

Data Management Server2

MIM-D00A

BACnet Gateway

MIM-B17

LonWorks Gateway

MIM-B18

Air Conditioner user manual

imagine the possibilities

Thank you for purchasing this Samsung product.

Safety Precautions

- *Before using the DMS2, read carefully these instructions.*
- *After reading the instructions, keep this user's manual in a handy and safe place. If a user is changed, you must hand over the manuals.*
- *Never attempt to install the air conditioning system or to move the DMS2 by yourself.*



WARNING

- ◆ Do not attempt to install or repair this DMS2 by yourself.
- ◆ This DMS2 contains no user-serviceable parts. Always consult authorized service personnel for repairs.
- ◆ When moving, consult authorized service personnel for disconnection and installation of the DMS2.
- ◆ Ensure that the wall is strong enough to support the weight of the DMS2.
- ◆ Must install the DMS2 with rated power supply.
- ◆ In the event of a malfunction (burning smell, etc.), immediately stop operation, turn off the electrical breaker, and consult authorized service personnel.



CAUTION

- ◆ Do not use inflammable gases near the DMS2.
- ◆ Do not spill water into the DMS2.
- ◆ Do not operate the DMS2 with wet hands.
- ◆ Do not install the DMS2 in a location where it will come into contact with the combustible gases, machine oil, sulphide gas, etc.
- ◆ Do not press buttons with a pointed thing.
- ◆ Do not pull or bend the DMS2 cable excessively.
- ◆ Do not use this DMS2 for other purpose.
- ◆ Do not spray an insecticide or other combustible things on the DMS2.
- ◆ Do not clean the DMS2 with benzene, solvents or other chemicals.
- ◆ Do not give a shock to the DMS2 or disassemble it by yourself.

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General Description

Introduction of DMS2 (Data Management Server2)

The DMS2 is an Internet based device for central management of Samsung system air-conditioners. It supports LAN & WAN and operates 24 hours without a separate PC.

Advantages of DMS2 System

The DMS2 provides the following advantages:

- ◆ Everyday Device–The DMS2 is operational all year long 24 hours.
- ◆ Independent Operation–The DMS2 can operate schedule control, peak power control, and power distribution without a PC.

Note In order to run peak power control and power distribution, relevant controllers need to be installed.

- ◆ Internet Control

- ✓ Web – The DMS2 has a built-in web server function and can be accessed from a remote location to operate status monitoring, control, trouble history, and schedule setting of the system air-conditioners.
- ✓ Using an Upper Level Controller–When a separate upper level controller (S-NET series) is used, a number of DMS2 can be controlled with one central management system.

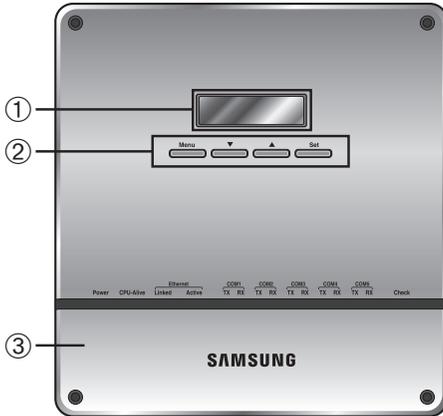
- ◆ Data Storage–The DMS2 has its own database built-in, therefore, trouble history, indoor unit installation information, and power distribution data can be saved and retrieved.
- ◆ Large Scale Management–At most 256 indoor units can be connected to one DMS2 and therefore, only one DMS2 can manage small and medium size buildings.
- ◆ Automatic “e-mail” sending–When an error is occurred, inform the error details to an e-mail saved on DMS2.

Terms

- ◆ DMS2: The abbreviation of Data Management Server2.
- ◆ Upper Controller: It means S-NET Series, a local controller of the DVM system.
S-NET 3, S-NET mini and RMS are linked to a DMS2.
- ◆ Centralized Controller: A device that controls 16 groups of the DVM air conditioner.
A central control device of a DVM system which is located between a DMS2 and an outdoor unit interface module.
- ◆ Interface module: A data interface module of a DVM system which is located between a central controller and an outdoor unit.
- ◆ AHU(Air Handling Unit): Excutes heat exchange between air and cooling unit using central air conditioning duct method.
- ◆ ERV(Energy Recovery Ventilator): Ventilating system using heat recovery function.

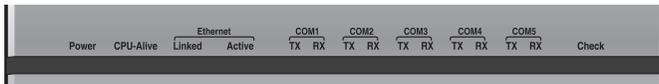
Viewing the Parts

Front View



No.	Name	Description
①	LCD Display	Display current time/ Check menu
②	Menu button	Access to main menu
	▼/▲ button	Select the function you want and set detailed functions in main menu
	Set button	Check the function you want from main menu and select it
③	Bottom cover	Unfasten 2 screws on the bottom and separate the bottom cover from DMS2. Then check cable connection part.

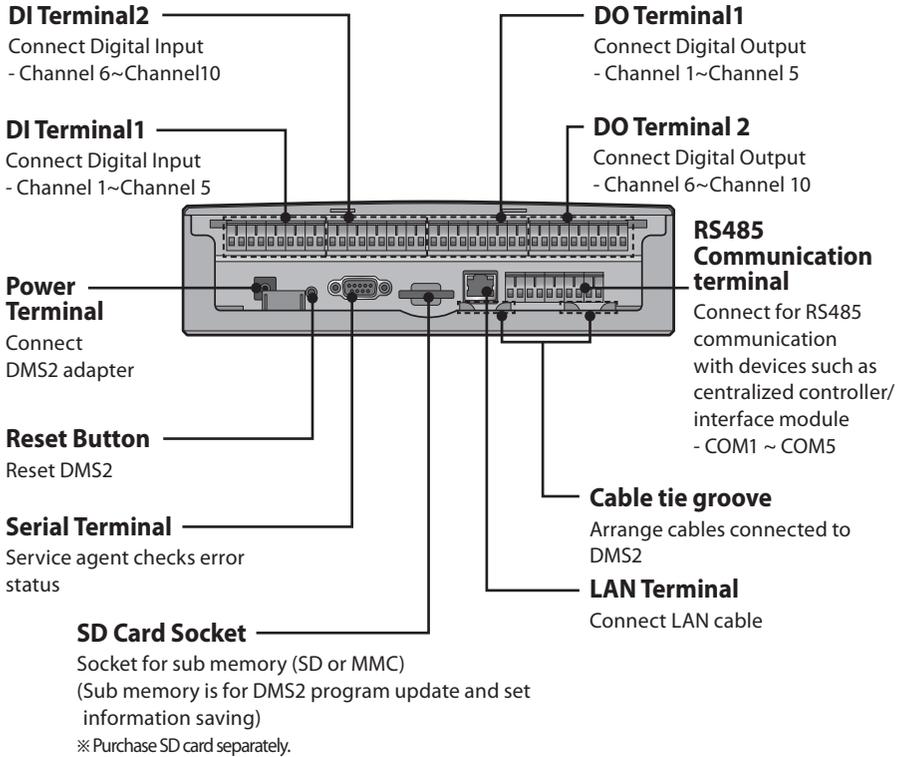
Indicator



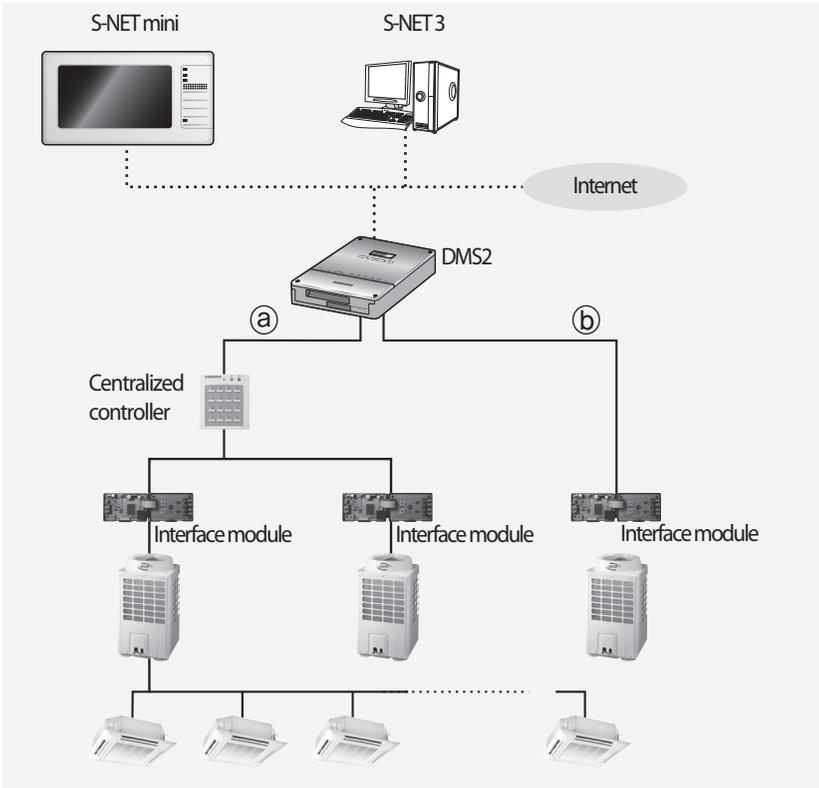
Name	Description
Power	Turns blue when the power is supplied.
CPU Alive	Blinks in orange with 1 second intervals during normal operation.
Ethernet-Linked	Turns green during normal connection.
Ethernet-Active	Blinks in orange during normal transmission/reception.
COM1~5 - TX	Blinks in green during normal transmission.
COM1~5 - RX	Blinks in green during normal reception.
Check	Turns green when notice occurs.

Bottom View

◆ Separate bottom cover by unfastening 2 screws on the bottom.



System Configuration



- ◆ Connecting centralized controller and DMS2 (Ⓐ type)
You can control up to 16 centralized controllers and 256 indoor units using DMS2.
- ◆ Connecting interface module and DMS2 (Ⓑ type)
 - You can control up to 80 interface modules and 256 indoor units using DMS2.
 - ※ 16 interface modules can be connected to RS485 communication channel of DMS2.
 - The more interface modules are connected, the longer time takes for tracking.



CAUTION

- ◆ **When connecting centralized controller and interface module to the DMS2 of same communication channel, only one of them will communicate according to the communication channel mode setting of [System Settings]→[Tracking]. Therefore, do not connect the centralized controller and interface module to the same communication channel.**
- ◆ **If you set the communication channel mode as interface module, virtual centralized controller address will be assigned. Therefore if you connect centralized controller at the same time and set the address as virtual centralized controller address, it may cause trouble for bringing device information.**
 - Channel 0: Virtual centralized controller 11,**
 - Channel 1: Virtual centralized controller 12,**
 - Channel 2: Virtual centralized controller 13,**
 - Channel 4: Virtual centralized controller 14,**
 - Channel 5: Virtual centralized controller 15**

Web Browser Specification

- ◆ Install Windows XP SP2, Windows 2000 SP4 or later version
- ◆ Install Internet Explorer 7.0 or later version
 - ※ You can use Internet Explorer 6.0 but it is not recommended.
- ◆ Install Silverlight 2.0 or later version

- Note**
- ◆ Visit internet homepage (<http://www.microsoft.com/silverlight/>) to download Silverlight. Or you can download it through the download link which is noticed automatically when the PC is connected to the Internet and you access to DMS2 for the first time.
 - ◆ Silverlight operates normally with Windows XP SP2 or later version.
It may not operate normally with former version of Windows.

Computer Settings for DMS2 Connection

All settings of DMS2 will be arranged in web page which built in DMS2.

You should access to DMS2 IP to use DMS2 web page.

There are 2 ways to access DMS2 IP.

(For about settings, refer to installation manual.)

- ◆ Static IP setting
- ◆ Dynamic IP(DHCP) setting

Interface with Upper Level Controller

The DMS2 receives/manages setting and control data from the upper level controller and sends the received data to the lower level system.

- ◆ The upper level controllers of the DMS2 are the S-NET series and the connectible S-NET series are S-NET 3, S-NET mini and RMS.
- ◆ S-NET 3: System air conditioner controlling and monitoring program that is used by installing on a PC.
- ◆ S-NET mini: System air conditioner controlling and monitoring device with touchscreen
- ◆ RMS: A device which supervises operation status and break down status by connecting to DMS2 for system air conditioner remote service. If break down is detected, it notifies service agent and makes fast service possible.

Save Trouble History

The DMS2 saves at most 1024 cases of trouble history. If the number of errors exceeds 1024, only the latest 1024 cases are stored by deleting the oldest trouble history.

- ◆ Device name, address, error occurrence time, error solvation time, trouble history will be saved. You can check it in web page or upper controller.
- ◆ When an error occurs, it sends trouble history to e-mail saved in DMS2.

Device	Type
Indoor Unit	Indoor unit communication error Indoor unit sensor related error Other errors
Outdoor Unit	Outdoor unit communication error Pipe inspection error Outdoor unit sensor related error Outdoor unit related other errors
Communication error such as centralized controller	Option device related communication error

Set and Run Schedule

The schedule function of the DMS2 can be set through the Web or using the upper level controller. 1day/Everyday/Every week schedules can be set.

- ◆ Each schedule can be used selectively by using the run schedule/stop schedule order.
- ◆ At most 256 schedules can be set.
- ◆ Indoor unit control is possible at least 1 minute of interval by set schedule.

Item	Content	Remark
Schedule Period	Starting and ending date of a schedule	
Exception Day Setup	Set an exception day within a schedule period to ignore the schedule control	
Indoor unit to be applied	Select indoor units to receive schedule control	
Event	Set indoor unit operation modes - Indoor unit On time - Indoor unit Off time - Set temperature - Operation mode: Auto/Cool/Dry/Fan/Heat - Remote control usage ON/OFF/Level1 - Fan speed: Auto/Low/Mid/High - Air flow: None/Vertical/Horizontal/All - ERV operation mode: Auto/HeatEx/ByPass/Sleep - ERV Fan speed: Low/High/Turbo	Weekly Repeat: Maximum 10 events per day Daily Repeat: Maximum 70 events

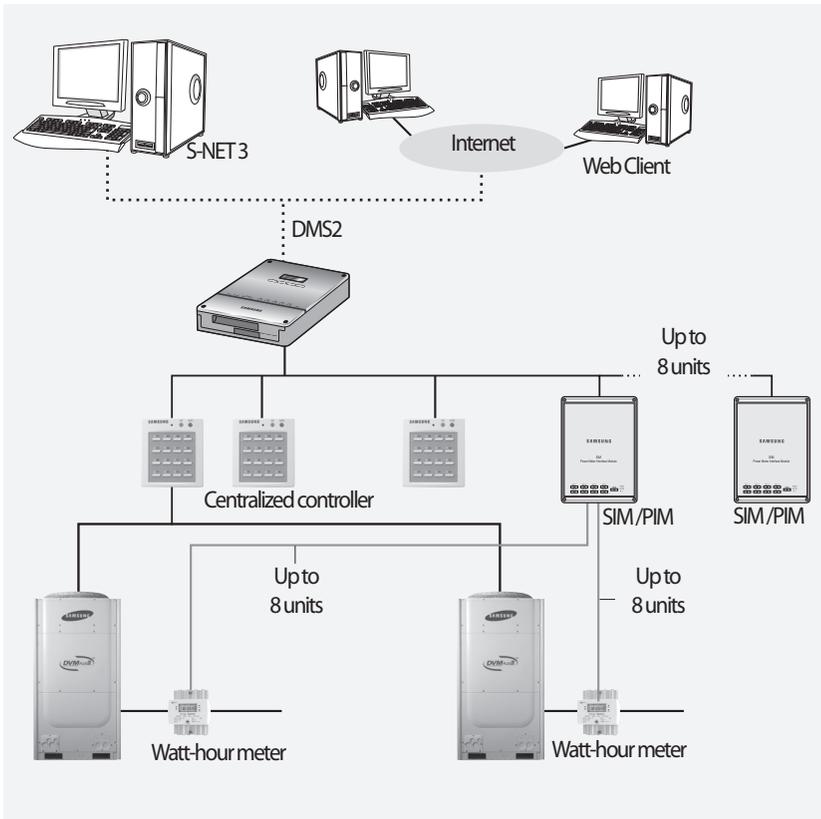
Main Function (Continued)

Save Integrated Power Distribution Data

The DMS2 calculates and distributes the power consumed by each indoor unit by receiving the total power usage from the watt-hour meter interface modules (SIM/PIM) and taking into account the operation status of the indoor units.

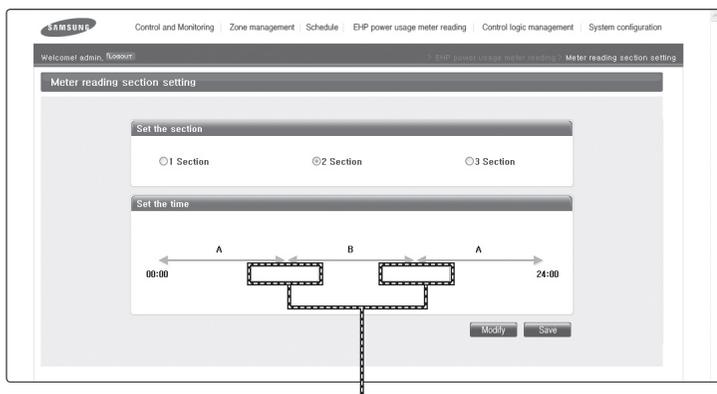
The DMS2 saves at most 1 year of data. After a year, the oldest data is deleted and the latest data is saved. This data can be checked through the built-in Web page of the DMS2 or by S-NET 3.

