily timers.

1. Select existing daily timers.
2. Select daily timer number (D1 to D50, Holiday, Sp1 to Sp5) to set and confirm or cancel each button.
3. With Weekly timer, select a weekly timer number (1 to 50). Up to 50 types of weekly timers can be set. Three items each are displayed.
   Each press of 'W' changes the display in order like 1, 2, 3, 4, 5...
   Each press of 'V' changes the display in order like 50, 49, 48, 47, 46...
4. Select the daily timer number (D1 to D50, Prohibit, Sp1 to Sp5) to set and confirm or cancel each button.

Since different air conditioner models have different upper and lower temperature limits, the temperature is set automatically within the supported range when an air conditioner is actually controlled. Items for which no time is set are ignored.
6 Using the System

6.8.4 Setting Tenant holiday/Timer special day

You can make settings by tenant of days of setting timer for holidays and timer special days. Holidays and timer special days can be registered for up to the next two years.

Procedure


1. Select the tenant.
2. Select the calendar for the month of the year to set.
3. Select items (regular days, holidays, and special days 1 to 5) you would like to set.
4. Point the item (regular days, holidays, and special days 1 to 5) you would like to set on the left calendar and touch the date or day of the week.
5. If holidays and timer special days have already been registered for a tenant, you can copy them from the calendar to the calendar on the right. Select the tenant for the copy destination calendar.
6. A window like the one on the right appears when you touch Copy.
7. Touch the OK button to copy two years of holidays from the tenant on the left to the tenant on the right.
8. Set the system mode at "Regular day" to cancel settings of holidays and timer special days.

6.8.5 Prohibiting remote control use

You can prohibit the use of the remote controls connected to indoor units.

Procedure

Select 6.Auxiliary settings in the main menu and 5.Prohibit R/C in the sub menu.

1. Touch the item you want to change to display a settings window for that item.
2. To allow remote control use, touch the O (Accept) button. To prohibit remote control use, touch the X (Prohibition) button.
3. Touch the Set button to confirm the setting, or the Cancel button to cancel it.
4. Touch the Initial setting button to restore the initial setting (described above).
6 Using the System

6.8.6 Setting distribution time zones
You can set distribution time zones for the same day of each week.

Procedure
Select 6. Auxiliary settings in the main menu and 6. Distribution time zone in the sub menu.

1. Select the distribution group.
2. Touch the “From” column.
3. Set the start time of regular hours to a time between 00:00 and 24:00 (30-minute intervals).
4. Touch the  Set  button to confirm the setting, or the  Cancel  button to cancel it.
5. If you set the start time to 00:00 and the end time to 24:00, the entire day is regular hours.
6. If the start time is the same as the end time, the entire day is out of hours.
7. If the start time and the end time are reversed, the outer side is regular hours.
8. Touch the “To” column.
9. Set the end time of regular hours to a time between 00:00 and 24:00 (30-minute intervals).
10. Touch the  Set  or  Cancel  button.

* Refer also to “6.6.3 Time zone totals and distribution”.

6.8.7 Setting special distribution days
You can set special distribution days to which normal time zone settings do not apply. Use this function for holidays and so on. Special distribution days can be registered for up to the next two years.

Procedure
Select 6. Auxiliary settings in the main menu and 7. Special distrib. day in the sub menu.

1. Select the distribution group to set.
2. Select the calendar for the month of the year to set.
3. On the left-side calendar, touch the date or day to set as a special distribution day.
4. If special distribution days have already been registered for a distribution group, you can copy them from the calendar to the calendar on the right. Select the distribution group for the copy destination calendar.
5. A window like the one on the right appears when you touch  Copy .
6. Touch the  OK  button to copy two years of special distribution days from the distribution group on the left to the distribution group on the right.

* Refer also to “6.8.6 Setting distribution time zones”.

Main Sub
1. Status/Control
2. Total data/Cut-off
3. Distrib. ratio/Usage
4. Maintenance/Test Run
5. Initial settings
6. Auxiliary settings
7. Distribution time zone
8. Special distrib. day
9. I/D unit settings
10. WEB settings
11. User settings
12. Other settings
### 6 Using the System

#### 6.8.8 Indoor unit settings

You can use this screen to check the air conditioning capacity of indoor units, and to set the capacity. Normally you do not need to change settings with this screen. Exercise care when changing settings, because improper settings can prevent accurate distribution.

**Procedure**

   *When “No Distrib.” is selected, this screen is not accessible. (see Section 11)*

2. Select the link system to display.

3. To change a capacity setting, touch an item in the capacity column, and enter a kW capacity from 0 to 999.9 in the numeric keypad window which appears.

4. Touch Set to confirm the setting. Or Auto to cancel it. (The capacity value will restore the received level)

   If you have changed the capacity, an asterisk (*) appears to the left of the value.

5. Touching the heater capacity column for the indoor unit having an electric heater will have a soft ten-key for the heater capacity setting displayed. Input numbers 0.0 to 100.00 by kW. However, these are effective only for loaded distribution settings.

#### 6.8.9 Other settings

You can use this screen to register passwords, initialize data, and make power saving settings for the LCD display.

**Procedure**


2. Touch the Chk config. button to check the connection configuration of the system. You should do this after adding or deleting units, changing addresses, and so on. If the system configuration has changed, cut-off processing and confirmation of the system processing messages appear. For details, see "6.9 System Configuration Changes".

Up to 10 minutes may be required to check the system configuration.
6 Using the System

6.8.9.2 Registering passwords
- Click the "Not registered" button to display a keyboard window for registering passwords. You can register 3 kinds of passwords: "Setting", "Distrib.", and "Operation". Refer to "Menu list" under "5. Quick reference" for details.
- Enter a 4-digit number from 0000 to 9999, and touch the "Set" button. The caption on the "Not registered" button changes to "Registered".
- To delete a password, first enter the four-digit password, then touch the "Clear" button.
- Clear the password by pressing the "Registered" button and entering the password. The button changes back to "Not registered". When changing a password, delete the old password before setting the new one.

6.8.9.3 Selecting no-communications mode
- Use the options buttons to select whether or not to use no-communications mode. If you select "YES (no-communications mode)" then communications errors will be suppressed, but it will not be possible to communicate with air conditioning units. Data displayed by the system will be meaningless.
- This setting is provided for occasions when you want to register names or check the display layout even though air conditioners are not installed, not turned on, or otherwise not capable of communications.
- Normally you should leave the "NO (Normal)" button selected, selecting "YES (no-communications mode)" only when it is necessary.

6.8.9.4 Buzzer sounds
- When pressing an effective button during setting at "Sound", the buzzer will sound (buzz).
- When setting at "No sound", even the alarm buzzer does not sound.

6.8.9.5 Initialization
- Initialization erases all system data, including setting data and totals data.
- A window like the following appears when you touch the "Initialization" button.

6.8.9.6 LCD auto off settings
- The auto display off settings allow you to select a time after which the LCD display should be automatically turned off if there is no activity. The LCD display is turned on again when you touch it.
- Settings: 5 minutes, 10 minutes, 15 minutes, 30 minutes, OFF (default: 30 minutes)

6.8.9.7 Calibrating touch panels
- Humidity and temperature around the Intelligent Controller and its secular change may affect the point on the touch panel screen to deviate after use over a long period of time. In such a case, calibrate the position.
- Press calibration and the next screen will be displayed.

When 30 seconds passes without operating the screen, the calibration result is cancelled to restore the previous screen.

Do not make imprudent initialization.

Initialization

All data, such as setting and communication, will be lost.
All data will be saved to the initial state.

NO YES

Calibrating touch panel settings

Start

Be sure to press Calibration for a second or longer and stop pressing. Follow the same procedure for Upper left, Lower left, Lower right, and Upper right.

Finally the cross mark disappear and "New calibration settings have been measured." will be displayed. Then press somewhere on the screen and the result of calibration will become effective to restore the original screen.

When 30 seconds passes without operating the screen, the calibration result is cancelled to restore the previous screen.
6 Using the System

6.8.9.8 Power off button

Always touch this button before powering the Intelligent Controller off.

A message appears asking if you want to exit the program. Touch OK in the message. The system saves current data, and then displays a message “It is now safe to turn off the Intelligent Controller.” Wait until this message appears before powering the system off. (If there is a large amount of data, several minutes may be required for this message to appear.)

!!! Powering off before this message appears may cause malfunction or prevent booting.

6.8.10 WEB settings

Settings related to WEB such as the site name, mail settings, and network settings are possible.

Procedure

Select [Auxiliary settings] in the main menu and [WEB settings] in the sub menu.

For items 1 to 6, and 8 to 10, touch each input box and a soft keyboard will appear.

1. Input the name of an optional site (within 40 characters).
2. Set the automatic updating interval on the screen displayed on Web browser. When selecting “Invalid”, data will not be updated until pressing the New button on the WEB browser screen.
3. Send the test mail.
4. Input the IP address (or domain name) of the mail (SMTP) server separately contracted.
5. Input an optional transmitter account name (mail address) (within 40 characters).
6. Input the receiver account name (mail address) (within 40 characters).
7. Select this check box to enable DHCP instead of using a fixed IP address. When DHCP is enabled, input for items 8 to 10 is disabled.
8. Input the Intelligent Controller IP address (or domain name).
9. Input the Intelligent Controller subnet mask.
10. Refer to settings for other equipment (PC, router, etc.).
11. Input the Intelligent Controller IP address of the default gateway connected to the Intelligent Controller as necessary.
6 Using the System

Input the IP address of the primary and secondary DNS servers as necessary.
Input the IP address of the primary and secondary WINS servers as necessary.
Input the Intelligent Controller’s device name (device ID) (within 15 characters).
(This is used to identify the Intelligent Controller when using DNS, for example.)
For details on the mail server settings, see “6.8.10.1 Detailed server settings”.
* Refer to the network administrator for confirmation of detailed mail and network settings.
* If a Web browser (on PC) was used to change any of the settings from 7 to 10, the Network settings have changed. Restart the unit; message appears and the Intelligent Controller restarts automatically.
* If you change the settings for items 7 and 8, the system restarts so that the new settings are reflected when you switch to other screens.
* You cannot set the IP address to “0.0.0.0” or “255.255.255.255”.

6.8.10.1 Detailed server settings

From the “WEB settings” screen, clicking the “Server details” button displays the following screen.
This screen enables you to use the same and actual mail server settings to set up the Intelligent Controller as well. Therefore, check your mail server settings in advance and then apply the same settings to the Intelligent Controller.

6.8.10.1.1 Receiving server settings

Clicking the “Receiving server settings” button on the “Server details” screen displays the following screen.
Use this screen to set up the server so that you can perform POP before SMTP authentication when the mail server is receiving mails from the Intelligent Controller.
Check your mail server settings in advance, and then apply the same settings here.
6 Using the System

6.8.11 User settings

The user ID, password, authority, and operatable tenant can be set.

Procedure


- Zone name
- ZoneNo./Mng. target
- Program timer
- Ten.Ho/TimerSp.Day
- Prohibit R/C
- Distribution time zone
- Special distrib. day
- 1D unit settings
- Distribution time zone
- Special distrib. day
- I/D unit settings
- WEB settings
- Other settings
- User settings

For items 1 and 2, touch each input box and a soft keyboard will appear.

- Input an optional user ID (within 20 characters).
- Input an optional password (within 10 characters).

Users include three categories: “Administrator”, “Special user”, and “General user”.
No. 000 denotes “Administrator” (A special user solely admitted; its initial user ID: administrator).
No.001 or higher denotes “Special user” if authority is set to P, and “General user” if authority is set to 5. Depending on the user, the functions available from the Web differ as follows.

<table>
<thead>
<tr>
<th>Tenants affected</th>
<th>Administrator</th>
<th>Special user</th>
<th>General user</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant offline</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>Screen 3-3 Download</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>Screen 4-2 Alarm log</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>Screen 4-4 Sent mail log</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>Screen 6-3 Program timer</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>Screen 6-4 Ten.Ho/TimerSp.Day</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>Screen 6-5 Prohibit R/C</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>Screen 6-10 WEB setting</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
</tbody>
</table>

When touching the input box, the following small screen is displayed, where you set operatable tenants by User ID.

- Register the tenant selected on the left side into the right side as the operatable tenant.
- Delete the tenant selected on the right side from among the operatable tenants.
- Select all the tenants on the left side.
- Cancel this tenant setting change.
- Make register setting for this user as the operatable tenant.
- Select all the tenants on the right side.
6 Using the System

6.9 System Configuration Changes

An alarm message like the following appears when a system configuration change (or the possibility of a configuration change) is detected.

If the system continues to operate after its configuration has changed, distribution ratios and other data will be totally inaccurate. For this reason, cut-off processing must be done with the system in the state before the change. The following message is displayed to ask you to confirm the processing.

Operation procedure for each case is as follows.

6.9.1 When a system configuration change detected

This alarm message is displayed in cases such as the following.

1. "Check system Configuration" was made after removing the outdoor and indoor units.
2. "Check system Configuration" was made after starting the unit and found that it was different from the previous one in configuration.
3. "Configuration" includes not only the number of units and address but also indoor unit capacity, main/sub unit setting, and presence/absence of an electric heater.
4. Additional indoor or outdoor unit was installed.
5. Automatic address setting was carried out for an indoor or outdoor unit.
6. An additional indoor or outdoor unit was installed.
7. Only confirmation of "Detailed setting" was made from a local or remote controller.
8. While this message is visible, no other operations can be performed except OK and Cancel.

While this message is visible, no other operations can be performed except OK and Cancel.

Touch OK to perform cut-off processing with the system in the state before the change. Touch Cancel if you do not need to perform cut-off processing.

Touch OK to check the new configuration.

If you select OK here, the current system configuration is re-checked and the results are confirmed.

If you do not need to do this, select Cancel.

If the system has changed because of a mistake, return the system to its former state and then touch Cancel. You should also touch Cancel here if you mistakenly selected Cancel in the previous message, even though the system cut-off processing should have been done. This returns you to the first alarm message, where you can perform cut-off processing.

While this message is visible, no other operations can be performed except OK and Cancel.

6.9.2 When system configuration may change

This alarm message is displayed in cases such as the following.

1. The following "Detailed settings" were made from a local remote controller.
2. (for address, extension settings, indoor unit capacity, or presence/absence of an electric heater)
3. Only configuration of "Detailed setting" was made from a local remote controller.
4. Automatic address setting was carried out for an indoor or outdoor unit.
5. For example, imprudently pressing Do now while a communication error message is displayed will result in an automatic cut-off processing to establish the current configuration. Therefore, take full care to avoid such a mistake.

While this message is visible, no other operations can be performed except OK or Cancel.

When touching Do later, this window closes and other screen operations are made possible. However, if you do not perform this operation after a while, the message will be displayed again.

Touch OK to confirm whether the configuration has been actually changed.

When a configuration change was detected as a result of configuration change, cut-off processing is automatically performed and the post-variation configuration is established. When there is no change in configuration, the screen exits configuration change processing.

Touch OK in accordance with 6.9.1. When a system configuration change detected.

If you select OK here, the current system configuration is re-checked and the results are confirmed.

If you do not need to do this, select Cancel.

When establishing a configuration without making cut-off processing, press Do later to once close the screen and perform "Check system Configuration" using the 6-9 screen.
After this, proceed "Perform cut-off" & "Cancel" & "Confirm the current system configuration?" & "OK" in accordance with 6.9.1. When a system configuration change detected.

When no operation has been made on this screen for twelve hours or more, cut-off and post-variation configuration change processing are automatically carried out.

Caution

Impudent cut-off processing and configuration change or neglecting them when necessary may cause a significant inconvenience in control.

When this alarm message is displayed, do not operate the system and contact the store where you purchased it or its service agency.
This message may be displayed also in inspecting the air conditioner. In such a case inform the person in charge of service of the fact.
7 Entering Text and Numbers

This system displays keyboard and numeric keypad windows when you need to enter names and numbers. The numeric keypad window appears when you need to enter numbers, and the keyboard window appears when you need to enter text.

7.1 Entering Numbers

A numeric keypad window like the one shown below appears when you need to enter a number, for example to register a password.

7.2 Entering Text

A keyboard window like the one shown below appears when you need to enter text, for example a tenant name.

To edit an existing text string, touch the character that you want to edit in the input field.

Alphanumeric, lowercase
8 Connection of External Signals

When connecting external signals, refer to the Installation Instructions (end of this manual) for detailed information about the electrical specifications.

8.1 Pulse Meter Input

You can measure energy usage by connecting pulse meters (gas, fuel, and electricity meters). If you do not need to view information about energy usage, there is no need to install pulse meters.