System Architecture



Time Segmentation

- ◆ Time segmentation is used to divide 24 hours into different sections and to distribute power according to each section.
- ◆ This function is used when the power consumption fee is different according to different time slots or when a building is charged differently depending on the consumption time.
- ◆ Time can be divided into 1 section (A), 2 sections (A,B,A), and 3 sections (A,B,C,B,A).
- ◆ When the time is divided into 2 or 3 sections, you should install S-NET 3 to calculate or check the distributed power on each section.
- ◆ DMS2 will always show the result of the power distribution on section 1, regardless of section 2 or 3.



Input manually (When setting 2 sections and 3 sections)



CAUTION

If communication error occurs between DMS2 and the lower level controllers, actual power consumption and the result of power distribution value may not be same. Make sure to solve communication error status.

- Communication error example : Between DMS2 and SIM/PIM

Between SIM/PIM and Watt-hour meter

Between DMS2 and Centralized controller

Between Centralized controller and interface module

Between Interface module and indoor/outdoor units

Between DMS2 and interface module

Starting DMS2

Starting DMS2

Current time setting

Set the current time of DMS2 system.

- ◆ "2009/01/01 01:01:01" is factory setting. Set the current time as DMS2 system time. You can set DMS2 time in [System Settings] → [System environment setting] (Refer to page 104~105)



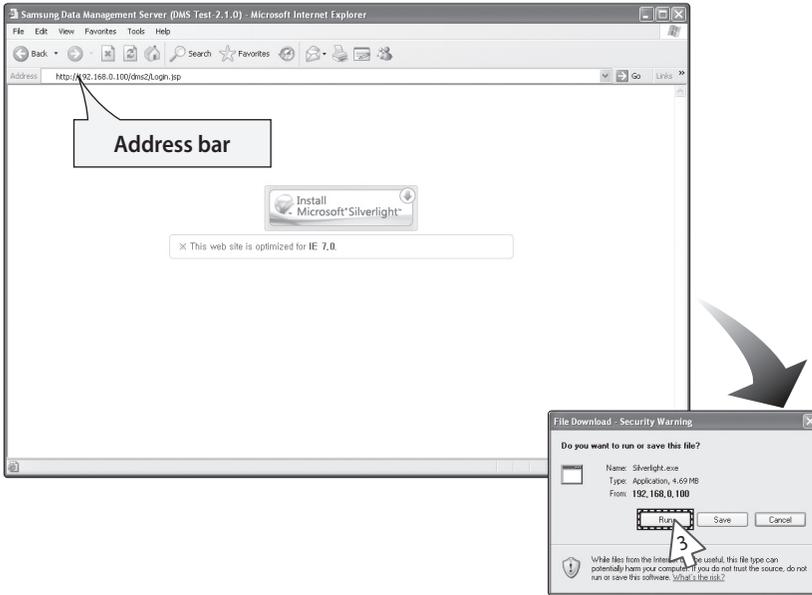
CAUTION

If DMS2 time does not set as the current time, DMS2 may cause malfunction when using Schedule or control logic management.

Connecting centralized controller & interface module

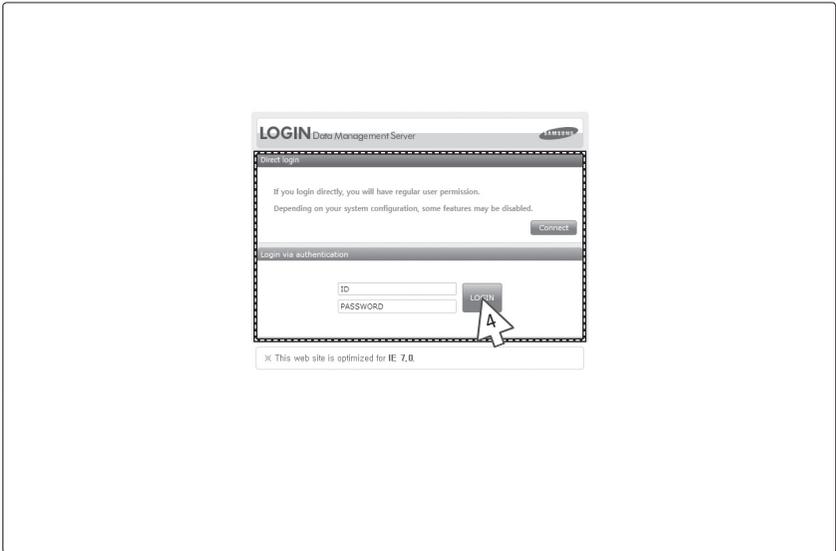
- (1) Make sure that centralized controller communication cables(C1, C2) or interface module communication cables(R1, R2) are connected.
 - ◆ For communication between DMS2 and centralized controller/interface module, centralized controller communication cable(C1, C2) or interface module communication cable(R1, R2) should be connected.
- (2) Execute tracking.
 - ◆ DMS2 communicates with centralized controller and interface module and brings information about installed indoor unit and outdoor unit.
 - ◆ After tracking, you can use indoor unit control and other menu.
 - ◆ For tracking, refer to [System Settings] → [Tracking] (Refer to page 120~130)

Access to DMS2 & Login



- 1 Run internet explorer on your computer.
- 2 Enter IP address (http://192.168.0.100) on the address bar, and then press [ENTER].
 - ◆ If it is the first access to DMS2, "Install Microsoft Silverlight" message will be displayed.
 - The message will not appear if Microsoft Silverlight have already installed.
 - If the message window and login screen does not appear, check PC setting status.
- 3 Click [Run] and continue installation.
 - ◆ Access to DMS2 again after installation.

Starting DMS2 (Continued)



- 4 Enter ID and password when DMS2 main web page appears. Then click [LOGIN].
 - ◆ The default DMS2 user ID is 'admin' and password is '1234'.
 - ◆ Click [Connect] to log in as a regular user.
 - ◆ Depending on authorization settings which set by the administrator, access to some functions may be restricted.
 - ◆ To edit user authorization, refer to [System Settings] → [User authorization management]. (Refer to page 87)

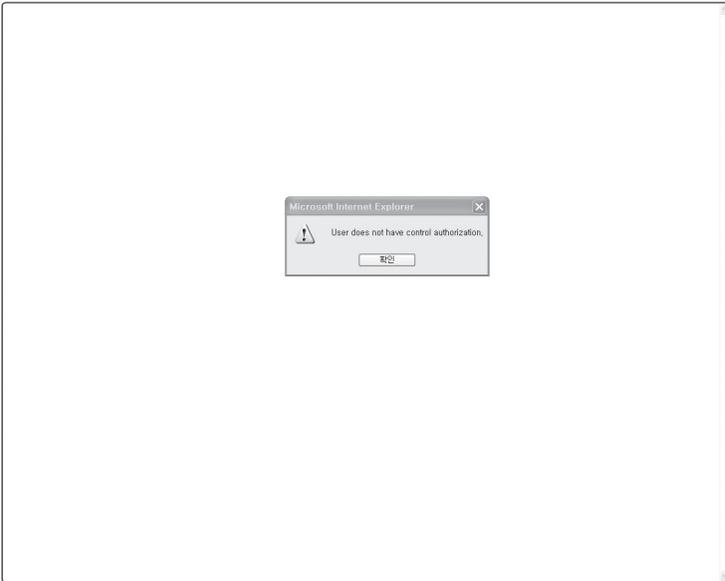
- Note**
- ◆ *Only authorized users can access to web page.*
 - ◆ *Fewer than 5 concurrent users are recommended because connection speed may slow down.*
 - ◆ *DMS2 manager should change ID and password for security and management. (Refer to page 85)*
 - ◆ *Logout: To log out, click [LOGOUT] on the top of the menu.*



CAUTION

Silverlight will run normally with Windows XP SP2 or later version. With former version of Windows, DMS2 may not operate normally.

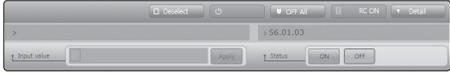
Logged-in User with No Authorization



- 1 When the screen above appears, ask for manager.
 - ◆ Depending on control authorization setting, there can be a user who does not have control authorization.
 - ◆ Above screen will appear when the logged-in user does not have control authorization.

Control and Monitoring

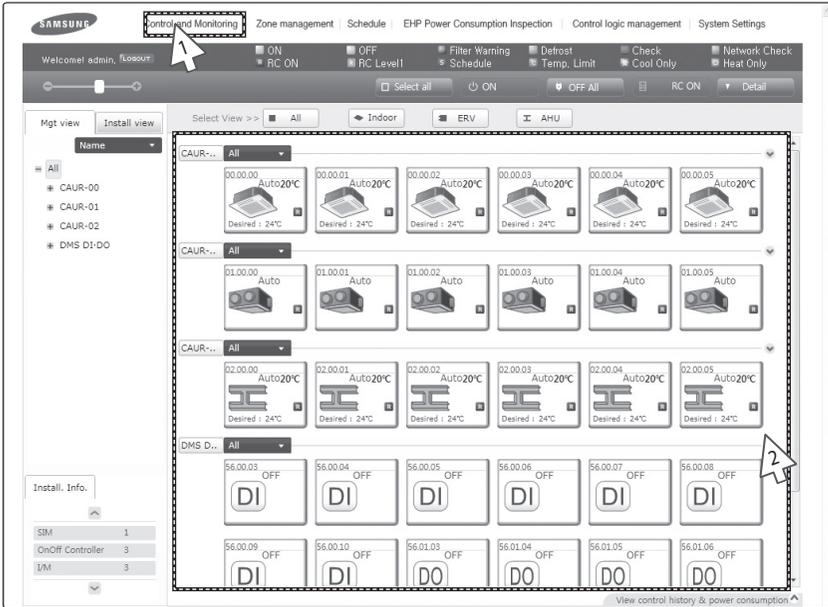
DMS2 Controllable Devices

Type	Display	Remote controller (Controlling range)
Indoor unit display icon		
ERV display icon		
AHU display icon		
DI(Digital Input) display icon		
DO(Digital Output) display icon		



If the user select several devices, the remote controller of last selected device will be displayed on the screen.

Monitoring Indoor Unit Operation Status



1 Click [Control and Monitoring] when DMS2 web page menu screen appears.

- ◆ [Control and Monitoring] screen will appear when you log-in to DMS2 web page.

2 Check the current status of all devices.

- ◆ You can check current status of all installed indoor units, ERV, AHU, DI and DO.

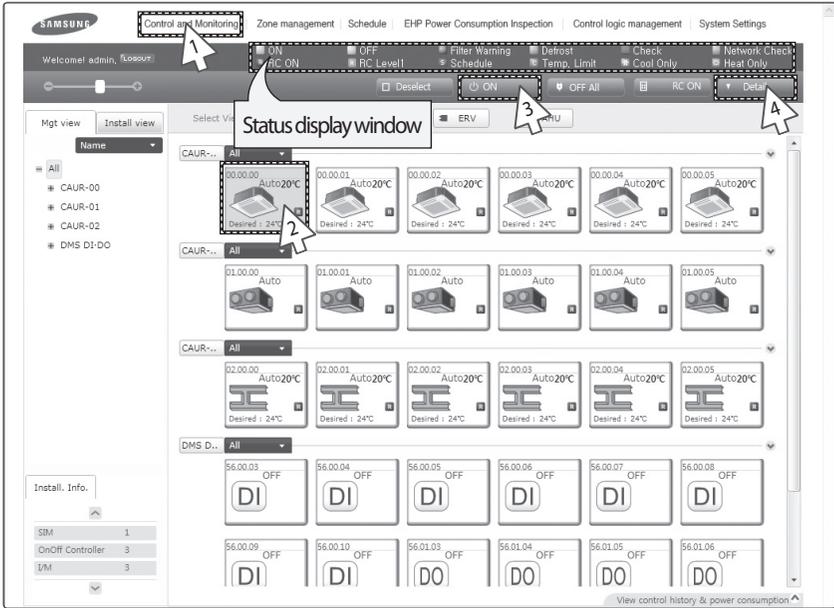
Note ◆ When the advanced functions (such as Sleep mode, Energy saving function) are selected through wired/wireless remote controllers or indoor unit panel, set operation mode on the remote controllers and DMS2 may be displayed differently. Also, when controlling by DMS2, additional functions will be canceled.

◆ Depending on the model of indoor unit, horizontal/all air flow control may not be possible. In this case, vertical or fixed flow will be displayed depending on indoor unit's basic operation specification.

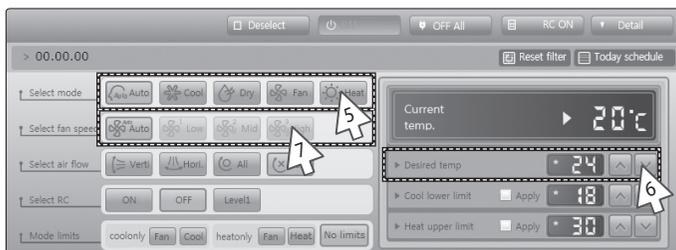
◆ Devices such as AHU and ERV will be displayed only when they are installed.

Control and Monitoring (Continued)

Controlling Indoor Unit



- 1 Click [Control and Monitoring] when DMS2 web page menu screen appears.
 - ◆ [Control and Monitoring] screen will appear when you log-in to DMS2 web page.
- 2 Select indoor unit to control.
 - ◆ Check the indoor unit status through status display window.
- 3 Turn the indoor unit on by clicking [ON].
- 4 Click [Detail].



5 Select the operation mode.

- ◆ You can select Auto, Cool, Dry, Fan or Heat operation mode.

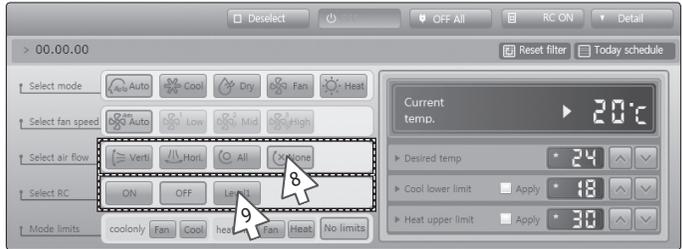
6 Click [▲][▼] to set the desired temperature.

- ◆ Each time you click the buttons, the temperature will be adjusted by 1°C(1°F).
- ◆ If Auto/Cool/Dry mode is in operation, you can adjust the desired temperature in the range of 18°C(65°F)~30°C(86°F).
- ◆ If Heat mode is in operation, you can adjust the desired temperature in the range of 16°C(61°F)~30°C(86°F).
- ◆ You cannot adjust the desired temperature in Fan mode.
- ◆ When the operation mode of indoor unit is Cool or Dry mode, you cannot set the desired temperature lower than lower limit temperature if lower limit is enabled.
- ◆ When the operation mode of indoor unit is Heat mode, you cannot set the desired temperature higher than upper limit temperature if upper limit is enabled.

7 Select the fan speed.

- ◆ You can select Auto, Low, Mid or High.
 - ◆ If Auto/Dry mode is in operation, fan speed will be set as Auto fan speed.
 - ◆ If Fan mode is in operation, you cannot select Auto fan speed.
-

Control and Monitoring (Continued)



8 Select the air flow.

- ◆ You can select Vertical, Horizontal, All and None air flow.

9 Set remote controller settings.

- ◆ You can select ON, OFF and Level1.
- ◆ When selecting [OFF], indoor unit control by wired/wireless remote controller and indoor unit panel is not possible. Indoor unit control is only available in DMS2 web page.
- ◆ Click [ON] when you want to use wired remote controller in each room.

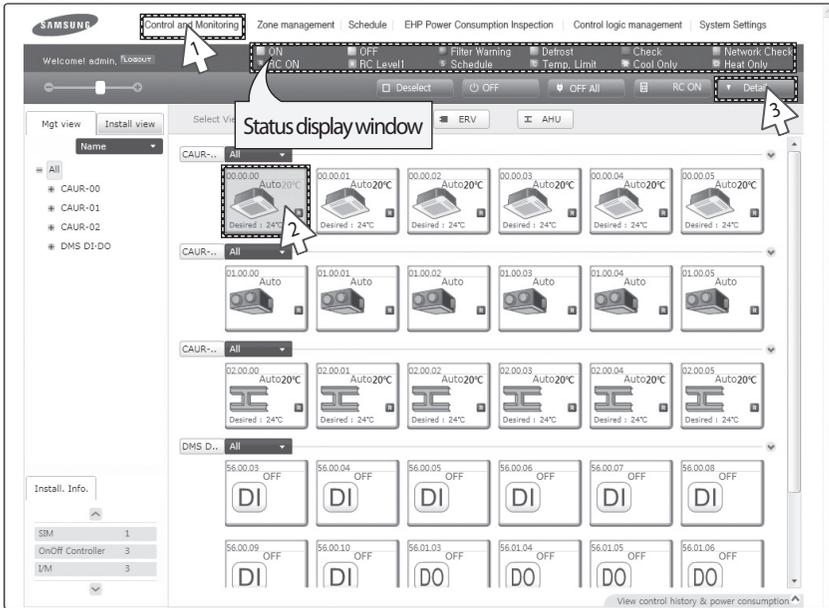
Note **When filter warning sign is displayed on indoor unit status window**

Select the indoor unit and click [Reset filter].
Filter warning will be released.



- ◆ Make sure that each indoor unit must be turned on to control.
- ◆ Selecting remote controller, reset filter, operation mode limits, setting lower/upper temperature limit are possible even if the power of indoor unit is off.
- ◆ Some air flow option may be restricted depending on the indoor unit model.

Indoor Unit Operation Mode Limit



1 Click [Control and Monitoring] when DMS2 web page menu screen appears.

- ◆ [Control and Monitoring] screen will appear when you log-in to DMS2 web page.

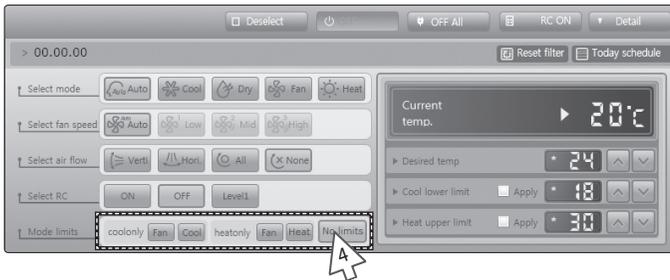
2 Select indoor unit to control.