1) Input locations
The communications connector panel on the side of the intelligent controller or an optical communication adaptor connected to the intelligent controller:
- P1 (No.7), P-COMM (No.6) …… Gas meter, fuel meter
- P2 (No.8), P-COMM (No.6) …… Electricity meter 1
- P3 (No.9), P-COMM (No.6) …… Electricity meter 2

* The above are factory default settings. If necessary, you can change the type of pulse meter (power meter or gas meter).
See “6.3.5 Making pulse meter settings” for more information.

2) Operation
Each pulse is counted.
The amount of energy consumed per pulse (m³, kWh, liters) must be defined by Pulse meter setting.
See “6.3.5 Making pulse meter settings”.

---

7 8 Entering Text and Numbers

- DEL button
  Deletes the character to the right of the input cursor.
- BS button
  Deletes the character to the left of the input cursor.
- Set button
  Enables the entered character string.
- Close button
  Closes the keyboard window.
- Copy button
  Copies text displayed in the input field. You can also copy portions of the text by dragging the touch pen over the desired portion.
- Paste button
  Pastes the text copied with the Copy button to the input field in which the cursor is currently located.

Alphanumeric, upper case

```
[Backspace] [1] [2] [3] [4] [5] [6] [7] [8] [9] [0] [Spacebar]
[Tab] [Q] [W] [E] [R] [T] [Y] [U] [I] [O] [P] 
[Shift] [A] [S] [D] [F] [G] [H] [J] [K] [L] 
[Z] [X] [C] [V] [B] [N] [M] [Esc] [Backspace]
```

---

8 Intelligent Controller (CZ-256ESM02)
8 Connection of External Signals

8.2 All Stop Input

You can stop all connected units automatically by connecting external signals (for example, from fire-alarm detectors.) All stop input is available only for managed (“target”) units. It does not affect units which have been designated as not managed (“Not target”) or individually operated (“Indiv Op”).

1) Input location
The communications connector panel on the side of the Intelligent Controller or on an optional communication adaptor connected to the Intelligent Controller:
   DI1 (No. 17), DI-COMM (No. 16)

2) Operation
While the input is asserted ON, a stop signal is sent periodically (once per minute) to all indoor units.

3) Display
   ![All Stop!]
   This message disappears when normal status is restored.

8.3 All Start Input

You can start all connected units automatically by connecting external signals. All start input is available only for managed (“target”) units. It does not affect units which have been designated as not managed (“Not target”) or individually operated (“Indiv Op”).

1) Input location
The communications connector panel on the side of the Intelligent Controller or on an optional communication adaptor connected to the Intelligent Controller:
   DI2 (No. 18), DI-COMM (No. 16)

2) Operation
When inputting ON from OFF, the operation signal will be transmitted to all the indoor units.

When both “All stop input” and “All start input” are set ON simultaneously, only “All stop input” is enabled.

8.4 All-Unit Alarm Output

An external signal is output when an alarm or error occurs in any connected unit. This signal can be used by alarm monitors and other equipment.

1) Output location
The communications connector panel on the side of the Intelligent Controller or on an optional communication adaptor connected to the Intelligent Controller:
   DO1 (No. 14), DO-COMM (No. 13)

2) Operation
The signal goes ON when an alarm or error occurs, and goes OFF when normal status is restored.

8.5 All-Unit Operation Output

An external signal is output when any connected unit is operating.

1) Output location
The communications connector panel on the side of the Intelligent Controller or on an optional communication adaptor connected to the Intelligent Controller:
   DO2 (No. 15), DO-COMM (No. 13)

2) Operation
The signal goes ON when any connected unit (including interface adaptor) is operating, and goes OFF when all units are stopped. Operation during alarms and errors is included.
9 Printing

Printing using the Intelligent Controller is as stated below.

9.1 Preparation

Printing is ready only by connecting a USB cable to the unit’s USB port. Purchase the cable shown below (an example) separately.

Example) ELECOM USB2-20 (2 m) or equivalent.

Internal wiring connection (reference)

<table>
<thead>
<tr>
<th>USB (A)</th>
<th>USB (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>SHELL</td>
<td>SHELL (Metal: wiring connection)</td>
</tr>
</tbody>
</table>

9.2 Connection

Connect the printer with the Intelligent Controller using a USB cable.

Connect the cable to the “USB” connector located on the controller’s back.

9.3 Restrictions

(1) The Intelligent Controller is adaptable to printers of the “PCL” standards, among which we have made sure that the following two are fully adaptable:

- Laser printer 1720 from Dell Inc.
- Ink jet printer Officejet Pro K5400 from Hewlett-Packard Co.

(2) Some printers need to have the Intelligent Controller powered on prior to connecting the printer cable or re-power the printer.

(3) Printers can be connected only to the USB port.

(4) Only A4-size paper in vertical position can be printed.

(5) Printing is available only in monochrome. Color printing is unavailable.

(6) Printing provides hardcopies (just as displayed in the screen).

(7) Refer to the operation manual for the printer for the printer-side settings, displays, and measures to counter failures.

(8) The following alarm dialogue will be shown when pressing [Print] in the events of:
- The printer is not connected to the system.
- The printer is not powered on.
- The printer is off-line.
10 Calculating air conditioner distribution

The Intelligent Controller calculates energy (electricity and gas) distribution ratios utilizing the accumulated working time (T/S ON/OFF) or the capacity value of the indoor unit.

* T/S: Thermostat

10.1 Calculating simple distribution

Parameters as listed below are used to calculate simple distribution:

- RHHi: accumulated operation time for indoor unit i (High fan speed)
- RHHi: accumulated operation time for indoor unit i (Medium fan speed)
- RLi: accumulated operation time for indoor unit i (Low fan speed)
- SHHi: T/S ON accumulated time for indoor unit i (High fan speed)
- SHi: T/S ON accumulated time for indoor unit i (Medium fan speed)
- SLi: T/S ON accumulated time for indoor unit i (Low fan speed)
- Pi: Capacity of indoor unit i (in kW)
- k: Weighing factor for power consumptions as T/S ON and OFF
- aHH: Weighing factor for High fan speed
- aH: Weighing factor for Medium fan speed
- aL: Weighing factor for Low fan speed

* Accumulated operation time = T/S ON accumulated time + T/S OFF accumulated time

Index of indoor unit i power/gas consumptions is calculated. Here, “TEi” and “TGi” denotes the power and gas consumption indexes of the indoor unit i, respectively.

When “Object of power distribution calculation” is “T/S ON + OFF time”:

The power consumption index is calculated using “Accumulated operation time” and “T/S ON accumulated time”; the gas consumption index using “T/S ON accumulated time”.

- For GHP:
  
  \[
  \text{TEi} = (RHHi \times aHH + RHHi \times aH + RLi \times aL) \times Pi \quad \text{Formula 1}
  \]
  
  \[
  \text{TGi} = (SHHi \times aHH + SHi \times aH + SLi \times aL) \times Pi \quad \text{Formula 2}
  \]

- For PAC:
  
  \[
  \text{TEi} = \left( (RHHi \times aHH + RHHi \times aH + RLi \times aL) + \frac{(SHHi \times aHH + SHi \times aH + SLi \times aL)}{k} \right) \times Pi \quad \text{Formula 3}
  \]
  
  \[
  \text{TGi} = 0
  \]

When “Object of power distribution calculation” is “T/S ON time”:

Both the power and gas consumption indexes are calculated using “T/S ON accumulated time”.

- For GHP:
  
  \[
  \text{TEi} = (SHHi \times aHH + SHi \times aH + SLi \times aL) \times Pi
  \]
  
  \[
  \text{TGi} = 0
  \]

- For PAC:
  
  \[
  \text{TEi} = (SHHi \times aHH + SHi \times aH + SLi \times aL) \times Pi
  \]
  
  \[
  \text{TGi} = 0
  \]

* Weighing by wind speed is not carried out for models with their speed set only as High or only as High and Low.
* Distribution ratios are not calculated when you have chosen not to perform distribution ratio calculations. (See “6.3.2 Setting the date, cut-off date, and distribution ratio calculation method”)

10 Calculating electricity/gas usage index of entire distribution group

Let “TOTALe” be the electricity usage index of entire distribution group, and let “TOTALg” be the gas usage index of entire distribution group. Let “m” be the number of indoor units in the distribution group.

\[
\text{TOTALe} = \text{TE1} + \text{TE2} + \cdots + \text{TEm}
\]

\[
\text{TOTALg} = \text{TG1} + \text{TG2} + \cdots + \text{TGm}
\]

Calculate electricity/gas usage distribution ratio of indoor units

Let “REi” be the electricity usage distribution ratio, and let “RGi” be the gas usage distribution ratio.

\[
\begin{align*}
\text{REi} (\%) &= \frac{\text{TEi}}{\text{TOTALe}} \times 100 \\
\text{RGi} (\%) &= \frac{\text{TGi}}{\text{TOTALg}} \times 100
\end{align*}
\]

Calculate electricity/gas usage distribution ratio of tenant j

Let “NEj” be the electricity usage distribution ratio of tenant j, and let “NGj” be the gas usage distribution ratio of tenant j.