- ◆ Check the indoor unit status through status display window.

3 Click [Detail].

- ◆ You can check and set operation mode, fan speed, air flow and desired temperature of selected indoor unit.

Control and Monitoring (Continued)



4 Set operation mode limit.

- ◆ You can select 'Cool only(Fan, Cool)', 'Heat only(Fan, Heat)' and 'No limits'.
 - Cool only (Fan, Cool): If cooling only indoor unit operates in heat mode, indoor unit operation will be reset to the alternative operation mode.
 - Heat only (Fan, Heat): If heating only indoor unit operates in cool mode, reset the indoor unit as set operation mode.
 - No limits: You can use cooling only and heating only with no limits.
 - Ex: If the cooling only indoor unit (with Fan mode set as alternative operation mode) operates in heating mode, DMS2 will detect it and reset the indoor unit in Fan mode.

Note

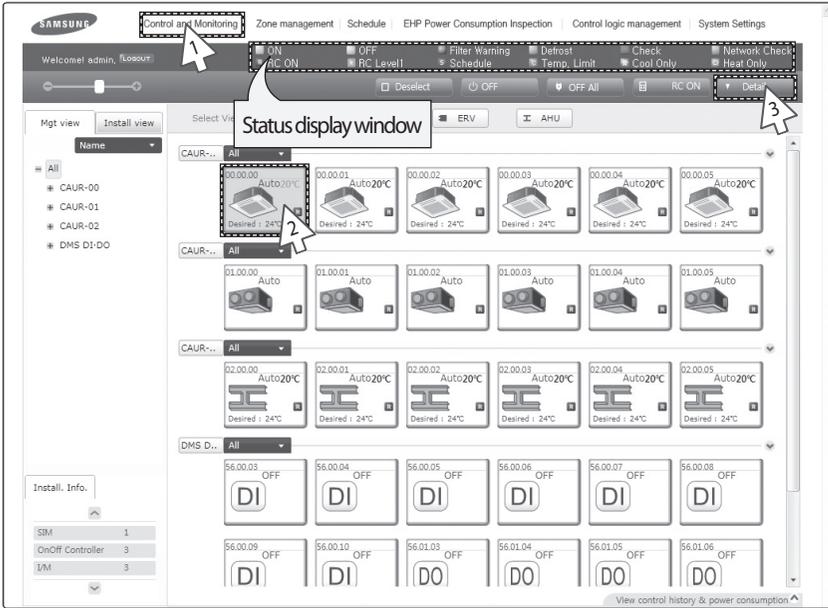
- ◆ Operation mode limits setting is not available in ERV.
- ◆ Mixed operation can occur regardless of operation mode limits setting.
- ◆ If indoor unit with operation mode limit is in mixed operation, DMS2 solves mixed operation status automatically by controlling the indoor unit in set operation mode.



CAUTION

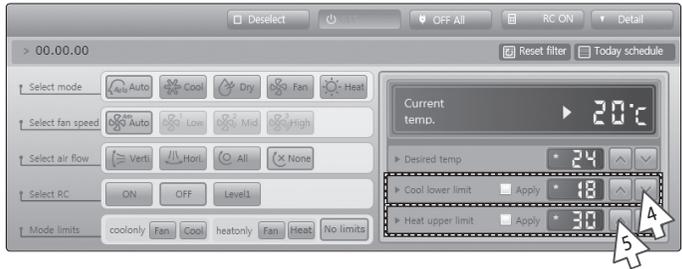
- ① **In the following circumstances, all indoor units under the same outdoor unit should be set to the same operation mode limits. Mixed operation can occur continuously when you set some of indoor unit to cool only and the other to heat only.**
 - If the centralized controller is MCM-A202 and is in group mode
 - If the centralized controller is in group mode and the interface module is MIM-B13 or MIM-B04A
- ② **Except above ① circumstances, DMS2 changes the operation mode limit of all indoor units under the same outdoor unit to same operation mode limit.**
 - If the centralized controller is in group mode and is above MCM-A202A and all the interface modules under the centralized controller are above MIM-B13A
 - If the centralized controller is in individual mode
- ③ **If you set the cooling only indoor unit's operation mode limit to heating only, DMS2 may display Heating ↔ Cooling alternately.**

Setting Lower/Upper Temperature Limit of Indoor Unit



- 1 Click [Control and Monitoring] when DMS2 web page menu screen appears.
 - ◆ [Control and Monitoring] screen will appear when you log-in to DMS2 web page.
- 2 Select indoor unit to control.
 - ◆ Check the indoor unit status through status display window.
- 3 Click [Detail].

Control and Monitoring (Continued)

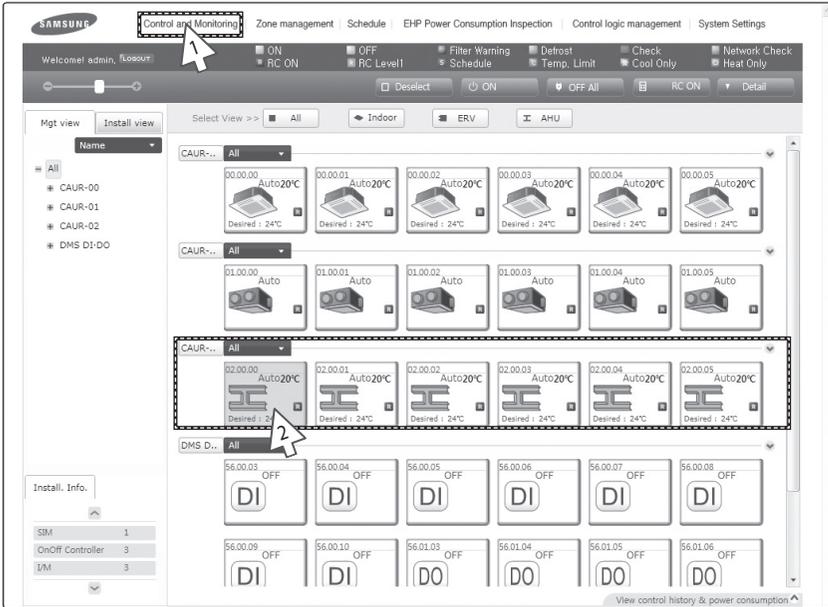


- 4 Set lower temperature limit by pressing [\wedge] and [\vee].
 - ◆ You can set lower temperature limit by checking 'Apply'.
 - ◆ When indoor unit is operating in cool mode, DMS2 controls indoor unit as lower temperature limit if the desired temperature is lower than lower temperature limit.
 - ◆ Lower temperature limit can be set in the range of 18°C (65°F)~30°C (86°F).
 - ◆ Check 'Apply' to apply the Lower temperature limit setting.
 - ◆ When indoor unit is operating in Cool or Dry mode and the low temperature limit is applied, you cannot set the desired temperature lower than the lower temperature limit.
- 5 Set upper temperature limit by pressing [\wedge] and [\vee].
 - ◆ Check 'Apply' to apply the upper temperature limit setting.
 - ◆ When indoor unit is operating in heat mode, DMS2 controls indoor unit as upper temperature limit if the desired temperature is higher than upper temperature limit.
 - ◆ Upper temperature limit can be set in the range of 16°C (61°F)~30°C (86°F).
 - ◆ Check 'Apply' to apply the lower temperature limit setting.
 - ◆ When indoor unit is operating in Heat mode and the upper temperature limit is applied, you cannot set the desired temperature higher than the upper temperature limit.

Note

- ◆ **Temperature limit in Cool/Heat mode setting is not available in ERV.**
- ◆ **If the indoor unit is in Auto(Cool)/Auto(Heat) mode, lower/upper temperature limit will be applied when the indoor unit is operating in Auto mode. However, if the upper temperature limit is set to 16°C (61°F)~17°C (64°F), the upper temperature limit in Auto(Heat) mode is 18°C (65°F).**

Monitoring AHU Operation Status



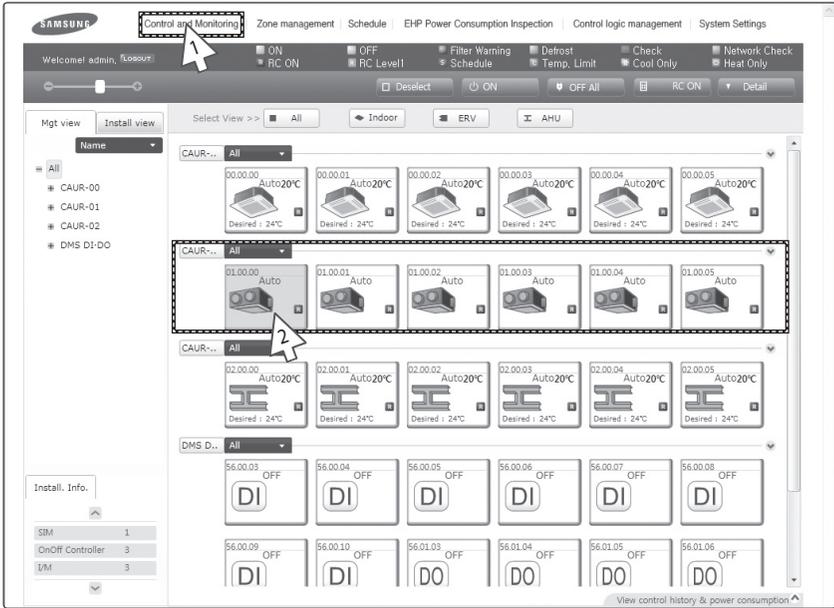
- 1 Click [Control and Monitoring] when DMS2 web page menu screen appears.
 - ◆ [Control and Monitoring] screen will appear when you log-in to DMS2 web page.

- 2 Check current status of AHU.

- Note**
- ◆ To control AHU, refer to 'Controlling indoor unit' steps.
 - AHU's fan speed is fixed as high. (Refer to page 20~22)
 - You cannot set air flow of AHU.
 - ◆ To set the operation mode limit of AHU, refer to 'Indoor unit operation mode limit' steps. (Refer to page 23~24)
 - ◆ To set the lower/upper temperature limit of AHU, refer to 'Setting lower/upper temperature limit of indoor unit' steps. (Refer to page 25~26)

Control and Monitoring (Continued)

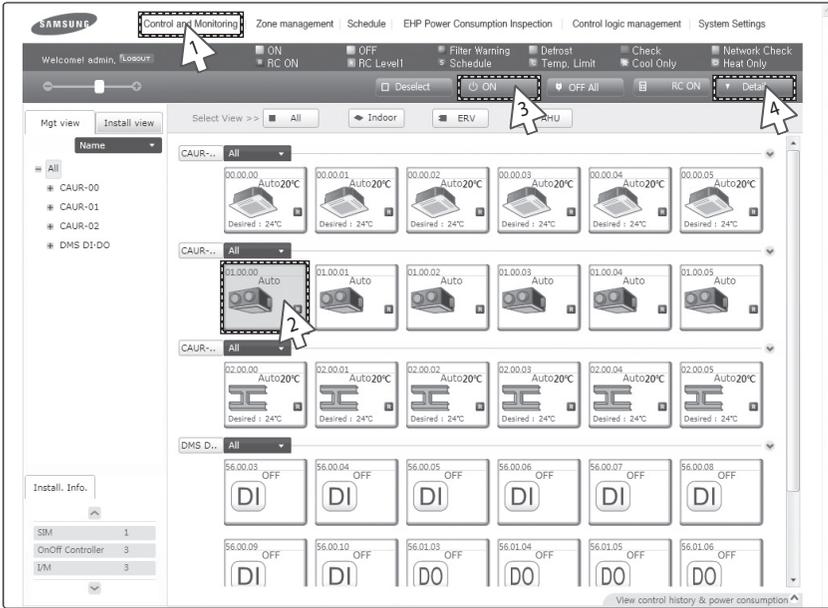
Monitoring ERV Operation Status



- 1 Click [Control and Monitoring] when DMS2 web page menu screen appears.
 - ◆ [Control and Monitoring] screen will appear when you log-in to DMS2 web page.

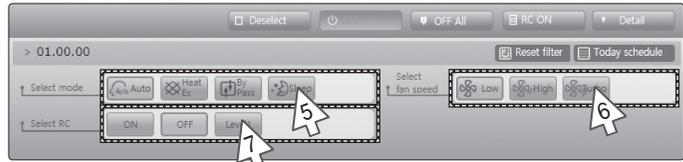
- 2 Check current status of ERV.

Controlling ERV



- 1 Click [Control and Monitoring] when DMS2 web page menu screen appears.
 - ◆ [Control and Monitoring] screen will appear when you log-in to DMS2 web page.
- 2 Select an ERV to control.
 - ◆ Check ERV status through status display window.
- 3 Turn ERV on by pressing [ON].
- 4 Click [Detail].

Control and Monitoring (Continued)



5 Select the operation mode.

- ◆ You can select Auto, HeatEx, By pass and Sleep.

6 Select the fan speed.

- ◆ You can select Low, High and Turbo.
- ◆ Fan speed is set to Low in sleep mode.

7 Set remote controller settings.

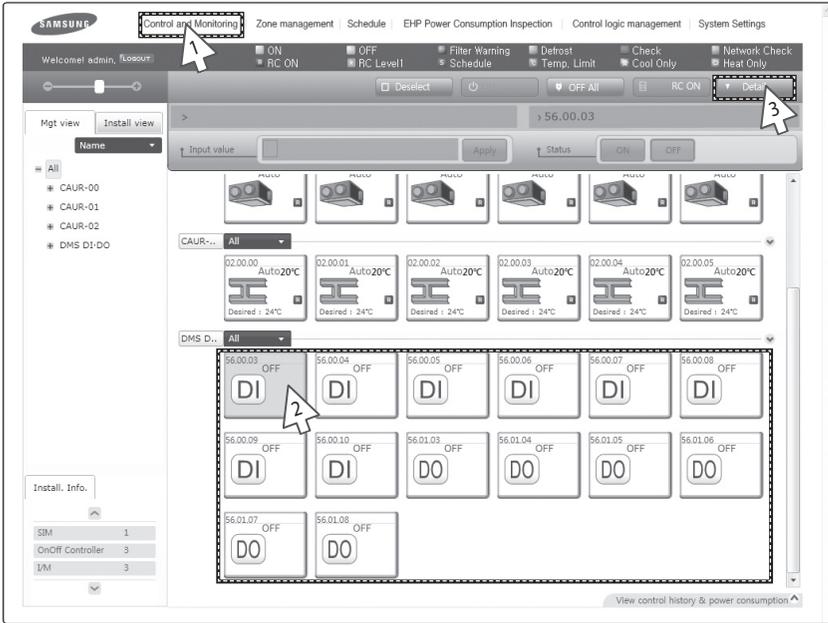
- ◆ You can ON, OFF, Level1.
- ◆ When selecting [OFF], ERV control by wired/wireless remote controller is not possible. ERV control is only available in DMS2 web page.
- ◆ Click [ON] when you want to use wired remote controller in each room.

Note ◆ *When filter warning sign is displayed on ERV status window*
Select the ERV and click [Reset filter]. Filter warning will be released.



- ◆ *Make sure that ERV must be turned on to control.*
- ◆ *Selecting remote controller and filter reset are possible even if the power of indoor unit is off.*

Monitoring DMS DI/DO Operation Status

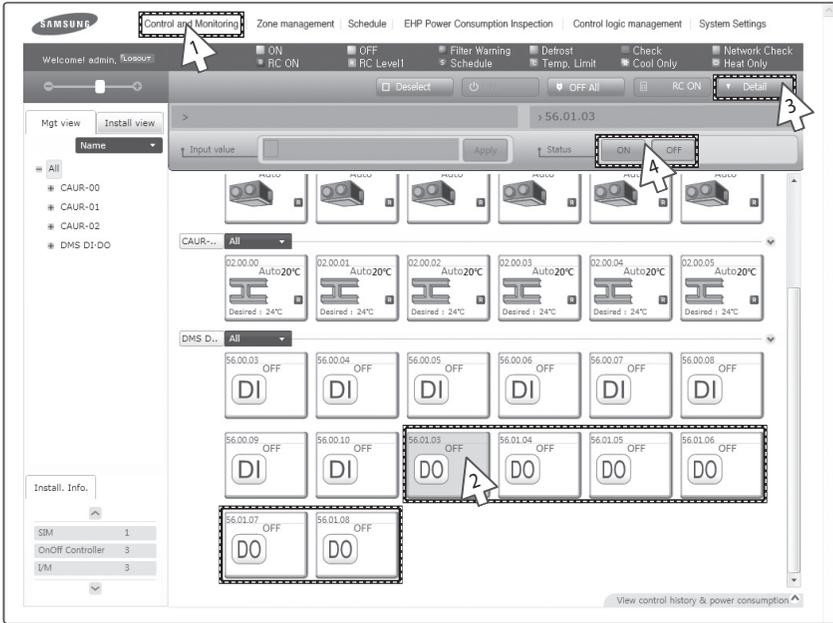


- 1 Click [Control and Monitoring] when DMS2 web page menu screen appears.
 - ◆ [Control and Monitoring] screen will appear when you log-in to DMS2 web page.
- 2 Check the current status of DI and DO device.
- 3 Click [Detail] to see the control window of selected device.
- 4 Monitor the device through the detail control window.

- Note**
- ◆ You can control and monitor DI/DO(10 for each) which built-in DMS2. However, DI 1, 2 and DO 1, 2, 9, 10 are excluded from controlling and monitoring because they are used for the internal function of DMS.
 - ◆ Entering ON/OFF becomes impossible for DI device.
 - ◆ Entering ON/OFF becomes possible for DO device.
 - ◆ Entering control value becomes impossible for DI/DO device.

Control and Monitoring (Continued)

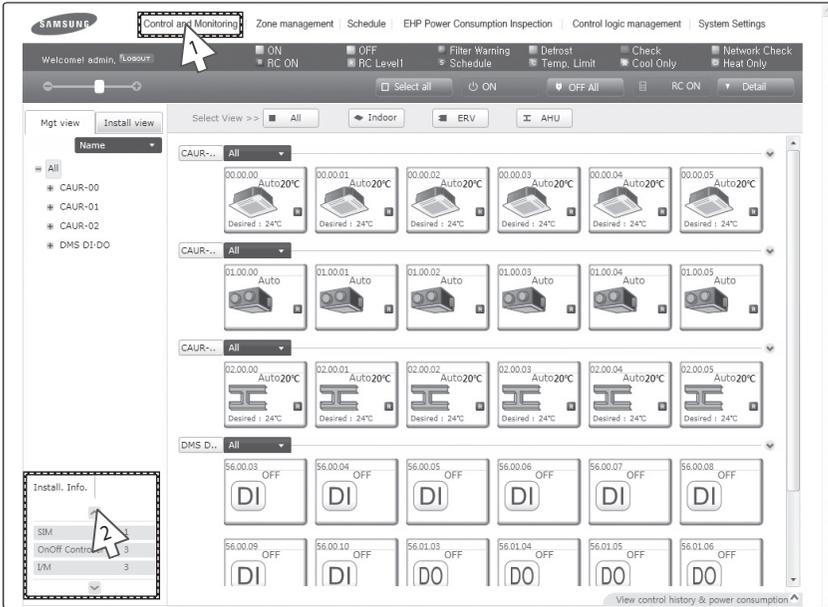
Controlling DMS DO



- 1 Click [Control and Monitoring] when DMS2 web page menu screen appears.
 - ◆ [Control and Monitoring] screen will appear when you log-in to DMS2 web page.
- 2 Select DO device to control when control and monitoring screen appears.
 - ◆ Check the status of DO device through the status window.
- 3 Click [Detail].
- 4 Control the DO device by clicking [ON]/[OFF].

Note Remote controller setting is not possible for DI/DO device.

Checking the Installation Information

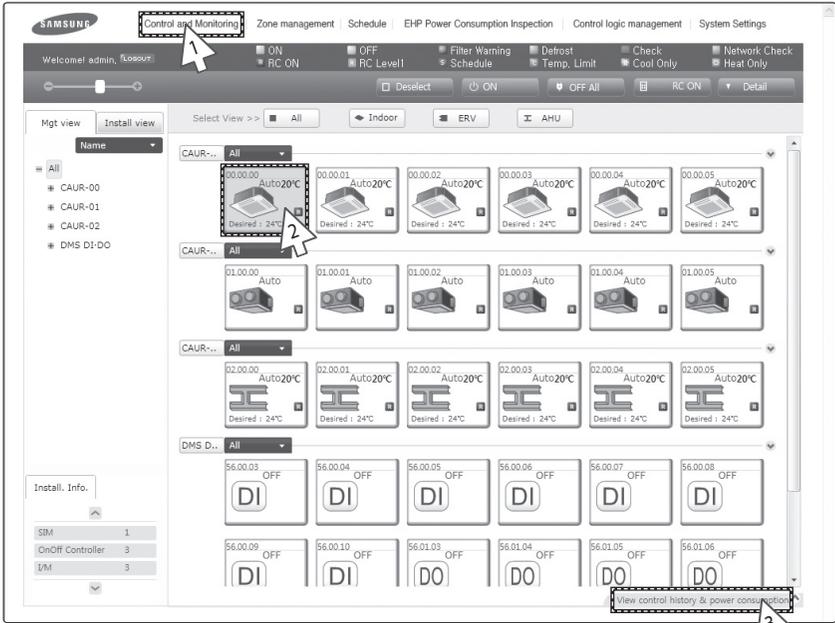


You can check the installation status of currently connected device.

- 1 Click [Control and Monitoring] when DMS2 web page menu screen appears.
 - ◆ [Control and Monitoring] screen will appear when you log-in to DMS2 web page.
- 2 Check installation status of currently connected device in the installation information tab.
 - ◆ You can check installation information by pressing [∧] and [∨] buttons.

Control and Monitoring (Continued)

View the Control History & Power Consumption



You can select a device and view control history and power consumption information.

- 1 Click [Control and Monitoring] when DMS2 web page menu screen appears.
 - ◆ [Control and Monitoring] screen will appear when you log-in to DMS2 web page.
- 2 Select a device you want to view control history and power consumption.
- 3 Click 'View control history & power consumption' tab and wait for a while.
 - ◆ Control history and power consumption information are received from DMS2.
 - ◆ 'Data receiving' message will appear on the bottom right of the tab.



The screenshot shows the Samsung Control and Monitoring interface. At the top, there are navigation tabs: Control and Monitoring, Zone management, Schedule, EHP Power Consumption Inspection, Control logic management, and System Settings. Below these are various status indicators and control buttons like 'Deselect', 'ON', 'OFF', 'RC ON', 'RC Level', 'Filter Warning', 'Schedule', 'Defrost', 'Temp. Limit', 'Check', 'Coal Only', 'Network Check', and 'Heat Only'. The main area displays a grid of device control cards for different zones (CAUR-00, CAUR-01, CAUR-02, DMS D1-00). Each card shows the device name, mode (e.g., Auto20°C), and desired temperature. A dashed box highlights a 'Control history' and 'Power consumption' table for a selected device (00.00.00).

Control history		Power consumption	
Controlled time	2010-02-26 22:12:26	Consumption in the current month	0.0 kWh
Type of control	User control	Average consumption current month	0.0 kWh
Power	OFF	Consumption of previous month	0.0 kWh
RC	-	Average consumption last month	0.0 kWh

4 When data reception is completed from DMS2, check control history and power consumption of selected device.

- Note**
- ◆ In 'Control history', you can check power control and remote controller usage status.
 - ◆ Operation mode, desired temperature, air flow and fan speed control shows you the controlled time and type of control only.
 - ◆ If SIM/PIM is not installed, power consumption information may not be correct.
 - Power consumption information is displayed only when SIM/PIM is installed.
 - If SIM/PIM is removed, value measured with SIM/PIM will be displayed.

Control and Monitoring (Continued)

Cycle Monitoring

The screenshot shows the Samsung DMS2 web interface. At the top, there are navigation tabs: Control and Monitoring, Zone management, Schedule, EHP Power Consumption Inspection, Control logic management, and System Settings. The main menu includes Cycle monitoring, Troubleshooting, and Checking Ventilation status. The Cycle monitoring page is active, showing a 'Select' dropdown menu with a list of indoor units (00.00.00 to 00.00.05, CAUR-01, CAUR-02). A table displays cycle data for the selected outdoor unit (Address: 00). Below the table, there is a 'Master' unit icon and a detailed table of system parameters.

Cycle Data (Current outdoor unit : 00.00.00)			
Oil recovering	None	Operation Mode	None
Total capacity of Indoor	0.5kWh	Defrost status	Off
Number of outdoor units	1	Oil balancing	None

Outdoor temperature	25°C	Model	DVM-PLUS3 HEATPUMP
Condenser outlet temp.	33°C	Oil / OLP temperature	10°C
Comp 2	On	Comp 3	On
Hot Gas Valve	On	Outdoor capacity	10HP
Liquid Bypass Valve	On	EVI Bypass Valve	On
Running currents(Comp.1)	10.0A	Running currents(Comp.2)	10.0A
Running currents(Comp.3)	10.0A	Running currents(Comp.3)	10.0A
High pressure data	17.0 kgf/cm2	Low pressure data	3.0 kgf/cm2
Double tube temperature	30°C	Double tube temperature	30°C
Main expansion valve step	300 STEP	EVI(Liquid) EEV	300 STEP
HR EEV(Gas Liquid EEV)	300 STEP	HR EEV(Gas Liquid EEV)	300 STEP
Discharge-1 temperature	22°C	Discharge-2 temperature	22°C
Discharge-3 temperature	22°C	Discharge-3 temperature	22°C
Outdoor Fan Step	30 STEP	Loading Time	5 Sec
Accumulator CCH	On	Accumulator CCH	On
CCH1	On	CCH2	On
CCH3	On	CCH3	On

Address	00.00.00	RMC	00	Mode	Auto	Current temp.	20°C	Desired temp.	24°C
Model	2 Way	Model	2 Way	Model	2 Way	Model	2 Way	Model	2 Way
Fan speed	Auto	Status	normal	Demand	100kcal	Model	2 Way	Model	2 Way

You can select an indoor unit and check cycle information.

- Click [Control and Monitoring] → [Cycle Monitoring] when DMS2 web page menu screen appears.
- Click [Select].
 - ◆ DMS2 installation information will be displayed.
- Select a device to check cycle information.
 - ◆ If you select centralized controller, its subordinate outdoor unit which has the earliest address will be selected.
 - ◆ If you select interface module, its subordinate outdoor unit will be selected.
 - ◆ If you select indoor unit, upper outdoor unit will be selected.
- Cycle information of selected outdoor unit and subordinate indoor units.
 - ◆ If the status of outdoor unit and indoor unit is changed, status value turns into blue.

Note You can check all the cycle information on DVM Plus 2 or DVM Plus 3 with the centralized controller MCM-A202B and interface module MIM-B13B (or higher version of those devices) only. However, some cycle information may not be displayed on any other models of outdoor unit.

Indoor Unit Usage Restriction_Operation Limit

Address	Name	Limit mode	Control mode	Lower temperature limit in Cool mode	Upper temperature limit in Heat mode
00,00,00(00)	00,00,00	None	<input type="radio"/> None <input type="radio"/> None	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C
00,00,01(01)	00,00,01	None	<input type="radio"/> None <input type="radio"/> None	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C
00,00,02(02)	00,00,02	None	<input type="radio"/> None <input type="radio"/> None	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C
00,00,03(03)	00,00,03	None	<input type="radio"/> None <input type="radio"/> None	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C

You can set the operation of indoor unit as cooling only and heating only.

- 1 Click [Control and Monitoring] → [Indoor unit usage restriction] when DMS2 web page menu screen appears.
- 2 Press [Edit] button.
- 3 Set the limit mode.
 - ◆ You can select 'Cool-only', 'Heat-only' or 'None'.
 - For cooling only indoor unit, you can select cool, dry and fan modes only.
 - For heating only indoor unit, you can select heat and fan modes only.

Control and Monitoring (Continued)

Address	Name	Limit mode	Control mode	Lower temperature limit in Cool mode	Upper temperature limit in Heat mode
00.00.00(00)	00.00.00	None	<input type="radio"/> None <input type="radio"/> Fan	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C
00.00.01(01)	00.00.01	None	<input type="radio"/> None <input type="radio"/> Fan	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C
00.00.02(02)	00.00.02	None	<input type="radio"/> None <input type="radio"/> Fan	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C
00.00.03(03)	00.00.03	None	<input type="radio"/> None <input type="radio"/> Fan	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C

4 Set the control mode.

- ◆ If you set the control mode, indoor unit operating in limited operation mode will be automatically set to operate in pre-set control mode. You can set the different control mode to each of the indoor units.
 - Cooling only indoor unit: You can select fan or cool mode.
 - Heating only indoor unit: You can select fan or heat mode.
- (Ex: When the indoor unit with fan mode is changed to heat mode, DMS2 will perceive it and control the indoor unit in fan mode.)

Note

- ◆ *Mixed operation can occur even if you set limit mode.*
- ◆ *If the indoor unit with operation mode limit is in mixed operation, DMS2 will solve the problem automatically by controlling it in control mode.*



CAUTION

- ① ***In the following circumstances, all indoor units under the same outdoor unit should be set to the same limit mode. Mixed operation can occur continuously when you set some of indoor unit to cool only and the other to heat only.***
 - *If the centralized controller is MCM-A202 and is in group mode*
 - *If the centralized controller is in group mode and the interface module is MIM-B13 or MIM-B04A*
- ② ***Except above ① circumstances, DMS2 changes the limit mode of all indoor units under the same outdoor unit to same limit mode.***
 - *If the centralized controller is in group mode and is above MCM-A202A and all the interface modules under the centralized controller are above MIM-B13A*
 - *If the centralized controller is in individual mode*
- ③ ***If you set the cooling only indoor unit's limit mode to heating only, DMS2 may display Heating ↔ Cooling alternately.***

Indoor Unit Usage Restriction_Temperature Limit in Cool/Heat mode

The screenshot shows the Samsung DMS2 web interface. The navigation menu includes: Control and Monitoring, Zone management, Schedule, EHP Power Consumption Inspection, Control logic management, and System Settings. The breadcrumb trail is: Welcome! admin, E386, Control and Monitoring > Indoor unit usage restriction. The main content area is titled 'Indoor unit usage restriction' and contains a table with the following data:

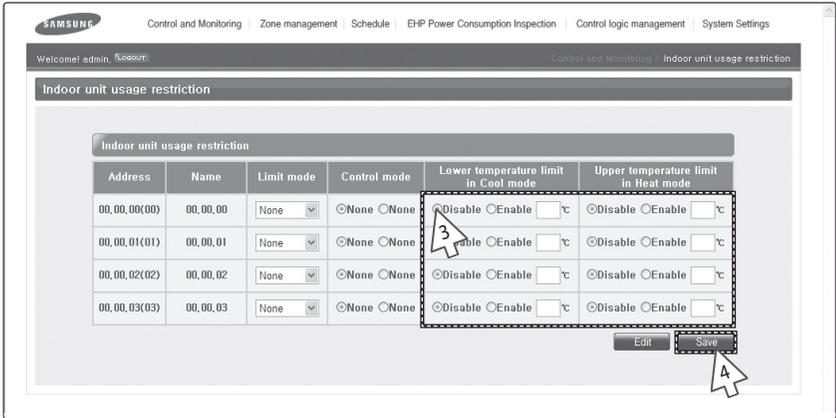
Address	Name	Limit mode	Control mode	Lower temperature limit in Cool mode	Upper temperature limit in Heat mode
00.00.00(00)	00.00.00	None	<input type="radio"/> None <input type="radio"/> None	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C
00.00.01(01)	00.00.01	None	<input type="radio"/> None <input type="radio"/> None	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C
00.00.02(02)	00.00.02	None	<input type="radio"/> None <input type="radio"/> None	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C
00.00.03(03)	00.00.03	None	<input type="radio"/> None <input type="radio"/> None	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C	<input type="radio"/> Disable <input type="radio"/> Enable <input type="text"/> °C

At the bottom right of the table, there is an 'Edit' button and a 'Save' button. A mouse cursor is pointing to the 'Edit' button.

You can set temperature lower/upper temperature limit in cool/heat mode.

- 1 Click [Control and Monitoring] → [Indoor unit usage restriction] when DMS2 web page menu screen appears.
- 2 Press [Edit] button.

Control and Monitoring (Continued)



3 Set the lower/upper temperature limit.

- ◆ You can set lower/upper temperature limit by selecting 'Enable'/'Disable'.
- ◆ If desired temperature is lower than lower limit temperature when the indoor unit is operating in cool mode, DMS2 controls indoor unit to lower temperature limit.
- ◆ If desired temperature is higher than upper limit temperature when the indoor unit is operating in heat mode, DMS2 controls indoor unit to upper temperature limit.
- ◆ Lower temperature limit range: 18°C(65°F)~30°C(86°F)
Upper temperature limit range: 16°C(61°F)~30°C(86°F)
- ◆ If the indoor unit is in Auto(Cool)/Auto(Heat) mode, lower/upper temperature limit will be applied when the indoor unit is operating in Auto mode.
However, if the upper temperature limit is set to 16°C(61°F)~17°C(64°F), the upper temperature limit in Auto(Heat) mode is 18°C(65°F).

4 Click [Save].

- ◆ Indoor unit usage restriction setting will be saved.

Checking the Trouble History

SAMSUNG Control and Monitoring Zone management Schedule EHP Power Consumption Inspection Control logic management System Settings

Welcome admin, [user] > Control and Monitoring Trouble history

Trouble history

2010 3 17 2010 3 17

All Communication trouble Search

Check	Address	Device type	Occurrence time	Resolution time	Code No.	Status
<input type="checkbox"/>	01	caur	2010-03-17 00:26	2010-03-17 00:33	611	Resolved (2)
DMS:DMS <-> CAUR Communi Error						
<input type="checkbox"/>	00	caur	2010-03-17 00:26	2010-03-17 00:33	611	Resolved (2)
<input type="checkbox"/>	32	peak	2010-03-17 00:26	2010-03-17 00:33	612	Resolved (2)
<input type="checkbox"/>	16	SIM	2010-03-17 00:26	2010-03-17 00:33	613	Resolved (2)

※ Click the row for detailed information.

1

Delete

- 1 Click [Control and Monitoring] → [Trouble history] when DMS2 web page menu screen appears.
- 2 Check all the trouble history.
 - ◆ You can check address, device type, occurrence time, resolution time, code number and status.
- 3 You can check detailed information on trouble history by selecting the item in the list.

- Note**
- ◆ **DMS2 saves maximum 1024 trouble histories. If the number of history exceeds 1024, DMS2 will delete the oldest history first.**
 - ◆ **If the same code trouble is detected repeatedly in the same device on the same day, trouble history will be shown as 1 case. If it occurs more than 2 times, 'Resolution time' may change every time you check. And the number of repetition will be displayed in 'Status' field.**

Control and Monitoring (Continued)

Checking the Trouble History by Date

The screenshot shows the Samsung DMS2 web interface. The top navigation bar includes 'Control and Monitoring', 'Zone management', 'Schedule', 'EHP Power Consumption Inspection', 'Control logic management', and 'System Settings'. The main content area is titled 'Trouble history' and features a search bar with a date range selector (2010-03-17 to 2010-03-17) and a 'Search' button. Below the search bar is a table with columns: Check, Address, Device type, Occurrence time, Resolution time, Code No., and Status. The table contains several rows of trouble records, including one for 'caur' and others for 'peak' and 'SIM'. A 'Delete' button is located at the bottom right of the table area.