Let “n” be the number of indoor units of tenant j.

\[
\begin{align*}
\text{NEj} (\%) &= \frac{\text{RE1} + \text{RE2} + \cdots + \text{REN}}{n} \\
\text{NGj} (\%) &= \frac{\text{RG1} + \text{RG2} + \cdots + \text{RGN}}{n}
\end{align*}
\]

Distribution ratios are rounded at the third decimal place and shown to the second decimal place.

* The following table shows which of the formulas 1 to 3 on the previous page are used by the two distribution modes.

<table>
<thead>
<tr>
<th>Distribution Mode</th>
<th>T/S ON+OFF time distribution mode</th>
<th>T/S ON time distribution mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHP</td>
<td>Electricty</td>
<td>Gas</td>
</tr>
<tr>
<td>PAC</td>
<td>Electricty</td>
<td>Gas</td>
</tr>
<tr>
<td>HOT</td>
<td>Electricty</td>
<td>Gas</td>
</tr>
</tbody>
</table>

See “About distribution ratios in 12 Supplementary Information”. 
10 Calculating air conditioner distribution

10.2 Calculating air conditioner energy usage

Calculate electricity/gas usage of entire distribution group:

Electricity usage for distribution group = Pulse meter (electricity) count value × Pulse unit amount (kWh)
Gas usage for distribution group = Pulse meter (gas) count value × Pulse unit amount (m³)

Calculate electricity/gas usage of indoor units:

Electricity usage for indoor unit = Electricity usage for distribution group × Electricity consumption distribution ratio for indoor unit
Gas usage for indoor unit = Gas usage for distribution group × Gas consumption distribution ratio for indoor unit

The usage is rounded to two decimal places and displayed.

10.3 Calculating loaded distribution

Data flow:

[Outdoor unit]
Calculation:
- Power T2
- Gas TG
Operation capacity ratio D = f(SH, SC)
Standing-by power TS
Energy saving-consideration power T3
Power at night by ice heat accumulation TC
Calculation parameter:
- Simple distribution
- Loaded distribution

[Indoor unit]
Operation time by fan speed R
Heater ON time W
Indoor capacity P
Heat exchanger outlet and inlet temperature E1, E2, and E3
Actual fan speed

[Adaptor]
Calculation:
- Operation capacity ratio D = f(SH, SC)
- Fan speed converted value FI = f(actual wind speed)
- Super heat SH = f(E3, E1)
- Sub cool SC = f(HPS, E1)
- Operation capacity PWb = f(T2, FI, and PS), PWg = f(GIN, T2, and PG)
- Power distribution ratio RPI = f(PIA')
- Gas distribution ratio RGI = f(PGI)
- Factor related to ice heat accumulation ICE = f(TC, night, RPI)
- Power usage PI = f(RPI, PC, @e)
- Gas usage GI = f(RGI, GC, @g)

* "f" means function. For example:
Operation capacity ratio D = f(SH, SC) means that the operation capacity ratio is calculated using super heat SH and sub cool SC.

Calculation parameter:
- Indoor unit capacity (kW)
- Indoor unit operation time
- Indoor fan speed ratio (high, medium, low)
- Operation ratio (Power: detected using CT, Gas: neuro-calculation)
- Standing-by power and various heater powers
- Indoor unit loaded ratio (Calculated using the values detected by multiple internal thermo sensor of indoor unit)

m: parameters considered in distribution calculation
n: parameters not considered in distribution calculation

See "About distribution ratios and energy usage" in "12 Supplementary Information".

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11 TERMS

This section explains some of the terms used in this manual:

- **Adaptor address** (No. 0 set on Intelligent Controller, No. 1 to 7 set on communication adaptors)
  
  An adaptor address is the address assigned to an optional communication adaptor.

- **Link system address** (No. 1 to 2, 3, or 4)
  
  A link system is a collection of indoor units and outdoor units connected to a single inter-unit control wire. Up to two link systems each can be connected to the Intelligent Controller and to an optional communication adaptor.

- **Outdoor unit system address** (No. 1 to 30 for each link system, set on outdoor unit side)
  
  An outdoor unit system is a collection consisting of one outdoor unit and the indoor units connected to that outdoor unit. A single link system can contain up to 30 outdoor systems.

- **Indoor unit address**
  
  Up to 64 indoor units can be connected in one link system.

  The Intelligent Controller system supports up to two link systems connected to the Intelligent Controller only (128 indoor units), or four link systems (256 indoor units) when an optional communication adaptor is connected.

  Indoor unit addresses, control central addresses, and unit names are applied to indoor units.

  • **Indoor unit address** (No.1~/for each outdoor unit system, set on outdoor unit side)
    
    An indoor unit address is a unique number within an outdoor unit system. These numbers are assigned to each indoor unit, including units subject to group control.

    These numbers are the smallest unit of totals calculation and distribution calculation.

  • **Central control address** (No.1 to 64 for each link system, set on Intelligent Controller and other central control equipment)
    
    A central control address is a unique number within a link system. It is shared with other central control equipment (system controllers, multi controllers, etc.).

    This is the same address used in group control.

  • **Unit name** (set on Intelligent Controller)
    
    This is the same name used in group control.

    It is the smallest unit of operation, monitoring, and timer operations.

- **Distribution group number** (No. 1 to 8, set on Intelligent Controller)
  
  A distribution group is made up of one or more tenants. The total of the distribution ratios in the group is 100%. The Intelligent Controller system supports up to 8 distribution groups. GHP, PAC, and HOT units cannot be mixed in a single distribution group.

- **Tenant number** (No. 1 to 256 set on Intelligent Controller)
  
  A tenant is a collection that is the object of distribution calculations (or operation and monitoring).

  It is made up of one or more indoor units. The system as a whole supports up to 256 tenants.

- **Zone number** (No. 1 to 128, set on Intelligent Controller)
  
  A zone is unrelated to distribution. It is a range for performing all-unit operation, monitoring, and timer operation. GHP, PAC, and HOT units can be mixed in a zone. The system as a whole supports up to 128 zones.

12 Supplementary Information

- **Powering the system off**
  
  Always use the following procedure to power the Intelligent Controller off.

  Touch the **Power off** button in the “Other settings” screen.

  Touch the **OK** button in the message box which appears to ask if you want to exit the program.

  Wait until a message appears to inform you that “It is now safe to turn off the Intelligent Controller.” (*)

  and then power the system off. (*Several minutes may pass before this message appears.)

- **Indoor unit address**
  
  Up to 64 indoor units can be connected in one link system.

  The Intelligent Controller system supports up to two link systems connected to the Intelligent Controller only (128 indoor units), or four link systems (256 indoor units) when an optional communication adaptor is connected.

  Indoor unit addresses, control central addresses, and unit names are applied to indoor units.

  • **Indoor unit address** (No.1~/for each outdoor unit system, set on outdoor unit side)
    
    An indoor unit address is a unique number within an outdoor unit system. These numbers are assigned to each indoor unit, including units subject to group control.

    These numbers are the smallest unit of totals calculation and distribution calculation.

  • **Central control address** (No.1 to 64 for each link system, set on Intelligent Controller and other central control equipment)
    
    A central control address is a unique number within a link system. It is shared with other central control equipment (system controllers, multi controllers, etc.).

    This is the same address used in group control.

  • **Unit name** (set on Intelligent Controller)
    
    This is the same name used in group control.

    It is the smallest unit of operation, monitoring, and timer operations.

- **Distribution group number** (No. 1 to 8, set on Intelligent Controller)
  
  A distribution group is made up of one or more tenants. The total of the distribution ratios in the group is 100%. The Intelligent Controller system supports up to 8 distribution groups. GHP, PAC, and HOT units cannot be mixed in a single distribution group.

- **Tenant number** (No. 1 to 256 set on Intelligent Controller)
  
  A tenant is a collection that is the object of distribution calculations (or operation and monitoring).

  It is made up of one or more indoor units. The system as a whole supports up to 256 tenants.

- **Zone number** (No. 1 to 128, set on Intelligent Controller)
  
  A zone is unrelated to distribution. It is a range for performing all-unit operation, monitoring, and timer operation. GHP, PAC, and HOT units can be mixed in a zone. The system as a whole supports up to 128 zones.

- **Operating time totals and distribution data** are updated every 18 minutes. Electric heater ON time is updated once an hour.

- **Filter cleaning signs and oil exchange signs** are updated every 7 minutes (maximum).

- **Cut off processing** for the previous day is performed every day for a few minutes after 00:00 a.m. The system will not respond to user input during this processing.

- **After the settings of an indoor unit are changed from the Intelligent Controller, the display may revert temporarily to the former settings. This is more likely to occur with all-unit operations. The cause is communications delay, not any malfunction in the system. If you wait a few minutes, the display will show the correct information.**
12 Supplementary Information

Errors occurred while operating during a thunder storm or because of electromagnetic interference. Power the Intelligent Controller off and then on again. (Refer to “Powering the system off” stated on the previous page)

As a rule, the Intelligent Controller should be powered off only in cases such as the above. Correct management of air conditioning is not possible when the Intelligent Controller is powered off.

About distribution ratios and energy usage

The formulas used by the Intelligent Controller to calculate air conditioning distribution ratios and energy usage are only approximations. They normally do not yield the same amounts that appear on bills from electric and gas utilities.

Depending on operating conditions, there may be a margin of error between distribution ratios and actual air conditioning amounts. There may also be a small margin of error between the following, due to the rounding algorithms used in distribution ratio calculations:

- **“Distribution ratios of tenants in a group” and “100.00%”**
- **“Total of distribution ratios” and “Overall tenant distribution ratio”**
- **“Total of usage by each tenant” and “Total usage indicated by pulse meters”**
- **“Total of usage during regular hour, out of hours, and special days time zones” and “Total of all hours time zones”**

The Intelligent Controller does not measure energy use directly. It calculates energy distribution ratios based on the inferred load ratio of each indoor unit. The results of the calculations should be regarded as approximations.

About operating time totals

Air conditioning distributions and air conditioner operating times are calculated only for periods in which the Intelligent Controller is powered on and in which there are no communications errors between the Intelligent Controller and the air conditioners. Therefore, no totals are accumulated for times when the Intelligent Controller is powered off or in which communications errors occur. You should be aware that errors in distribution ratios will become larger if conditions like the above continue for a longer period of time.

Setting the current date and time

The current date and time should be set on a regular basis, since the system clock can gain or lose up to about two minutes per month.

Touch panel operations are not possible at the following times.

- While the system is booting
- During connection checks
- Under cut-off processing
- During PC Card access (backup, restore)

About passwords

Passwords should be recorded and saved in a safe place. They should never be disclosed to third parties. If you forget your password, contact your dealer or service provider.

Flickering on the screen

This may occur occasionally. It is due to data refreshing and is not a malfunction.

12 Supplementary Information

About Interface adaptors

You can use Interface adaptors to connect equipment that can be turned on and off (fans, room air conditioners and so on) to the Intelligent Controller.

However, note that the following limitations apply.

For details, refer to the documentation of the equipment or contact your dealer or service provider.

- **Central control is supported for the following operations only.**
  - Start/stop
  - Remote control prohibition (start/stop only)

Timer settings are supported, but settings other than “start/stop” and “remote control prohibition” are ignored. Remote control prohibition is possible only when prohibition signal output from the Interface adaptor has been connected to the equipment. Even in this case, the only operations that can be prohibited are start and stop.

For each screen from [ ] to [ ], it appears in light purple during the ON operation.

Alarm display

Alarm details are not shown. The “C12” code is displayed (meaning Interface adaptor all-unit alarm). However, this is possible only when a Interface adaptor alarm input signal has been connected.

About air conditioning distribution

1. Indoor unit fan speed data
   - Total operating times by fan speed are fixed at high speed. (Units are treated as if they always operated at high speed, even if the thermostat ON signal is connected to the unit.)

2. Electric heater ON time
   - Total electric heater ON time is not displayed.

3. Indoor unit capacity values
   - These cannot be read automatically. Set them as kW values in the “I/D unit settings” screen (Distribution is not performed if they are not set.)

4. Product types
   - When connected via Interface adaptors, the system cannot distinguish PAC and GHP units.

   You need to set the type as well when you set the indoor unit capacity.

5. This applicable only to simple distribution. No loaded distribution can be made.

   As long as it conforms to the contact specifications of the Interface adaptors, any type of equipment can be connected to the Intelligent Controller. However, you should avoid connecting equipment whose operation can have grave consequences for life or property.

When only one centralized control unit is installed in a system without remote controller, if the centralized control unit is damaged, the air conditioner(s) may become inoperable, or other troubles may occur. To avoid this problem, we recommend that you install multiple centralized control units.
12 Supplementary Information

★ IMPORTANT ★

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• The software supplied with this product may not be used on any other equipment.

• This product and the supplied software are subject to change without notice. The contents of this manual are subject to change without notice.

• We will not be liable for any violation of the rights of any third party stemming from use of information in this manual, or for violation of other rights.

8. Intelligent Controller (CZ-256ESMC2)

13 Troubleshooting

Before requesting service, check the following items. Do not attempt to service the Intelligent Controller yourself. Doing so can be dangerous.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
</tr>
</thead>
</table>
| Nothing appears on the screen when the computer is turned on. | • Is the power cord connected?  
• Is the power switch set to on? |
| Timer operation does not work. | • Is timer operation set to the target unit?  
• Operation of a selected timer does not start if the setting is not set the target unit.  
• Does the setting match the current date and time? If the date and time do not match, operation can start at an unexpected time. (See "6.3.2 Setting the date, cut-off date, and distribution ratio calculation method") |
| The distribution ratio is always 100%. | • Check the group settings and tenant settings.  
• Distribution rate calculations always result in 100% if there is only one tenant registered in a distribution group, or if there is only one indoor unit in a tenant. |
| The power goes off at odd times. | • The screen may be blank because of the power-saving auto off function. The Intelligent Controller is still powered on. Touch the screen to restore the display.  
• Regardless of the selected auto off time, the screen may be turned off when the Intelligent Controller boots. |
| There is an alarm message in the notification bar at the bottom of the screen that will not go away. | • The message displays the unit where the alarm occurred, and the alarm number. Inform your dealer or service provider about the content of the message. |
| Backing up to a PC Card does not work. | • Data can be backed up only to the special PC Cards (option) for the Intelligent Controller. Backup to other PC Card types is not possible. |
| It takes a long time after an operation for the screen to be updated. | • A certain amount of time may be required depending on the state of communications with the connected air conditioners. Please wait until all of the information is received. |
| LCD display | • In rare cases there may be a dot on the screen which is always on or always off. This is not a malfunction. Due to the nature of LCD displays, there may be some color bleeding in certain areas because of variations in temperature and so on. This is normal and not a malfunction. |
| Nothing happens when an operation button is pressed. | • Over extended use, the touch positions and display positions on the touch panel may get out of alignment. (§ 6.8.9.7. Calibrating touch panels) |
| When local remote control operation is prohibited on the Intelligent Controller, the Intelligent Controller is not able to start/stop operation of a malfunctioning air conditioner. | • Emergency operations until our service person arrives:  
Power off the Intelligent Controller and externally installed communication adaptor; re-power on the indoor unit. Operation with the local remote control will be possible. However, this cannot be done in a remote control free system. |
| A power outage occurred. When it ended, the equipment did not come on automatically according to program timer settings. | • The Intelligent Controller does not power on equipment automatically by program timer after a power outage. The setting for the next programmed time will be executed when the time arrives.  
• The Intelligent Controller cannot detect a single indoor unit. Or it cannot find all of them. |
| The Intelligent Controller cannot detect a single indoor unit. Or it cannot find all of them. | • Try using the "Check configuration" button in the "Other settings" screen. |
13 Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>One of the following messages is displayed and the unit does not start. • Application error !! • DiskErr • CF error !!</td>
<td>Contact the store where you purchased the system or our service agency.</td>
</tr>
<tr>
<td>A message, &quot;Diskxx access error&quot;, is displayed. (xx is a number from 1 to 4)</td>
<td>Press the [Check] button to close, and press [Reset] to the left of the clock display. If the same message appears again, consult your local dealer or service representative.</td>
</tr>
</tbody>
</table>

14 Maintenance

n Unplug the power cord before cleaning the Intelligent Controller.