Check	Address	Device type	Occurrence time	Resolution time	Code No.	Status
<input type="checkbox"/>	01	caur	2010-03-17 00:26	2010-03-17 00:33	611	Resolved (2)
DMS:DMS <-> CAUR Communicati...						
<input type="checkbox"/>	00	caur	2010-03-17 00:26	2010-03-17 00:33	611	Resolved (2)
<input type="checkbox"/>	32	peak	2010-03-17 00:26	2010-03-17 00:33	612	Resolved (2)
<input type="checkbox"/>	16	SIM	2010-03-17 00:26	2010-03-17 00:33	613	Resolved (2)

DMS2 saves maximum 1024 trouble histories. If the number of history exceeds 1024, DMS2 will delete the oldest history first.

- 1 Click [Control and Monitoring] → [Trouble history] when DMS2 web page menu screen appears.
- 2 Enter the time period you want to check.
 - ◆ Enter year/month/day in order.
- 3 Click [Search].
 - ◆ You can check address, device type, occurrence time, resolution time, code number and status in the entered period.
- 4 You can check detailed information on trouble history by selecting the item in the list.

Deleting the Trouble History

The screenshot shows the Samsung DMS2 web interface. The top navigation bar includes 'Control and Monitoring', 'Zone management', 'Schedule', 'EHP Power Consumption Inspection', 'Control logic management', and 'System Settings'. The 'Trouble history' menu item is highlighted with a dashed box and a mouse cursor labeled '1'. Below the navigation bar, there are filters for year (2010), month (3), and day (17). The main content area displays a table of trouble records. The table has columns: Check, Address, Device type, Occurrence time, Resolution time, Code No., and Status. The first row is highlighted with a dashed box and a mouse cursor labeled '2'. Below the table, there is a confirmation dialog with a 'Delete' button highlighted by a dashed box and a mouse cursor labeled '3'.

Check	Address	Device type	Occurrence time	Resolution time	Code No.	Status
	01	caur	2010-03-17 00:26	2010-03-17 00:33	611	Resolved (2)
DMS:DMS <-> CAUR Communication Error						
<input checked="" type="checkbox"/>	00	caur	2010-03-17 00:26	2010-03-17 00:33	611	Resolved (2)
<input checked="" type="checkbox"/>	32	peak	2010-03-17 00:26	2010-03-17 00:33	612	Resolved (2)
<input checked="" type="checkbox"/>	16	SIM	2010-03-17 00:26	2010-03-17 00:33	613	Resolved (2)

× Click the row for detailed information.

- 1 Click [Control and Monitoring] → [Trouble history] when DMS2 web page menu screen appears.
- 2 Select trouble history you want to delete.
- 3 Click [Delete].
 - ◆ Click [OK] from the confirm window. Selected trouble history will be deleted.

Control and Monitoring (Continued)

Checking the Operation Status

The screenshot shows the Samsung Control and Monitoring web interface. The top navigation bar includes 'Control and Monitoring', 'Zone management', 'Schedule', 'EHP Power Consumption Inspection', 'Control logic management', and 'System Settings'. A dropdown menu is open under 'Control and Monitoring', showing options like 'Cycle monitoring', 'Indoor unit usage restriction', and 'Checking operation status'. The 'Checking operation status' option is selected. Below the menu, there is a search bar with filters for year (2010), month (2), day (27), and status (all). A table displays the operation history with columns: Device type, Occurrence time, Control Unit, Control type, and Controlled device. The table contains three rows of data. A mouse cursor is pointing at the 'Checking operation status' menu item (1), the search bar (2), and a row in the table (3). Below the table, there is a section for 'Control device (DVM)' with detailed information and a 'Power : Off' status. A note at the bottom says 'Click the row for detailed information.'

Device type	Occurrence time	Control Unit	Control type	Controlled device
DVM	2010.02.27 07:59:53	DMS Web	Upper controller control	02.00.05.02.00.04.02.00.
DVM	2010.02.27 07:59:53	DMS Web	Upper controller control	01.00.05.01.00.04.01.00...
DVM	2010.02.27 07:59:53	DMS Web	Upper controller control	00.00.00

You can check operation status of indoor unit which is controlled by DMS2.

- 1 Click [Control and Monitoring] → [Checking operation status] when DMS2 web page menu screen appears.
- 2 Check the operation history.
 - ◆ You can check the device type, occurrence time, control unit, control type, and controlled device address of indoor unit which is controlled by DMS2 and subordinate controller.
- 3 You can check operation status by entering date.
 - ◆ Enter year/month/day then click [Search]. You can check control history that occurred on the entered date.
- 4 You can check detailed control history which is controlled by the command by pressing control history in the list.

Note DMS2 saves the information of operation history for 180 days. However, it varies depending on saving space of DMS2.

Zone Management

Zone Setting & Edit – Individual/Group Initialization

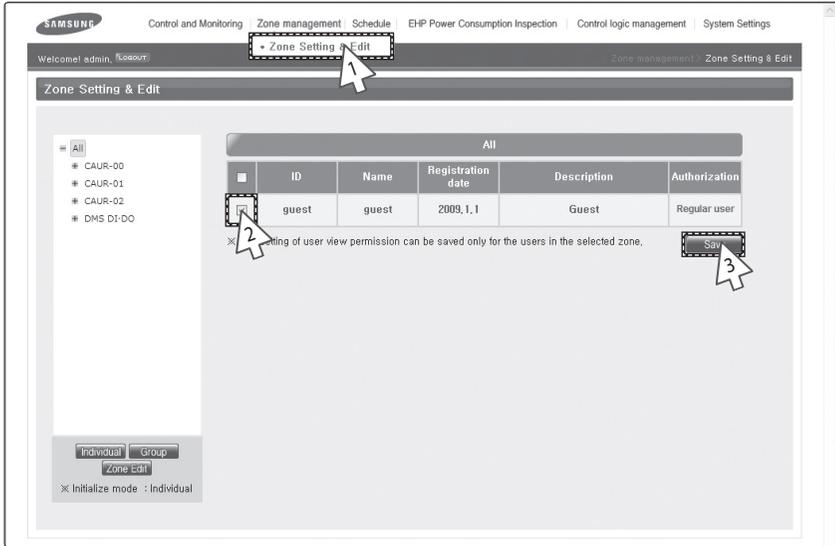


- 1 Click [Zone management] → [Zone Setting & Edit] when DMS2 web page menu screen appears.
 - ◆ Same screen will be displayed even if you click [Zone management] only.
- 2 Initialize the indoor unit organization as individual by clicking [Individual].
 - ◆ Individual initialization reorganizes connected indoor unit based on installation address.
- 3 Initialize the indoor unit organization as group by clicking [Group].
 - ◆ Group initialization reorganizes connected indoor unit based on RMC address.
 - ◆ After group initialization, indoor units are displayed as one device when upper zone is selected in the [Control and Monitoring] screen.
 - ◆ When editing zone after group initialization, moving in group is only allowed.
 - ◆ After group initialization, subordinate devices cannot be moved individually to the other zone.

- Note**
- ◆ Only the user who has authorization to edit all zones can use zone initialization. - To the user who has no authorization to use zone initialization and manage structure, button will not be displayed.
 - ◆ If the user does not have authorization to edit zone, [Individual], [Group] and [Zone edit] will not be displayed.

Zone Management (Continued)

Zone Setting & Edit – Setting the User Authorization

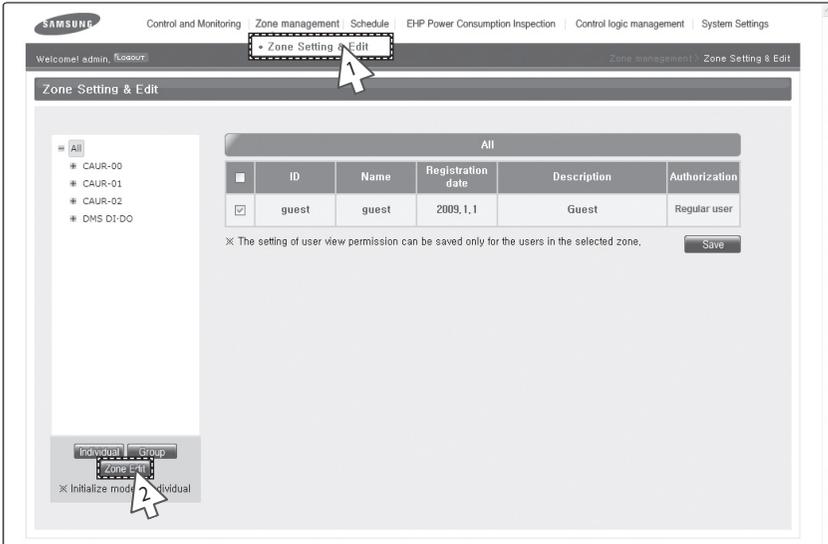


- 1 Click [Zone management] → [Zone Setting & Edit] when DMS2 web page menu screen appears.
 - ◆ Same screen will be displayed even if you press [Zone management] only.
- 2 Set user authorization for each zone.
 - ◆ If the user has no authorization for the zone, controlling and monitoring of the zone is restricted.
 - ◆ The user who is allowed to control and monitor zone has '☑' sign.
- 3 Click [Save] to save.
 - ◆ The user of currently selected zone is selected in the screen.



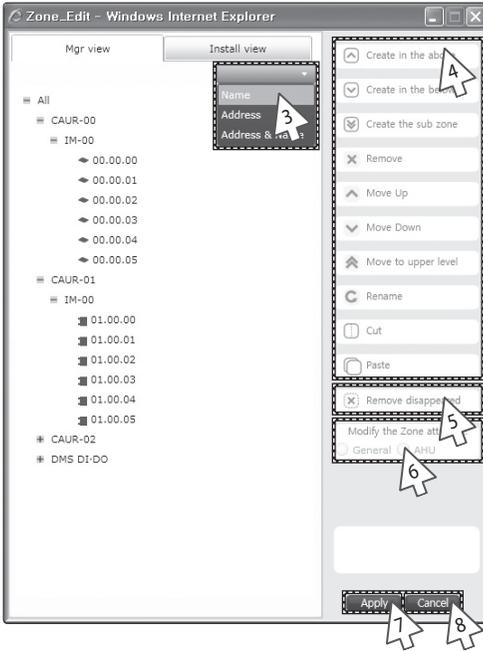
- ◆ **You should set the authorization for controlling and monitoring the zone when the user is added.**
- ◆ **If you do not set the authorization for zone after adding a user, the zone will not be displayed even if the user logged in.**
- ◆ **Setting the user authorization is valid only for the zone displayed on the screen. If you select the other zone setting without clicking save button after changing the setting, user authorization for previously selected zone will be gone.**
- ◆ **When initializing zone, all rights are given to all users.**

Zone Setting & Edit – Zone Edit



- 1 Click [Zone management] → [Zone Setting & Edit] when DMS2 web page menu screen appears.
 - ◆ Same screen will be displayed even if you press [Zone management] only.
- 2 Click [Zone Edit].
 - ◆ Zone edit screen will be displayed.

Zone Management (Continued)



- 3 Click [▼] to set viewing option of zone edit list.
 - ◆ You can select from viewing by 'Name', 'Address' and 'Address & Name'.

- 4 Edit item you want.

Create in the above	Create a new zone on top of the selected zone.
Create in the below	Create a new zone under the selected zone.
Create the sub zone	Create a zone one step lower than the user selected. You cannot create a zone under 5 steps in zone edit.
Remove	Remove selected zone. If the selected zone includes device, the device will move to the top step.
Move up	Move up the selected zone or indoor unit.
Move down	Move down the selected zone or indoor unit.
Move to upper level	Move the selected zone or indoor unit to the upper level.
Rename	Rename the selected zone or indoor unit. You can use maximum 16 letters.
Cut	Cut to move the selected zone or indoor unit,
Paste	Move the cut zone or indoor unit to the selected zone.

5 Click [Remove disappeared] to remove all disappeared devices which were found after tracking.

6 Change zone properties.

◆ You can select "General", "AHU", and "Group".

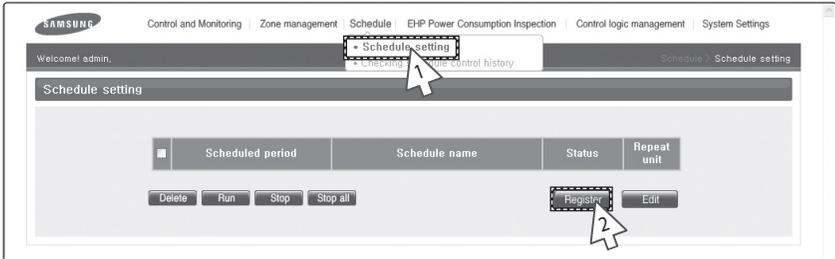
Mode	Property name	Description	Remarks
Individual initialization mode	General	<ul style="list-style-type: none"> ■ Virtual group which is managed by installation address, not by RMC address ■ The user can create and delete zone. 	-
	Group	Not applicable. (Only supported in group initialization mode.)	Not applicable. (Only supported in group initialization mode.)
	AHU	<ul style="list-style-type: none"> ■ Virtual group which manages AHU kit in general zone. ■ The user can create and delete. 	<ul style="list-style-type: none"> ■ It will be displayed as single device in the control and monitoring screen, and it can be controlled as single device. ■ You cannot move subordinate device to the other zone.
Group initialization mode	General	<ul style="list-style-type: none"> ■ Virtual group which is set and managed by the user. ■ The user can create and delete. 	-
	Group	<ul style="list-style-type: none"> ■ Virtual group which is managed by installation address, not by RMC address. ■ The user cannot create and delete. DMS2 creates it automatically. 	<ul style="list-style-type: none"> ■ It is displayed like as one device in the control and monitoring screen and can be controlled. ■ You cannot move subordinate device to the other zone.
	AHU	<ul style="list-style-type: none"> ■ Virtual group which manages AHU kit in general zone. ■ The user can create and delete. 	<ul style="list-style-type: none"> ■ It is displayed like as one device in the control and monitoring screen and can be controlled. ■ You cannot move subordinate device to the other zone.

7 Click [Apply].

◆ Edited zone structure will be applied.

8 To cancel the setting, click [Cancel].

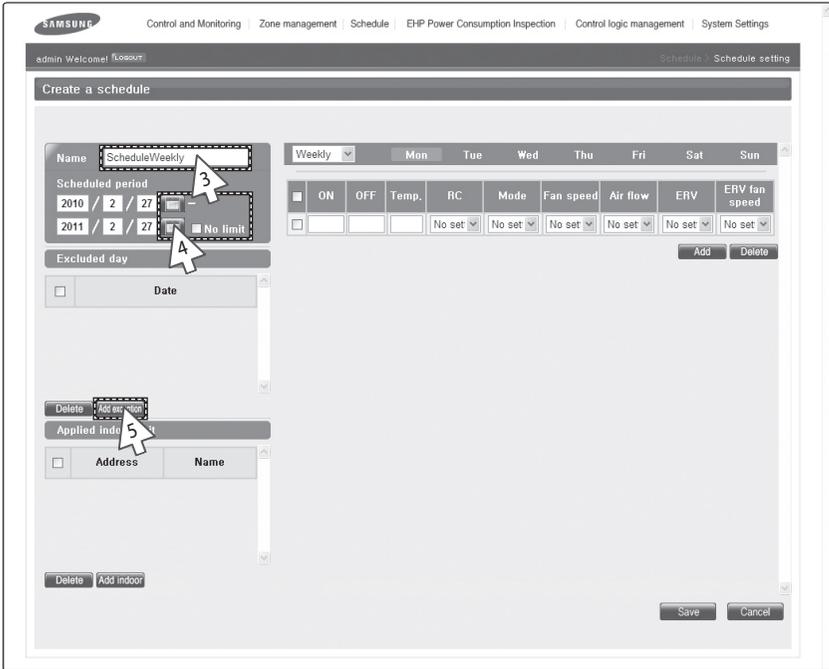
Creating New schedule



You can set, edit, delete and use the schedules for air conditioner control.

- 1 Click [Schedule] → [Schedule setting] when DMS2 web page menu screen appears.
- 2 Click [Register] in the schedule setting screen.

Note It is not available to provide the schedule information to BMS system.



- 3 Enter the schedule name when the schedule setting screen appears.
- 4 Select schedule period you want by clicking calendar.
 - ◆ If you select 'No limit' when setting end date, it means there is no period and it displays Dec 31st, 9999. To set the end date, remove the check of 'No limit' or select calendar icon which is on the right side of date.
- 5 To set an exception date in the schedule period, click [Add exception] and select date(month/day) you want.
 - ◆ Select an exception date on the calendar window.

Schedule (Continued)

The screenshot shows the 'Schedule setting' interface. At the top, there are navigation links: Control and Monitoring, Zone management, Schedule, EHP Power Consumption Inspection, Control logic management, and System Settings. Below this, there's a breadcrumb trail: admin Welcome! > Lobby1 > Schedule > Schedule setting.

The main section is titled 'Create a schedule'. It contains several sections:

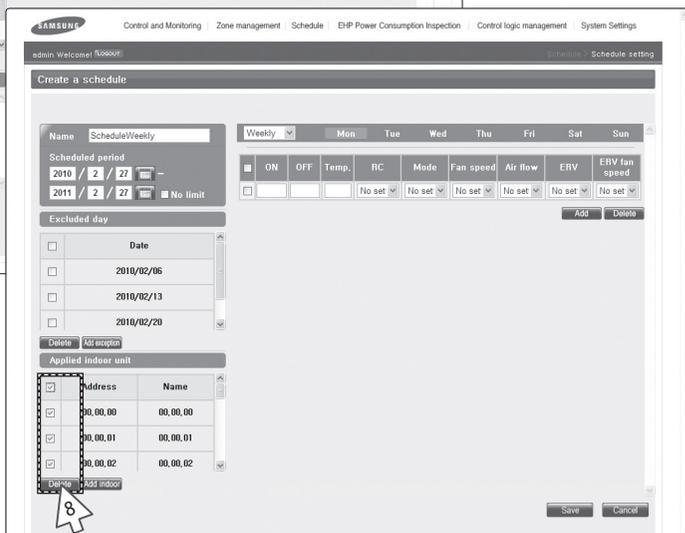
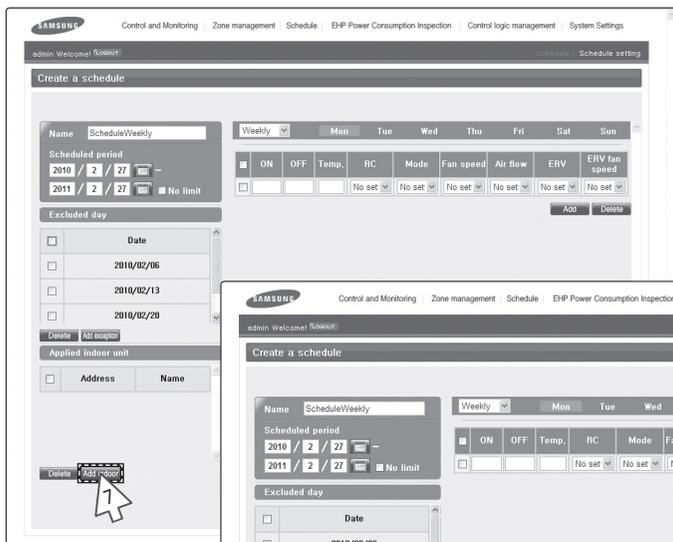
- Name:** A text input field containing 'ScheduleWeekly'.
- Scheduled period:** Two date pickers. The first is set to '2010 / 2 / 27' and the second to '2011 / 2 / 27'. There is a 'No limit' checkbox.
- Excluded day:** A table with columns for 'Date' and checkboxes. The table contains three rows:

Date	
2010/02/06	<input type="checkbox"/>
2010/02/13	<input checked="" type="checkbox"/>
2010/02/20	<input checked="" type="checkbox"/>

A mouse cursor is pointing at the 'Delete' button next to the first row. Below the table are 'Delete' and 'Add exception' buttons.
- Applied indoor unit:** A table with columns for 'Address' and 'Name'. It is currently empty. Below it are 'Delete' and 'Add indoor' buttons.

At the bottom right, there are 'Save' and 'Cancel' buttons.

- To cancel the added exception date, select the exception date it() and click [Delete].
 - ◆ Maximum 365 exception dates can be saved.



- 7 Click [Add indoor] to select an indoor unit to apply.
 ◆ All the connected indoor units list will be displayed.

- 8 To cancel the indoor unit selection, select (☑) the indoor unit again and click [Delete].

Schedule (Continued)

The screenshot shows the 'Schedule setting' interface. The 'Create a schedule' section includes:

- Name:** ScheduleWeekly
- Scheduled period:** 2010/2/27 to 2011/2/27 (No limit)
- Excluded day:** 2010/02/06, 2010/02/13, 2010/02/20
- Applied indoor unit:** 00.00.00, 00.00.01, 00.00.02

The event settings table is as follows:

Weekly	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Weekly							
Everyday							
1day							
<input type="checkbox"/>	08:00	19:30		No set	No set	No set	No set

- 9 Click [v] to select repeat schedule you want and set an event.
 - ◆ You can select 'Weekly', 'Everyday' and '1day'.
However, the starting and end date should be same when you select '1day'.
 - ◆ Enter 4 digits for ON/OFF time setting.
Ex) 8:00 → 0800, 9:30 → 0930
 - ◆ Remote controller setting is as follows.
 - ON: Controlling indoor unit using wired/wireless remote controller or indoor unit panel in each room is possible.
 - OFF: Controlling indoor unit using wired/wireless remote controller or indoor unit panel in each room is not possible.
 - Level1
 - ON by centralized controller, DMS2: Controlling indoor unit using wired/wireless remote controller or indoor unit panel in each room is possible.
 - OFF by centralized controller, DMS2: Controlling indoor unit using wired/wireless remote controller or indoor unit panel in each room is not possible.
- ◆ Click [Add] to add event.
- ◆ To delete event, select an event() and click [Delete].
- ◆ Maximum 70 events can be set per 1 schedule. In case of week schedule, 10 events per 1 day can be set.
- ◆ If starting and end time of schedule event are repeated, only the schedule event which is made earlier will be executed.

10 Click [Save].

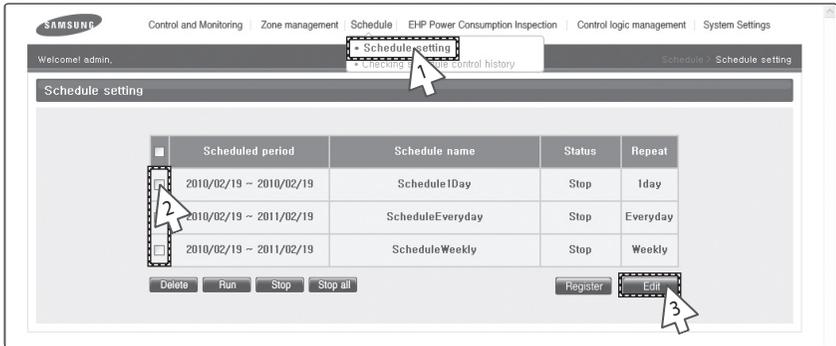
- ◆ Set schedule information is saved in DMS2.
 - ◆ Click [Cancel] to cancel schedule setting.
-

Note

- ◆ *If you select dry mode among basic modes, auto fan speed is only available.*
- ◆ *When the operation mode is 'Auto', fan speed is always set to 'Auto'.*
- ◆ *When the operation mode is 'Fan', you cannot control fan speed as 'Auto'.*
- ◆ *When the operation mode is 'Dry', fan speed is always set to 'Auto'.*
- ◆ *When you select sleep mode among ERV modes, 'Mid' fan speed is only available.*
- ◆ *The desired temperature range is as below.*
 - *Celsius: 16°C~30°C in heating mode, 18°C~30°C in cooling mode*
 - *Fahrenheit: 61°F~86°F in heating mode, 65°F~86°F in cooling mode*
- ◆ *If the tracking is not completed, schedule setting is not possible. To use proper schedule function, make sure to complete tracking with installation engineer.*

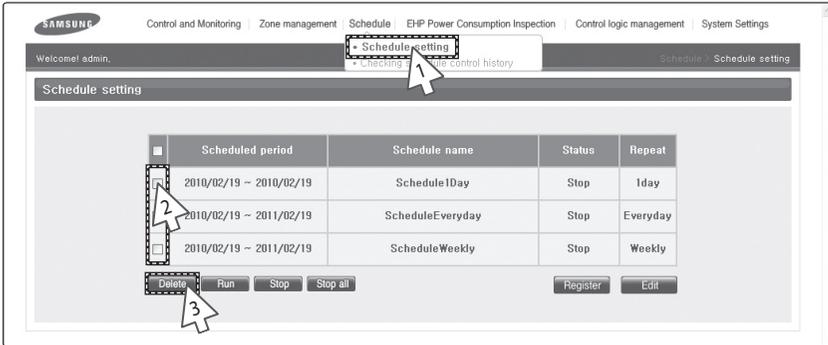
Schedule (Continued)

Editing Schedule



- 1 Click [Schedule] → [Schedule setting] when DMS2 web page menu screen appears.
- 2 Select the schedule to edit.
 - ◆ For the currently operating schedule, you can only check it.
- 3 Click [Edit].
 - ◆ Edit schedule when the schedule edit screen appears.
 - ◆ Editing schedule method is same as "Creating New Schedule". (Refer to page 50~55)

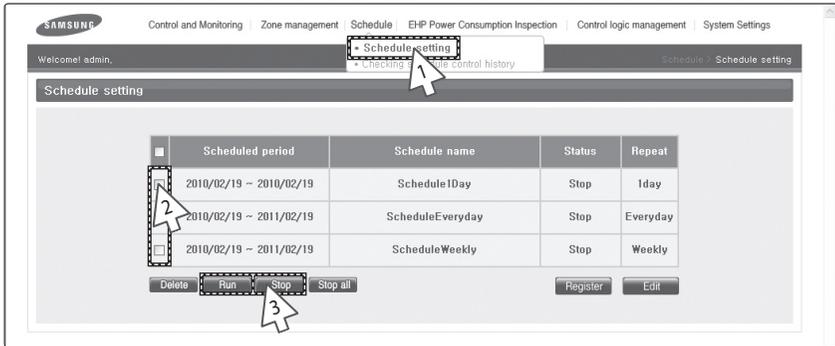
Deleting Schedule



- 1 Click [Schedule] → [Schedule setting] when DMS2 web page menu screen appears.
- 2 Select the schedule to delete.
- 3 Click [Delete].
 - ◆ Click [OK] in confirm window and selected schedule will be deleted.
 - ◆ Deleting schedule is possible only when the schedule is in stop status.
If you want to delete schedule which is currently applied, stop applying the schedule first.

Schedule (Continued)

Applying schedule



- 1 Click [Schedule] → [Schedule setting] when DMS2 web page menu screen appears.
- 2 Select the schedule you want to use.
- 3 Use schedule functions by clicking [Run] and [Stop].
 - ◆ To apply the selected schedule, click [Run].
 - ◆ To stop the selected schedule, click [Stop].

Note To stop all schedules, click [Stop all].
- Currently applied schedule will be stopped.

Checking Schedule Control History

The screenshot shows the 'Checking schedule control history' page in the DMS2 web interface. The page has a navigation bar with 'Schedule' selected. Below the navigation bar, there is a search bar with a date range of 2010-02-27 and a 'Search' button. The search results are displayed in a table with the following columns: Schedule name, Occurrence, Controlling subject, and Control type. The table contains one entry: 'ScheduleEveryday' with an occurrence of '2010,02,27 08:00:09', a controlling subject of 'DMS internal features', and a control type of 'Schedule control'. Below the table, there is a detailed view of the selected schedule, including the control device type (DVM) and power status (On, Set temperature: 22).

Schedule name	Occurrence	Controlling subject	Control type
ScheduleEveryday	2010,02,27 08:00:09	DMS internal features	Schedule control

Control device type : DVM
Power : On, Set temperature : 22

Click the row for detailed information.

- 1 Click [Schedule] → [Checking schedule control history] when DMS2 web page menu screen appears.
- 2 Select a date to check and then click [Search].
◆ Only executed schedules can be searched.
- 3 You can check detailed setting by clicking the schedule name.

Note *DMS2 saves the information or schedule control history for 180 days. However, it varies depending on saving space of DMS2.*

EHP Power Consumption Inspection

Checking Inspection Result (with SIM/PIM)

Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, floorout

Check inspection result

Check inspection result

- Setting and checking watt-hour meter
- Setting and checking indoor channel
- Channel setting by indoor unit
- Checking indoor unit operation time

2010 2 26 ~ 2010 2 26 Search

Power consumption • Proportion • Individual indoor unit by date

2-26 ~ 2010-2-26

Indoor unit address	Indoor unit name	Used power consumption (kWh)
00.00.00	00.00.00	0.0
00.00.01	00.00.01	0.0
00.00.02	00.00.02	0.0
00.00.03	00.00.03	0.0
00.00.04	00.00.04	0.0
00.00.05	00.00.05	0.0
Total power consumption (kWh)		0.0

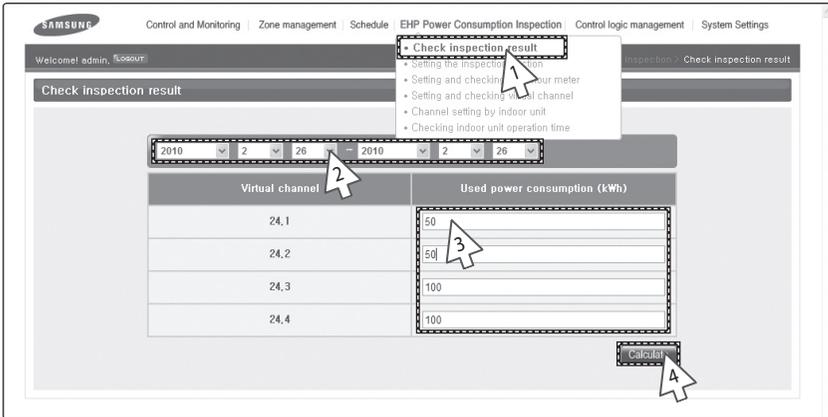
Save as Excel

You can check the operation history and power consumption saved in DMS for each indoor unit.

- 1 Click [EHP Power Consumption Inspection] → [Check inspection result] when DMS2 web page menu screen appears.
- 2 Set date and search condition (power consumption/proportion/individual indoor unit by date) when inspection result screen appears.
 - ◆ Select year/month/day in order.
 - ◆ Based on DMS2 time, you can check up to 365 days of watt-hour meter value.
- 3 Click [Search].
 - ◆ Inspection result will be displayed depending on set period and searching condition.
 - ◆ You can check power consumption only when watt-hour meter is connected.
If watt-hour meter is not connected, you can check operating proportion by indoor unit only.
- 4 Click [Save as Excel].
 - ◆ Searched inspection result will be saved as MS Excel file.

Note For data management, it is recommended to save indoor unit inspection result periodically.

Checking Inspection Result (without SIM/PIM)



- 1 Click [EHP Power Consumption Inspection] → [Check inspection result] when DMS2 web page menu screen appears.
 - ◆ Channel setting by indoor unit must be done in advance.

- 2 Set date when inspection result screen appears.
 - ◆ Select year/month/day in order.
 - ◆ Based on DMS2 time, You can check up to 365 days of inspection results.

- 3 Enter power consumption value during the period.
 - ◆ Virtual channel is value which is set in channel setting by indoor unit.

- 4 Click [Calculate].
 - ◆ Power consumption by indoor unit during the period will be displayed.

EHP Power Consumption Inspection (Continued)

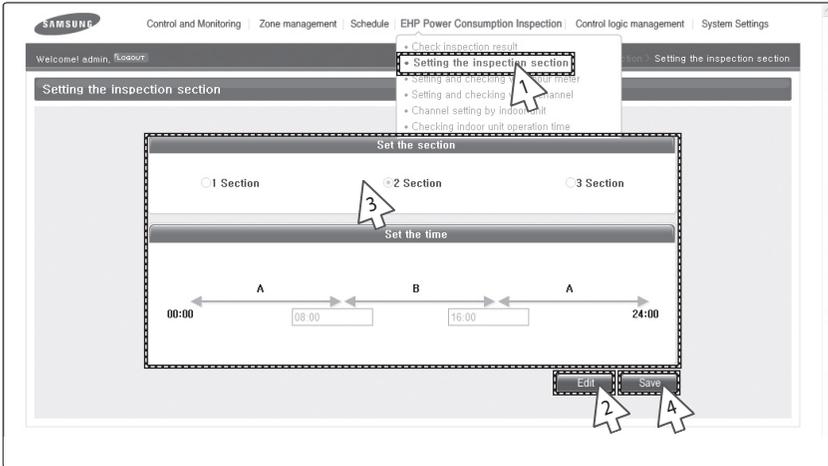
The screenshot shows the 'Check inspection result' screen in the Samsung EHP web interface. The page title is 'Check inspection result'. Below the title, there are two radio buttons: 'Power consumption' (selected) and 'Proportion', with a 'Calculate' button to the right. Below this, a date range '2010-2-26~2010-2-26' is displayed. A table with three columns is shown: 'Indoor unit address', 'Indoor unit name', and 'Used power consumption (kWh)'. The table contains five rows of data and a total row. A 'Save as Excel' button is located at the bottom right of the table area.

Indoor unit address	Indoor unit name	Used power consumption (kWh)
00.00.00	00.00.00	28.877
00.00.01	00.00.01	28.447
00.00.02	00.00.02	23.149
00.00.03	00.00.03	23.149
00.00.04	00.00.04	23.149
Total power consumption (kWh)		300.001

- 5 Check the power consumption result of the selected period.
 - ◆ Due to rounding the actual values, actual input value and result value may differ to each other.
 - ◆ If you want to save the consumption result for selected period as MS Excel file, click [Save as Excel].
 - ◆ Click [Calculate] to go back to inspection result screen.

Note For data management, it is recommended to save indoor unit inspection result periodically.

Setting the Inspection Section



- 1 Click [EHP Power Consumption Inspection] → [Setting the inspection section] when DMS2 web page menu screen appears.
- 2 Click [Edit] when inspection result screen appears.
 - ◆ 1 section is set as default.
- 3 Select a section and enter time by section.
 - ◆ You should enter time of section B when selecting section. And you should enter time if section B and C when selecting 3 sections.
 - ◆ Correct format of time is HH:MM.
Ex) 4:30 in the afternoon → 16:30
- 4 Click [Save].
 - ◆ Set power section will be saved in DMS2.
 - ◆ If you do not click [Save], changed setting will not be saved.

- Note**
- ◆ Ex) When selecting 2 sections(A, B, C)
If the border time between A and B is 08:00, section A is 00:00 ~ 08:00, section B is 08:01 ~ 18:00, and section A again is 18:01 ~ 24:00.
 - ◆ Checking inspection result by section is available in S-NET 3 only.