The system has high-voltage connectors and other dangerous components. Always power the system off and unplug the power cord before cleaning it.

n Use a neutral solvent

To clean the control panel and touch panel, use a soft cloth slightly moistened with a neutral solvent. Do not use volatile liquids such as benzene or thinner, and do not use polishing power or pesticides. Doing so can damage painted surfaces and the surface of the touch panel.

n Avoid direct contact with water

Do not allow water to contact the product directly. Insulation will be impaired, which may result in damage or electrical shorts.

n Do not disassemble

Do not disassemble the Intelligent Controller. Doing so is extremely dangerous. It may damage the unit or cause electrical shock.

n Check the mounting of components

Several times a year, check to make certain that the mounting of components such as the control panel has not been weakened by rust or corrosion.
8. Intelligent Controller (CZ-256ESMC2)

15 Specifications

<table>
<thead>
<tr>
<th>Product number</th>
<th>CZ-256ESMC2</th>
</tr>
</thead>
<tbody>
<tr>
<td>External dimensions</td>
<td>(H) 240 * (W) 280 * (D) 138 mm</td>
</tr>
<tr>
<td>Method of installation</td>
<td>Front door of control panel</td>
</tr>
<tr>
<td>Maximum number of connectable units</td>
<td>Maximum 128 air conditioners (indoor units)</td>
</tr>
<tr>
<td>Maximum 256 air conditioners (indoor units) with communication adaptor connected</td>
<td></td>
</tr>
<tr>
<td>Timer precision</td>
<td>Approx. 2 minutes/month (normal temperature)</td>
</tr>
<tr>
<td>Setting unit</td>
<td>1 minute</td>
</tr>
<tr>
<td>Operation</td>
<td>50 times/day</td>
</tr>
<tr>
<td>50 types of daily timer / 50 types of weekly timer</td>
<td></td>
</tr>
<tr>
<td>Program cycle</td>
<td>1 week</td>
</tr>
<tr>
<td>Temperature / Humidity ranges for use</td>
<td>5°C to 40°C / 20% to 80%</td>
</tr>
<tr>
<td>Display</td>
<td>6.5-inch TFT color LCD display (640 x 480 pixels), with backlight</td>
</tr>
<tr>
<td>Power requirements</td>
<td>Single-phase 100-240 V – 50/60 Hz</td>
</tr>
<tr>
<td>Power consumption</td>
<td>Max. 30 W</td>
</tr>
<tr>
<td>Weight</td>
<td>3.4 kg</td>
</tr>
</tbody>
</table>
16 Installation (Electric) and Service Instructions

Safety Precautions

- **Warning**: This refers to a hazard or unsafe procedure or practice which can result in severe personal injury or death.
- **Caution**: This refers to a hazard or unsafe procedure or practice which can result in personal injury or product or property damage.

- Be sure to arrange installation at the dealer where the system was purchased or use a professional installer. Electric shock or fire may result if an inexperienced person performs any installation or wiring procedures incorrectly.
- Carefully follow these Installation (Electric) and Service Instructions when installing the unit. Electric shock or fire may result if the unit is not installed correctly.
- Electrical installation should be performed by qualified electrician, in accordance with the provisions of the Technical Standards for Electrical Installations, local regulations for indoor wiring, and these Installation (Electric) and Service Instructions. Be sure to use a dedicated electrical circuit. Insufficient electrical circuit capacity may result in electric shock or fire.
- Use the specified cables for the electrical connections, and connect the cables securely. Fasten the cables securely so that the cables will not exert force on the connection terminals. Insecure connections or fastening may result in overheating or fire.
- The installation location may require the use of a circuit breaker. Failure to use a circuit breaker may result in electric shock or fire.

**Warning**

- Be sure to arrange installation at the dealer where the system was purchased or use a professional installer. Electric shock or fire may result if an inexperienced person performs any installation or wiring procedures incorrectly.

**Caution**

- When performing electrical installation, discharge any accumulated static electricity to ground before touching the unit.

Supplied parts

<table>
<thead>
<tr>
<th>Part number</th>
<th>Part name</th>
<th>Quantity</th>
<th>Part number</th>
<th>Part name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Small pan head box (M4 x 10)</td>
<td>4</td>
<td>2</td>
<td>Nut (M4)</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Flat washer</td>
<td>4</td>
<td>4</td>
<td>Cable tie</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Operation Manual</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specifications

- Rated voltage: 100 - 240 V, single phase
- Rated frequency: 50/60 Hz
- Power consumption: 30 W max.
- Operating temperature: 5° to 40° C
- Operating humidity: 20 to 80% (non-condensing)

1. Cautions regarding the design of the control box

Control box machining diagram

External dimensions

2. Mounting

**Caution**

- Do not route communications signal lines or input / output signal lines close to power supply lines, or routing them through the same conduit. Doing so may result in malfunction.
- Mount the unit far away from potential noise sources.
- Do not mount the unit where it could get wet, or in areas of high humidity.
- Do not mount the unit where it could be subject to excessive vibration or shocks.
- Mount the unit inside a control box.

(1) Remove the two pan-head bolts from the lower sides and bottom of the front panel.
(2) Mount the controller unit to the control box using the four supplied bolts, washers, and nuts.
(3) Replace the front panel.

Control box example

Wiring example

Mounting diagram
16 Installation (Electric) and Service Instructions

3 Wiring

Always shut off the power supply (breaker) before installing or uninstalling.

(1) Power supply connection

- Connect the power supply to the commercial power mains (100V to 240V, AC), using a dedicated circuit.
- Connect the power supply lines to the L and N power supply terminals (the power supply neutral to the N terminal). Connect an earth ground line to the ground power supply terminal.
- Firmly secure the power supply lines using the supplied cable tie.

(2) Signal connection

- Connect indoor and outdoor signals using 0.5 - 2.0 mm² two-conductor cable.
- Use the shielded wire for inter-unit control wiring. Do not run signal lines through the same conduit as power supply lines, use the same cable as the power supply wires, or run close to the power supply lines (maintain at least 30 cm separation, if cabled outside the control box).
- Do not run the LINK1 and LINK2 signal lines through the same conduit, use the same cable for wiring, or run the signal lines close together.
- Earth the shield wire of the Inter-unit control wire (U1-U2).
- Use terminal 2 (LINK1-U2) instead of terminal 1.
- Use terminal 5 (LINK2-U2) instead of terminal 4.

Wiring procedure

- When connecting link systems (inter-unit control wiring), always connect beginning with LINK1 and LINK2 on the Intelligent Controller. Up to 4 link systems can be connected.

- Connect signal terminals 0 and 1 (LINK1) to the inter-unit control wire terminals of an indoor or outdoor unit. If using two link systems for connection, connect signal terminals 3 and 4 (LINK2) in the same manner.
- Connect indoor and outdoor terminal boards to the respective communication control terminal board. Set the central control address. (Note + and - polarity)
- Up to seven external communication adaptors can be connected to the control unit (case it low in size). However, a maximum of four links is supported. Be sure to follow the communication adaptor installation instructions when connecting the adaptors. Make sure that power lines are not connected to the communication adaptor terminal boards or inter-unit control wire terminals.
- If the power voltage is applied to the inter-unit control terminal, for instance, it may cause the control board. If this happens, disconnect the power voltage and check the output terminal settings (Contact the dealer). The spare U2 terminal is right next to the main U2 terminal. (The other signal line can stay connected to the U1 terminal). The spare U2 terminal is right next to the main U2 terminal.
- The LCD is blank after connecting power, check the position of the power switch.

4 Connecting to external equipment

- Connect the power supply terminal board cover.
- Keep the input and output signal line lengths to under 20 meters. For distances greater than this, install a standalone communication adaptor, or use a relay.
- For use in areas that may be susceptible to electrical noise, use two-conductor shielded cable (with one line grounded), with a cross-section of 0.5 mm² or greater.
- Do not apply external voltages to the input terminals.
- The input terminals use a sensing current of about 10 mA at 5 V DC.
- The output terminal allowable contact voltage and current are 30 V DC, 0.5 A.