EHP Power Consumption Inspection (Continued)

Setting and Checking Watt-Hour Meter

SIM Channel	Name	CT proportion	Watt-hour meter value (kWh)
16.1	16.1	1	6.0
16.2	16.2	1	6.0
16.3	16.3	1	6.0
16.4	16.4	1	6.0
16.5	16.5	1	6.0
16.6	16.6	1	6.0
16.7	16.7	1	6.0
16.8	16.8	1	6.0

- 1 Click [EHP Power Consumption Inspection] → [Setting and checking watt-hour meter] when DMS2 web page menu screen appears.
 - ◆ Setting watt-hour meter is possible only when SIM/PIM is installed.
- 2 Click [Edit] when the setting and checking watt-hour meter screen appears.
 - ◆ CT proportion '1' is set as default.
- 3 Set name and CT proportion of watt-hour meter.
 - ◆ You can use maximum 16 letters.
 - ◆ The range of CT proportion value is positive number from 1 to 5000.
- 4 Click [Save].
 - ◆ Set watt-hour meter information will be saved in DMS2.
 - ◆ If you do not click [Save], changed setting will not be saved.
 - ◆ Watt-hour meter value shows actual value of currently connected watt-hour meter. Watt-hour meter value will be updated automatically.



When using CT watt-hour meter, be careful that there can be difference with actual power consumption as much as CT ratio error.

Checking Kilowatthour History

The screenshot shows the Samsung DMS2 web interface. The top navigation bar includes: Control and Monitoring, Zone management, Schedule, EHP Power Consumption Inspection, Control logic management, and System Settings. The main content area is titled 'Setting and checking watt-hour meter'. It features a table with the following data:

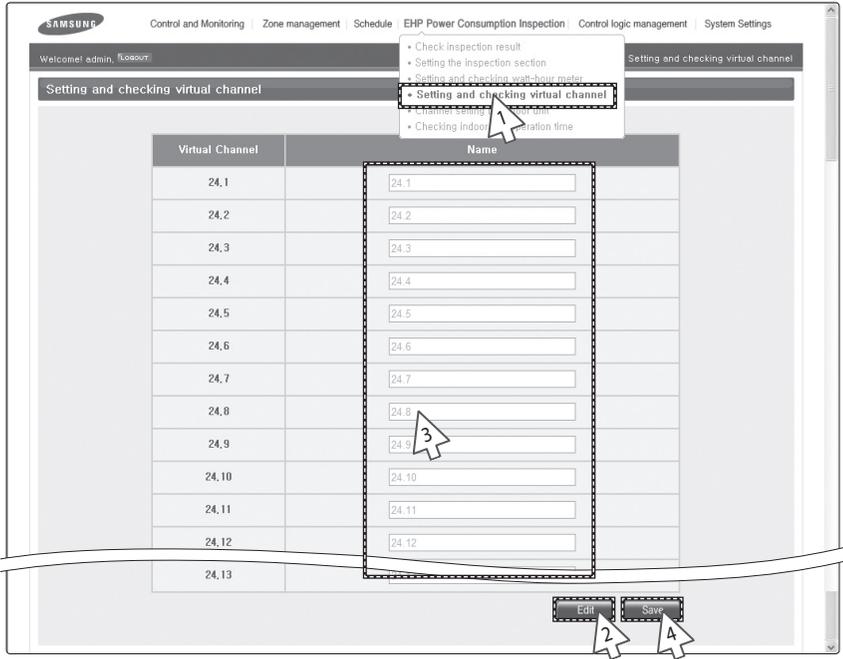
SIM Channel	Name	CT proportion	Watt-hour value
16.1	16.1	1	6.0
16.2	16.2	1	6.0
16.3	16.3	1	6.0
16.4	16.4	1	6.0
16.5	16.5	1	6.0
16.6	16.6	1	6.0

Below the table are 'Edit' and 'Save' buttons. A second screenshot, titled 'Watt-hour meter history', shows a 'SIM Address' field set to '16' and a date range selector from '2010-1-20' to '2010-1-20'. A 'Check' button is visible. Below the date range, a table shows columns for 'Date' and SIM addresses 16.1 through 16.8. The text 'No Watt-hour meter value history exists.' is displayed at the bottom.

- 1 Click [EHP Power Consumption Inspection] → [Setting and Checking watt-hour meter] when DMS2 web page menu screen appears.
- 2 Click [Kilowatthour history] when the setting and checking watt-hour meter screen appears.
- 3 Select SIM/PIM address and date you want when the kilowatthour history screen appears.
 - ◆ Enter year/month/day in order.
 - ◆ Based on DMS2 time, you can check up to 365 days of kilowatthour history.
- 4 Click [Check].
 - ◆ Kilowatthour history of set period will be displayed.

EHP Power Consumption Inspection (Continued)

Setting and Checking Virtual Channel



- 1 Click [EHP Power Consumption Inspection] → [Setting and checking virtual channel] when DMS2 web page menu screen appears.
 - ◆ Maximum 128 virtual channels can be set.
Virtual channel is written in (24 ~ 31).(1 ~ 16) format address.
Ex) 24.1, 25.2, 31.8
- 2 Click [Edit] when the setting and checking virtual channel screen appears.
- 3 Set the name of virtual channel.
 - ◆ You can use maximum 16 letters.
- 4 Click [Save].
 - ◆ Set virtual channel name will be saved in DMS2.
 - ◆ If you do not click [Save], changed setting will not be saved.

Channel Setting by Indoor Unit

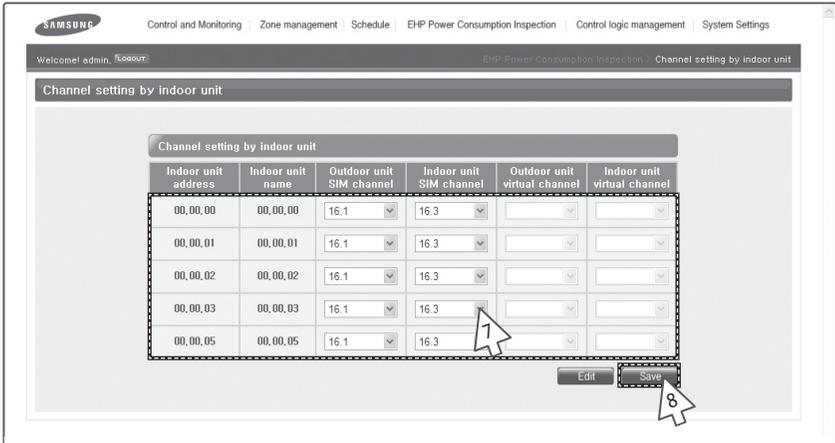
Channel setting by indoor unit

Indoor unit address	Indoor unit name	Outdoor unit SIM channel	Indoor unit SIM channel	Outdoor unit virtual channel	Indoor unit virtual channel
00,00,00	00,00,00	16.1	16.3		
00,00,01	00,00,01	16.1	16.3		
00,00,02	00,00,02	16.1	16.3		
00,00,03	00,00,03	16.1	16.3		
00,00,04	00,00,04	16.1	16.3		
00,00,05	00,00,05	16.1	16.3		
02,00,00(AHU)	02,00,00	16.2	16.4		

Edit Save

- 1 Click [EHP Power Consumption Inspection] → [Channel setting by indoor unit] when DMS2 web page menu screen appears.
- 2 Click [Edit] when the setting channel by indoor unit screen appears.

EHP Power Consumption Inspection (Continued)



3 Check the address and channel information of SIM/PIM which is connected to watt-hour meter.

- ◆ If 0~7 SIM/PIM units execute tracking, it will be displayed as 16~23 in DMS2.
- ◆ Below table shows the channel information of the terminal which SIM and watt-hour meter is connected.
(Terminal block 1 is on the very left side in SIM.)

Terminal block Location	Terminal block 1	Terminal block 2	Terminal block 3	Terminal block 4
Top part	1	2	3	4
Bottom part	5	6	7	8

- ◆ PIM: Channel 1 is on the most left side and 8 channels are arranged in a line.

4 Check the information of indoor/outdoor unit which is connected to watt-hour meter.

5 Check the SIM/PIM channel(watt-hour meter) information of indoor/outdoor unit.

- ◆ You can set the channel when SIM/PIM is installed in DMS2.
- ◆ When bringing indoor unit's power from outdoor unit, set the 'Outdoor unit SIM channel' information.
('Outdoor unit SIM channel' is referring to watt-hour meter which is connected to outdoor unit.)
- ◆ When bringing indoor unit's power from the other device, not from outdoor unit, set the 'Outdoor unit SIM channel' and 'Indoor unit SIM channel' information.
('Indoor unit SIM channel' is referring to watt-hour meter which is connected to indoor unit.)
- ◆ Power distribution will be executed automatically. The user does not need to check the value of watt-hour meter.

-
- 6 Check the virtual channel information of indoor/outdoor unit.
- ◆ To execute power distribution without SIM/PIM, you should set virtual channel.
 - ◆ When bringing indoor unit's power from outdoor unit, set the 'Outdoor unit virtual channel' information only.
('Outdoor unit virtual channel' is referring to watt-hour meter which is connected to outdoor unit.)
 - ◆ When bringing indoor unit's power from the other device, not from outdoor unit, set the 'Outdoor unit virtual channel' and 'Indoor unit virtual channel' information.
('Indoor unit virtual channel' is referring to watt-hour meter which is connected to indoor unit.)
 - ◆ The number of virtual channel varies depending on the number of interface module.
 - ◆ To execute power distribution, you need to check watt-hour meter value manually.
 - ◆ Power distribution using SIM/PIM is more accurate than using indoor/outdoor unit virtual channel. Therefore, it is recommended to execute power distribution using SIM/PIM.
-
- 7 Set indoor unit to execute power distribution.
- ◆ If you do not set the watt-hour meter information, the power distribution result of the indoor unit will be displayed as '0'.
-
- 8 Click [Save].
- ◆ Set channel information will be saved in DMS2.
 - ◆ If you do not click [Save], changed setting will not be saved.
-



CAUTION

- ◆ **Information of watt-hour meter connected to indoor/outdoor unit should be accurate. If the watt-hour meter information is not accurate when you set channel information of indoor unit, error may occur in the power distribution result.**
- ◆ **You should set SIM/PIM channel information in the indoor unit if you want to execute power distribution using SIM/PIM. If not, it means that you do not execute power distribution. In this case, the power distribution result of the indoor unit will be '0'.**
- ◆ **If the information of watt-hour meter connected to indoor/outdoor unit is changed, consult with installation engineer.**
- ◆ **DMS2 executes power distribution based on set information.**
- ◆ **Virtual channel is not available when you use BACnet or LonWorks Gateway function.**

EHP Power Consumption Inspection (Continued)

Checking Indoor Unit Operation Time

SAMSUNG Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, floor001

Checking indoor unit operation time

- Check inspection result
- Setting the inspection section
- Setting and checking wait-hour meter
- Setting and checking virtual channel
- Checking indoor unit operation time

2010 2 27 2010 2 27

All indoor units by period Individual indoor unit by date

2010-2-27

Indoor unit address	Indoor unit name	Operation time (min)	Thermo on time (min)
00,00,00	00,00,00	6	6
00,00,01	00,00,01	6	6
00,00,02	00,00,02	6	6
00,00,03	00,00,03	6	6
00,00,04	00,00,04	6	6
00,00,05	00,00,05	6	6

Save as Excel

- 1 Click [EHP Power Consumption Inspection] → [Checking indoor unit operation time] when DMS2 web page menu screen appears.
- 2 Select search condition (All indoor units by period/ Individual indoor unit by date) when Checking indoor unit operating time screen appears.
 - ◆ Select year/month/day in order.
 - ◆ Based on DMS2 time, you can check up to 365 days of operation time.
- 3 Click [Search].
 - ◆ Operation time will be displayed depending on set period and condition.
- 4 Click [Save as Excel].
 - ◆ Searched operation time result will be saved as MS Excel file.

Note For data management, it is recommended to save indoor unit operation time result periodically.

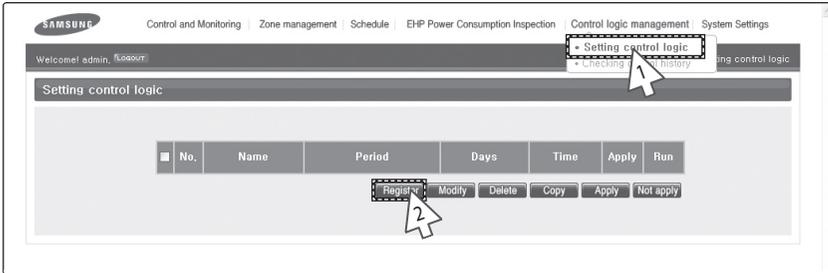
Control Logic Management

Setting Control Logic

- Control logic is used in the following situations.

Ex) The current temperature of the lab is higher than 29°C and you want cooling operation,
The current temperature of the office is lower than 10°C and you want heating operation

- Period, day and time are included in specific conditions.



You can set, edit, delete and use control logic for controlling device which is connected to DMS2.

- 1 Click [Control logic management] → [Setting control logic] when DMS2 web page menu screen appears.
 - ◆ Apply: Indicates control logic usage status.
 - ◆ Run: Indicates if the control logic is applied and whether the operation conditions are met.

Ex) If there is logic which says 'If the current temperature of indoor unit is higher than 29°C, control indoor unit as cool mode.', 'Yes' will be displayed when the indoor unit's current temperature is higher than 29°C. 'No' will be displayed when the indoor unit's current temperature is lower than 29°C.
- 2 Click [Register] when setting control logic screen appears.
 - ◆ Setting screen is composed of 4 categories.
 - Name & time: Set the name and time(period, days, time) to apply of control logic.
 - Factor edit: You can edit factor selection which is components of input/output.
 - Input: Set the condition which makes control logic perform.
 - Output: Set items to be controlled when the conditions of input are met.

- Note**
- ◆ If different value is set for same control item of same address' device, the indoor unit follows the first control logic set among running control logics.
 - ◆ It is not available to provide the control logic management information to BMS system.

Control Logic Management (Continued)

The screenshot shows the 'Setting control logic' interface. At the top, there is a navigation bar with 'Control and Monitoring', 'Zone management', 'Schedule', 'EHP Power Consumption Inspection', 'Control logic management', and 'System Settings'. Below this is a breadcrumb trail: 'Control logic management > Setting control logic'. The main form has the following sections:

- Name:** A text input field containing 'Control logic'. A callout '3' points to this field.
- Period:** A date range selector showing '2010' to '2011' with month and day dropdowns. A callout '4' points to this section.
- Day:** Radio buttons for Sun, Mon, Tue, Wed, Thu, Fri, Sat, and a checked 'Daily' option.
- Time:** A time range selector showing '0' to '24' hours.
- Input:** A table with columns: Compound factor, Factor, Comparison operator, Standard value, and Duration (minute). It contains three rows, each with a 'Select a factor' dropdown, an '=' operator, a 'None' radio button, and a 'Select a factor' dropdown. The first row has 'Cancel' and 'Apply' buttons, while the second and third have 'Apply' buttons.
- Output:** A table with columns: Factor and Command. It contains three rows, each with a 'Select a factor' dropdown, a 'None' radio button, and a 'Select a factor' dropdown.

At the bottom right, there are 'Add', 'Delete', and 'Save' buttons. A small note at the bottom left reads: '+ Setting Guide: In the initial setting, click 'Select a factor' and a factor editing window appears. Then click 'Select a device' to set the device. After setting the device, the information in the 'Select a factor' is updated to the setting. Select the information to modify it.'

- 3 Enter control logic name in the name field when the new control logic setting screen appears.
 - ◆ You can use maximum 16 letters.
- 4 Set period, day and time in control logic screen.
 - ◆ Select year/month/day in order.
 - ◆ Select a day to run during the control period.
 - ◆ Control logic will be applied only when period, day and time are united.
 - ◆ If you select 'Daily' in day selection, control logic will run regardless of day.

SAMSUNG Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin | Logout | Control logic management > Setting control logic

Setting control logic

Name:

Period: 2010 | 2 | 27 | - | 2011 | 2 | 27

Day: Sun Mon Tue Wed Thu Fri Sat Daily

Time: 0 | 0 | - | 24 | 0

Factor edit: **Single** 

Device:

• Click 'Select' or the device name: a pop-up window appears and you can select a device. Select a device to check the settings.

Input

Compound factor	Factor	Comparison operator	Standard value	Duration (minute)
<input type="checkbox"/> AND	Select a factor 	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1

Output

Factor	Command
Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor
Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor
Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor

5 Select a factor in the input list.

- ◆ Factor means the target to be controlled or standard item of logic decision.

6 Select the type of factor.

- ◆ Single: It means 1 device.
Ex) Desired temperature of indoor unit
- ◆ Arithmetic: It means 2 devices are connected by arithmetic operator.
Ex) Desired temperature of indoor unit 1 – Desired temperature of indoor unit 2

Edit a factor: Arithmetic

Function	Arithmetic operator	Device 2
Single Arithmetic Function	-	Select a device

- ◆ Function: It means several devices are using as value of function.

Ex) Average(Current temperature of Indoor unit 1, Current temperature of Indoor unit 2, Current temperature of Indoor unit 3)

Edit a factor: Function

Function	Device 2	Device 3	Device 4	Device 5
Single Arithmetic Function	Select a device	Select a device	Select a device	Select a device
Avera	Select a device	Select a device	Select a device	Select a device

Control Logic Management (Continued)

SAMSUNG Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, Logout Control logic management > Setting control logic

Setting control logic

Name:

Period: 2010 2 27 - 2011 2 27

Day: Sun Mon Tue Wed Thu Fri Sat Daily

Time: 0 : 0 - 24 : 0

Factor edit: Single

Device:

Device selection

Address	Name
00.00.00	00.00.00
00.00.01	00.00.01
00.00.02	00.00.02
00.00.03	00.00.03
00.00.04	00.00.04

• Click 'Select' or the device name: a pop-up window appears and you can select a device. Select a device to check the settings.