- Minimum pulse width 100 msec
- Minimum pulse interval 1 sec

5 Power switch

The Intelligent Controller has a power switch. If the LCD is blank after connecting power, check the position of the power switch.

6 Circuit board diagram

- Ordinary, there is no need to change any settings on the Intelligent Controller board.

7 Verify the system configuration, make necessary settings

- Turn on power to all air conditioner units.
- Turn on to the Intelligent Controller.
- Set the date and time on the Intelligent Controller and verify the system configuration.
- Following the display on the Intelligent Controller, verify the number of units connected.
- Perform the necessary settings. Refer to the central control setup guide.
- See the Operation Manual for details.

8 Educating the customer

- Give the Operation Manual to the customer.
- Explain the operation to the customer, following the explanations given in the Operation Manual.
Thank you for choosing the CZ-256ESMC2 Intelligent Controller.
Before using the system, be sure to read this manual carefully.

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2. Log-in .............................................................................1
3. Screen Display and Operation .................................................2
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   3-2. [Each Tenant Details] Screen ......................................5
   3-3. [All Units] Screen ..................................................5
   3-4. Distribution Ratio/Usage: Data Download Screen ..........6
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   3-6. Mail Send Log Screen ...........................................9
   3-7. Program Timer Screen .........................................10
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Access and Operation by Web Browser

Accessing the Intelligent Controller from your computer allows you to monitor/operate air-conditioning equipment using a Web browser.

1. Computer Environment Requirements
   In order to use the web browser of your computer to connect to the Intelligent Controller and monitor/operate air-conditioning equipment, the following environment requirements must be met.
   Supported browser: Internet Explorer 6.0 or later
   Java applet: Sun Microsystems Java Plugin Ver 1.4.2 or later
   Screen resolution: 1024 x 768 recommended

2. Log-in
   To log in to the Intelligent Controller, enter the following into the address bar of the web browser:
   http://[Intelligent Controller address]/SACWWW/index_[language code].asp
   For example, if the Intelligent Controller address is 192.168.0.2 and you want to connect to the English page, enter:
   http://192.168.0.2/SACWWW/index_en.asp
   If the DNS is used and ID name (device name) of the Intelligent Controller is "WindowsCE0", enter:
   http://WindowsCE0/SACWWW/index_en.asp.
   The language codes are as follows.
   English : en French : fr German : de Italian : it
   This will cause the web browser to connect to the Intelligent Controller, and a screen such as shown below appears.
   Enter the user ID and password set for the Intelligent Controller to log in.
   Shows the site name that was set for Intelligent Controller.
   Ÿ Enter the user ID that was set for Intelligent Controller.
   Ð Enter the password that was set for Intelligent Controller.
   Click the Login button.
3. Screen Display and Operation

3-1. [Each Tenant] Screen

After you log in to the Intelligent Controller, or when you use the menu to select [1. Status/Control : 1. Each tenant], a screen such as shown below appears. (Screen details may differ depending on the user logged in.)

- **New button**
  Updates the screen to the latest information.

- **Menu**
  The menu may differ depending on the user logged in. The following menu appears when logged in as an administrator.
  - Administrator Menu
    - New
    - 1. Status/Control
    - 2. Each tenant
    - 3. Drill-down Usages
    - 4. Maintenance Test Run
    - 5. Auxiliary settings
  - Special User Menu
    - New
    - 1. Status/Control
    - 2. Each tenant
  - General User Menu
    - New
    - 1. Status/Control

- **Tenant list**
  Shows the indoor unit and tenant structure currently accessed by the Intelligent Controller in a list.
  Select indoor units by clicking different parts of the list.
  Clicking on the part highlighted in the screen example above will select the individual indoor unit, while clicking on the tenant name (Tenant001, Tenant002, etc. in the example) will select all indoor units for that tenant.
  Clicking on the top of the list (Tenant in the example) will select all indoor units of the site.
  Only the tenants that can be operated by the user permission used to log in (administrator, special, general) are displayed.

- **Icon display area**
  Shows icons for indoor units connected to the Intelligent Controller.
  Clicking on an icon whose frame is shown in reverse will select that unit.
  Clicking on a tenant name will select that tenant.

- **Alarm display column**
  Shows the alarm code as a tooltip when the cursor is moved over the icon of the indoor unit for which the alarm is occurring.

- **Remote control window**
  Shows the Remote control window. When this window has been closed, clicking on the indoor unit or making another selection will bring it up again.

- **Site name**
  The “Site name” set in the Intelligent Controller appears.

- **Remote control window**
  Shows the Remote control window. When this window has been closed, clicking on the indoor unit or making another selection will bring it up again.

- **A  Status/Control screen section**
  Shows the status of the indoor unit and the operation condition.
  When a control operation is performed, the background color of the respective field changes and the **Send** button becomes available.
  Clicking the **Send** button will send all operation steps performed up to this point to the Intelligent Controller.
  If you instead click the **Cancel** button or perform a step such as selecting another indoor unit, operation steps performed up to this point will be canceled.
Screen Display and Operation

3-2. [Each Tenant Details] Screen

When you use the menu to select [1. Status/Control : 2. Each tenant details], a screen such as shown below appears. (Screen details may differ depending on the user logged in.) Operation principles for this screen are similar to those of the "3-1. [Each tenant] screen".

3-3. [All Units] Screen

When you use the menu to select [1. Status/Control : 5. All units], a screen such as shown below appears. (Screen details may differ depending on the user logged in.) A maximum of 256 indoor units are displayed in 1 screen. Operation principles for this screen are similar to those of the "3-1. [Each tenant] screen".

B Control section
Shows controls for possible operation steps such as start/stop switching, operation mode selection, temperature selection, fan speed setting, fan direction setting etc.

If the logged in user has only general user privileges, buttons for restricted operation steps will be grayed out (inactive).
The REMOTE CONTROL and CHECK buttons will not be displayed.

C Send button
Sends the changes made to the Intelligent Controller.

D Cancel button
Cancels the changes made.

E CHECK buttons
Used to check the timer setting and remote control prohibition setting status.
(See "3-7. Program Timer Screen" and "3-9. Prohibit Remote Control Screen".)
Clicking the Return button will return the display to the previous screen.
3-4. Distribution Ratio/Usage: Data Download Screen

When you use the menu to select [3. Distrib. ratio/Usage : 3. Download] while logged in as an administrator, a screen such as shown below appears.

You can download files by selecting them and clicking the "Download" button.

A cut-off data file appears for each piece of cut-off data that appears on the Intelligent Controller unit. Be aware, however, that the dates that appear on the Intelligent Controller unit appear as file names on this screen.

For example, cut-off data that appears as "01/Apr-30/Apr" on the Intelligent Controller will appear as "20070401-20070430.csv" on this screen.

When the following message appears after clicking the "Download" button, select "Open" or "Save".

- "Open" ......... Open the selected CSV file using spreadsheet software.
- "Save" ......... Select a folder and save the CSV file.

3-5. Alarm Log Screen

When you use the menu to select [4. Maintenance/Test Run : 2. Alarm log] while logged in as an administrator or special user, a screen such as shown below appears.

When an indoor unit is selected in the tree section, the previous 14 occurrences are displayed. (Same as the display on the Intelligent Controller.)

"ID alarm log", "UD comm. error log", and "Adapter alarm log" can be selected from the drop-down list.
8. Intelligent Controller (CZ-256ESMC2)

Screen Display and Operation

3-6. Mail Send Log Screen

When you use the menu to select [4. Maintenance/Test Run : 4. Sent mail log] while logged in as an administrator, a screen such as shown below appears.

| No. | Entry numbers for the sent mail log. With a maximum of 20 (No. 1 to 20) possible entries, the newest entries appear at the top of the list. When the number of entries exceeds 20, entries are deleted starting with the oldest. As up to three mail recipients can be specified, up to three log entries can be recorded for one alarm occurrence. |
| Rslt | "OK" appears when an alarm mail is sent properly, and "NG" appears when sending fails. |
| Send T. | The date and time the alarm mail was sent (or sending was attempted). |
| To | The recipient address the alarm mail was sent to. If the address is too long, only part of the address may appear. |
| Unit name | The name of the indoor unit for which the alarm occurred. |
| Alarm code | The code for the alarm that occurred. |
| Stat | "Occurrence" appears when a notification of an alarm occurrence is sent, and "Restoration" appears when a notification of an alarm restoration is sent. |
| Address | The address of the indoor unit for which the alarm occurred. The address follows the format, "adaptor number - link number - system (outdoor) number - indoor number". When a test mail is sent, "TEST_MAIL" appears. |
3-7. Program Timer Screen

When you use the menu to select [6. Auxiliary settings : 3. Program timer] while logged in as an administrator, or use the "CHECK" button for timer operation in the remote control window, a screen such as shown below appears. (As non-administrator users can only confirm settings and not configure them, the "Cancel" and "Send" buttons only appear when logged in as an administrator.)

When the daily timer number is selected in the tree section, the current setting status is displayed. Click the desired setting item, and you can select the setting from the drop-down list as shown below. Drop-down lists are also displayed for the weekly timer in the same way as the daily timer number.

You can only configure daily timer settings one number (D1, D2, etc.) at a time. If you attempt to switch to D2 settings in the middle of configuring D1 settings, for example, the message "Send for each daily timer." appears.

In such a case, apply or cancel the current settings by clicking the "Send" or "Cancel" button, respectively, before configuring the next daily timer number.

For details on the settings, refer to the operation manual for the Intelligent Controller. The "Check RC prohib." button appears in the above screen when logged in as an administrator or special user. When you click on this button, a screen such as shown below appears.

When you use the menu to select [6. Auxiliary settings : 3. Program timer] while logged in as an administrator, or use the "CHECK" button for timer operation in the remote control window, a screen such as shown below appears. (As non-administrator users can only confirm settings and not configure them, the "Cancel" and "Send" buttons only appear when logged in as an administrator.)
3-8. Tenant Holiday/Timer Special Day Screen

When you use the menu to select [6. Auxiliary settings : 4. Ten.Ho/TimerSp.Day] while logged in as an administrator, a screen such as shown below appears.

You can only configure tenant holiday/timer special day settings one tenant at a time. If you attempt to switch to Tenant002 settings in the middle of configuring Tenant001 settings, for example, the message "Send for each tenant." appears.

In such a case, apply or cancel the current settings by clicking the "Send" or "Cancel" button, respectively, before configuring the next tenant.

To copy changed settings, click the "Copy" button before copying.

For details on the settings, refer to the operation manual for the Intelligent Controller.

3-9. Prohibit Remote Control Screen

When you use the menu to select [6. Auxiliary settings : 5. Prohibit R/C] while logged in as an administrator, or click the "CHECK" button for prohibit remote control in the remote control window, a screen such as shown below appears. (As non-administrator users can only confirm settings and not configure them, the "Cancel" and "Send" buttons only appear when logged in as an administrator.)

For details on the settings, refer to the operation manual for the Intelligent Controller.
3-10. WEB Settings Screen

When you use the menu to select [6. Auxiliary settings” : 10. WEB settings] while logged in as an administrator, a screen such as shown below appears.

For details on the settings, refer to the operation manual for the Intelligent Controller.

<table>
<thead>
<tr>
<th>Setting Item</th>
<th>Input Range</th>
<th>Input Character Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site name</td>
<td>Up to 40 characters</td>
<td>One-byte “=” is prohibited</td>
</tr>
<tr>
<td>IP address</td>
<td>Numbers 0 to 255</td>
<td>“0.0.0.0” and “255.255.255.255” are prohibited</td>
</tr>
<tr>
<td>Subnet mask</td>
<td>Numbers 0 to 255</td>
<td>“0.0.0.0” is prohibited</td>
</tr>
<tr>
<td>Default Gateway</td>
<td>Numbers 0 to 255</td>
<td></td>
</tr>
<tr>
<td>DNS (Primary, Secondary)</td>
<td>Numbers 0 to 255</td>
<td></td>
</tr>
<tr>
<td>WINS (Primary, Secondary)</td>
<td>Numbers 0 to 255</td>
<td></td>
</tr>
<tr>
<td>Device Name</td>
<td>Alphanumeric characters, “-” and “_”</td>
<td>First character must be alphabetic character “-” and “_” are prohibited as ending characters</td>
</tr>
<tr>
<td>Sender’s SMTP</td>
<td>Up to 40 alphanumeric characters and symbols</td>
<td>Symbols are @, ., _, : only</td>
</tr>
<tr>
<td>Sender’s account</td>
<td>Up to 40 alphanumeric characters and symbols</td>
<td>=, # is prohibited</td>
</tr>
<tr>
<td>Recipient account</td>
<td>1 to 3</td>
<td></td>
</tr>
</tbody>
</table>

If a value that is outside the input range or input limitations is set, the window below appears.

If the network settings have been changed when the “Send” button is clicked, the window below appears. Always check there is no problem restarting the Intelligent Controller unit.

When “YES” is clicked for submission, the screen changes as shown below, and the Intelligent Controller unit restarts.
When a mail test is sent, the window below appears when the mail settings have been changed.

In this case, either click the “Send” button to enable the mail setting changes or click the “Cancel” button to disable the changes, and then send the mail test again.

If the Intelligent Controller unit is processing (check configuration, cut-off, backup, etc.), this screen cannot be displayed or updated, mail test cannot be sent, and setting change “Send” cannot be performed.

If the Intelligent Controller unit is displaying the initial setting screen (main menu 5) or the Settings screen (main menu 6), setting change “Send” cannot be performed. In either case, the following window appears.

### 3-10-1. Server details

When you click the “Server details” button from the [WEB settings] screen, a screen such as shown below appears.

For details on the settings, refer to the operation manual for the Intelligent Controller.

<table>
<thead>
<tr>
<th>Setting Item</th>
<th>Input Range</th>
<th>Input Character Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port number</td>
<td>Numbers 0 to 999999</td>
<td></td>
</tr>
<tr>
<td>User ID</td>
<td>Up to 50 alphanumeric</td>
<td></td>
</tr>
<tr>
<td>Password</td>
<td>Characters and symbols</td>
<td></td>
</tr>
</tbody>
</table>

### 3-10-1-1. Receiving server settings

When you click the “Receiving server settings” button from the [Server details] screen, a screen such as shown below appears.

Input values have the following restrictions.

<table>
<thead>
<tr>
<th>Setting Item</th>
<th>Input Range</th>
<th>Input Character Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recv. server address (POP3)</td>
<td>Up to 40 alphanumeric characters and symbols</td>
<td>Symbols are “#”“<del>”“</del>”“~” only</td>
</tr>
<tr>
<td>User ID</td>
<td>Up to 50 alphanumeric characters and symbols</td>
<td></td>
</tr>
<tr>
<td>Password</td>
<td>Numbers 0 to 999999</td>
<td></td>
</tr>
</tbody>
</table>
### 4. Supplementary Information

When connecting the Intelligent Controller via Internet, consider implementing network security measures, such as a firewall.

#### Error Messages

<table>
<thead>
<tr>
<th>Error</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>System configuration change!</td>
<td>The system configuration of the Intelligent Controller has changed.</td>
<td>This is a warning message. Wait a moment and resume operation.</td>
</tr>
<tr>
<td>Intelligent Controller is now processing, please wait. Please try later.</td>
<td>The Intelligent Controller is applying settings. Access from the Web is heavy.</td>
<td>If configuring settings with the Intelligent Controller, switch to a non-settings screen (such as screen 1-n). Wait a moment and resume operation.</td>
</tr>
<tr>
<td>Communication error</td>
<td>The Intelligent Controller was turned off while connected, or a cable was unplugged or the network failure.</td>
<td>Try the operation again. Verify that the Intelligent Controller is turned on, and that the network wiring connections are correct.</td>
</tr>
<tr>
<td>Invalid user ID</td>
<td>The entered user ID is different from the user ID registered on the Intelligent Controller.</td>
<td>Verify the user ID that was registered to the Intelligent Controller.</td>
</tr>
<tr>
<td>Wrong password</td>
<td>The entered password is different from the password registered on the Intelligent Controller.</td>
<td>Verify the password that was registered to the Intelligent Controller.</td>
</tr>
<tr>
<td>All Stop!</td>
<td>The external all stop input is switched on for the Intelligent Controller unit.</td>
<td>When the external all stop input is changed to OFF, the message disappears. After changing to OFF, wait for the message to disappear.</td>
</tr>
</tbody>
</table>