Input

Compound factor	Factor	Comparison operator	Standard value	Duration (minute)
<input type="checkbox"/>	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1

Output

	Factor	Command
<input type="checkbox"/>	Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor
<input type="checkbox"/>	Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor
<input type="checkbox"/>	Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor

7 Select a device.

- ◆ List of device which you can select will be displayed.

8 Select the device to use as factor.

- ◆ Control and monitoring items will be displayed depending on selected device.
- ◆ Control and monitoring items are as follows.

Type	Item	Value	Remarks
Indoor unit	Power	On, Off	-
	Current temp.	Number	Control impossible
	Desired temp.	Number	-
	Outdoor temp.	Number	Control impossible
	Operation mode	Auto, Cool, Dry, Fan, Heat	-
	Fan speed	Auto, Low, Mid, High	-
	Air flow	Vertical, Horizontal, All, None	-
	Remote controller usage	ON, OFF, Level1	-
ERV	Power	On, Off	-
	Operation mode	Auto, HeatEx, Bypass, Sleep	-
	Fan speed	Low, High, Turbo	-
	Remote controller usage	ON, OFF, Level1	-
AHU	Power	On, Off	-
	Current temp.	Number	Control impossible
	Desired temp.	Number	-
	Outdoor temp.	Number	Control impossible
	Operation mode	Auto, Cool, Dry, Fan, Heat	-
	Remote controller usage	ON, OFF, Level1	-
DI	Status	On, Off	Control impossible
DO	Status	On, Off	-

SAMSUNG Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, Floor001 Control logic management | Setting control logic

Setting control logic

Name: ControllLogic

Period: 2010 2 27 - 2011 2 27

Day: Sun Mon Tue Wed Thu Fri Sat Daily

Time: 0 : 0 - 24 : 0

Factor edit: Single

Device: 00,00,00

• Click 'Select' or the device name: a pop-up window appears and you can select a device to check the settings.

Input

Compound factor	Factor	Comparison operator	Standard value	Duration (minute)
<input type="checkbox"/>	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1

Output

Factor	Command
Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor
Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor
Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor

Device List (Pop-up): Power, Power, Current, Desired, Outside, Mode, Fan speed, Air flow, Enable RC

Buttons: Apply

9 Select detailed item of factor.

- ◆ Detailed item may be different depending on the type of selected device.

10 Click [Apply].

- ◆ If you do not click [Apply], changed setting will not be saved.

11 Select comparison operator.

- ◆ Types of comparison operators: =, = <, = >, <, >, ≠
- ◆ Comparison operator compares factor to standard factor.

Control Logic Management (Continued)

SAMSUNG Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, [Logout](#) Control logic management > Setting control logic

Setting control logic

Name

Period 2010 - 2011

Day Sun Mon Tue Wed Thu Fri Sat Daily

Time 0 : 0 - 24 : 0

Factor edit Single

Device
Select a device

* Click 'Select' or the device name: a pop-up window appears and you can select a device. Select a device to check the settings.

Apply

Input

Compound factor	Factor	Comparison operator	Standard value	Duration (minute)
<input type="checkbox"/>	00,00,00,Power	= <input type="text"/>	On <input type="text"/> <input type="radio"/> Select a factor	Cancel <input type="radio"/> Apply <input type="text" value="1"/>
<input type="checkbox"/>	AND <input type="text"/>	= <input type="text"/>	Off <input type="text"/> <input type="radio"/> Select a factor	Cancel <input type="radio"/> Apply <input type="text" value="1"/>
<input type="checkbox"/>	AND <input type="text"/>	= <input type="text"/>	None <input type="text"/> <input type="radio"/> Select a factor	Cancel <input type="radio"/> Apply <input type="text" value="1"/>

Output

Factor	Command
<input type="checkbox"/>	<input type="radio"/> None <input type="text"/> <input type="radio"/> Select a factor
<input type="checkbox"/>	<input type="radio"/> None <input type="text"/> <input type="radio"/> Select a factor
<input type="checkbox"/>	<input type="radio"/> None <input type="text"/> <input type="radio"/> Select a factor

12 Select standard value.

- ◆ Select detailed item value of selected factor or factor.
- ◆ The item varies depending on the left factor when selecting detailed item value from standard value.
 - Ex1) Factor : Current temperature of indoor unit 1,
Value of standard value: Enter 29
 - Ex2) Factor : Remote controller usage of indoor unit 1,
Value of standard value: Select one among On, Off and Level1
- ◆ When selecting factor from standard value, it must be same with control item of left factor.
 - Ex1) Factor : Power of indoor unit 1,
Factor of standard value : Power of indoor unit 2
 - Ex2) Factor : Current temperature of indoor unit 1,
Factor of standard value : Average current temperature of indoor unit 1 and 2

13 Select duration time usage.

- ◆ Duration time means the time which the comparing conditions satisfy 'True'.
- ◆ The duration time can be set from 1 to 60.
- ◆ If you select duration time apply, the comparing condition will be 'True'.
To execute, maintain 'True' for duration time.

Note

- ◆ Only 1 duration time can be set per control logic.
- ◆ The tolerance range of duration time is maximum 1 minute. If you set the duration time as 2 minutes, operation will be started between 2 and 3 minutes.

Control Logic Management (Continued)

SAMSUNG Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, 10:00:00 Control logic management > Setting control logic

Setting control logic

Name:

Period: 2010 | 2 | 27 - 2011 | 2 | 27

Day: Sun Mon Tue Wed Thu Fri Sat Daily

Time: 0 : 0 - 24 : 0

Factor edit:

Device:

+ Click 'Select' or the device name: a pop-up window appears and you can select a device. Select a device to check the settings.

Input

Compound factor	Factor	Comparison operator	Standard value	Duration (minute)
<input type="checkbox"/>	00,00,00,Power	=	<input type="radio"/> On <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1

Output

Factor	Command
<input type="checkbox"/> <u>Select a factor</u>	<input type="radio"/> None <input type="radio"/> Select a factor
<input type="checkbox"/> Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor
<input type="checkbox"/> Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor

Device selection

Address	Name
00,00,00	00,00,00
00,00,01	00,00,01
00,00,02	00,00,02
00,00,03	00,00,03
00,00,04	00,00,04

16 Select type of factor.

- ◆ Single factor can be set for the left factor of output.
 - Single factor: It means 1 device.
 - Ex) Desired temperature of indoor unit

17 Select a device.

- ◆ List of device which can be selected will be displayed.

18 Select the device to use as factor.

SAMSUNG Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, EHP0007 Control logic management > Setting control logic

Setting control logic

Name ControlLogic

Period 2010 2 27 - 2011 2 27

Day Sun Mon Tue Wed Thu Fri Sat Daily

Time 0 : 0 - 24 : 0

Factor edit Single

Device

00,00,0 Power

• Click 'Select' or the device name: a pop-up window appears and you can select a device to check the settings.

Input

Compound factor	Factor	Comparison operator	Standard value	Duration (minute)
	00,00,0,Power	=	<input type="radio"/> On <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1

Output

Factor	Command
Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor
Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor
Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor

19 Select detailed item of factor.

- ◆ Detailed item may be different depending on the type of selected device.

20 Click [Apply].

- ◆ If you do not click [Apply], changed setting will not be saved.

21 Select command value.

- ◆ The value may vary depending on the detailed item of selected factor.
- ◆ You can select value of selected item or new factor.
- ◆ You can set single factor, arithmetic factor and function factor.

Control Logic Management (Continued)

SAMSUNG Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, [Logout](#) Control logic management > Setting control logic

Setting control logic

Name	ControlLogic							
Period	2010	2	27	-	2011	2	27	
Day	<input type="checkbox"/> Sun	<input type="checkbox"/> Mon	<input type="checkbox"/> Tue	<input type="checkbox"/> Wed	<input type="checkbox"/> Thu	<input type="checkbox"/> Fri	<input type="checkbox"/> Sat	<input checked="" type="checkbox"/> Daily
Time	0	:	0	-	24	:	0	

Factor edit:

Device
Select a device:

+ Click 'Select' or the device name: a pop-up window appears and you can select a device, Select a device to check the settings.

Input

Compound factor	Factor	Comparison operator	Standard value	Duration (minute)
<input type="checkbox"/>	00.00.00.Power	=	<input type="radio"/> On <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1
<input type="checkbox"/> AND	Select a factor	=	<input type="radio"/> None <input type="radio"/> Select a factor	<input type="radio"/> Cancel <input type="radio"/> Apply 1

Output

Factor	Command
00.00.01.Power	<input type="radio"/> On <input type="radio"/> Select a factor
Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor
Select a factor	<input type="radio"/> None <input type="radio"/> Select a factor

+ Setting Guide: In the initial setting, click 'Select a factor' and a factor editing window appears. Then click 'Select a device' to set the device. After setting the device, the information in the "Select a factor" is updated to the setting. Select the information to modify it.

22 To add output, click [Add].

- ◆ If you want to delete output which you don't use anymore, select it and then click [Delete].

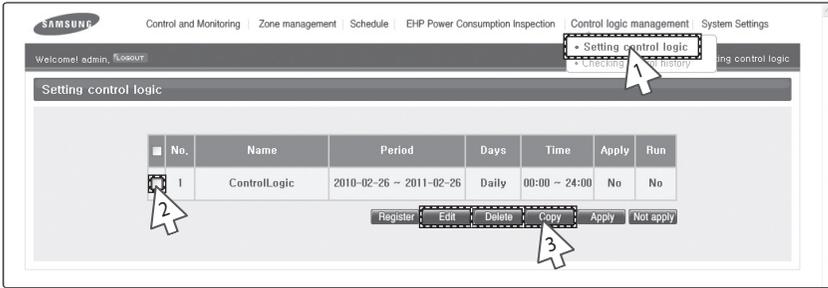
23 Click [Save].

- ◆ Set control logic will be saved in DMS2.
- ◆ If you do not click [Save], changed setting will not be saved.

Note

- ◆ Control logic input items consist of factor, comparison operator, standard value and duration time.
- ◆ You can enter up to 3 input items of control logic, and the items can be connected with compound factor.
- ◆ Output item of control logic consists of factor and command value.
- ◆ You can enter up to 20 output items of control logic.
- ◆ You can create up to 256 control logics.

Editing/Deleting/Copying Control Logic



- 1 Click [Control logic management] → [Setting control logic] when DMS2 web page menu screen appears.
- 2 Select control logic when control logic screen appears.
- 3 Click [Edit]/[Delete]/[Copy].
 - ◆ To edit control logic, refer to 'Setting control logic' steps. (Refer to page 71~80)
 - ◆ Click [Delete] to delete the selected control logic.
 - ◆ Click [Copy] to copy the selected control logic.

Control Logic Management (Continued)

Enable/Disable Control Logic

SAMSUNG Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, [logout](#)

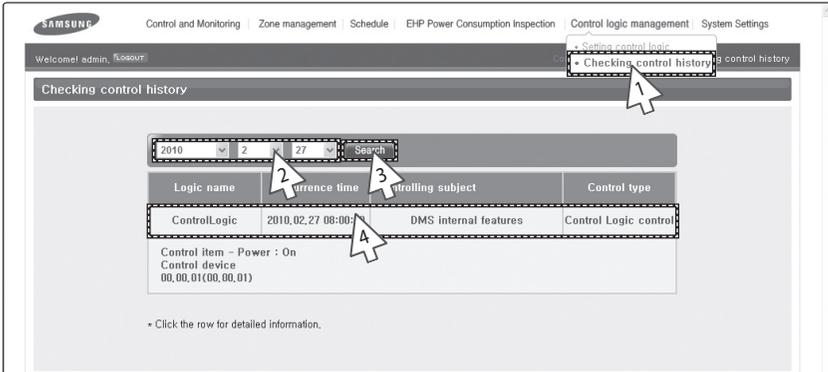
Setting control logic

No.	Name	Period	Days	Time	Apply	Run	
<input checked="" type="checkbox"/>	1	ControlLogic	2010-02-26 ~ 2011-02-26	Daily	00:00 ~ 24:00	No	No

Register Edit Delete Copy Apply Not apply

- 1 Click [Control logic management] → [Setting control logic] when DMS2 web page menu screen appears.
- 2 Select control logic when control logic screen appears.
- 3 Click [Apply]/[Not apply].
 - ◆ The selected control logic will be applied by clicking [Apply].
 - ◆ The selected control logic will not be applied by clicking [Not apply].

Checking Control History

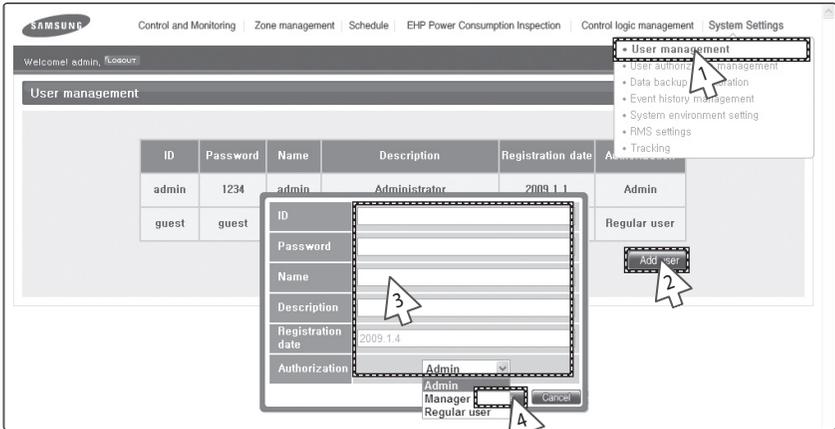


- 1 Click [Control logic management] → [Checking control history] when DMS2 web page menu screen appears.
- 2 Select the date you want when the control logic screen appears.
 - ◆ Select Year/Month/Day in order.
 - ◆ Based on DMS2 time, you can check of maximum 180 days of previous control history.
- 3 Click [Search].
 - ◆ You can check only in daily unit.
- 4 Select each items to check detailed contents of control history.

Note DMS2 saves the information of control logic management control history for 180 days. However, it varies depending on saving space of DMS2.

System Settings

Adding a User

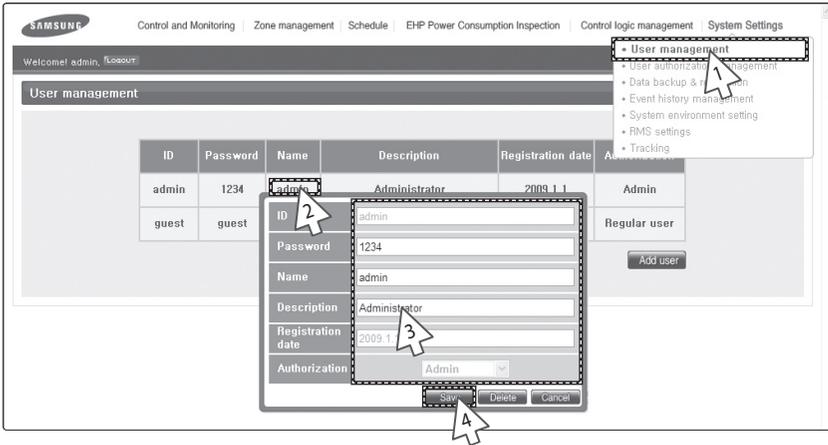


You can add, edit and delete the user of DMS2.

- 1 Click [System Settings] → [User management] when DMS2 web page menu screen appears.
- 2 Click [Add user] when user management screen appears.
 - ◆ User information input window will be appeared when pressing [Add user].
- 3 Enter ID, password, name and description for new user and then select authority.
 - ◆ ID should be within 12 letters. You can use small letter and number only. (Big letter and special symbols including space cannot be used for user ID.)
 - ◆ Password should be within 12 letters. You can use small letter/big letter, number(except space) only.
 - ◆ Name should be within 20 letters, and description should be in 50 letters.
 - ◆ Registration date will be input automatically as system date.
 - ◆ Select authorization for the user from 'Admin', 'Manager' and 'Regular user'. Admin has all authorization and 'Manager'/'Regular user' has limited authorization.
- 4 Click [Save].
 - ◆ There is no limit to the number of user.
 - ◆ User information will be saved in DMS2.

- Note**
- ◆ For security and maintenance of admin account and guest account, you should change the password.
 - ◆ Administrator(Admin) can change all setting of indoor/outdoor unit.
 - ◆ Administrator(Admin) can check all indoor/outdoor units connected to DMS2.
 - ◆ Administrator(Admin) can edit zone information and assign the zone information to manager.
 - ◆ A manager can check and control indoor/outdoor units which belong to assigned zones only.

Editing a User



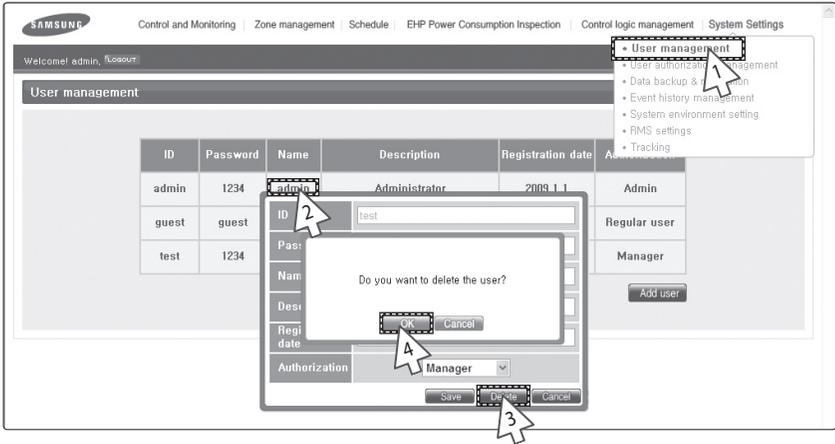
- 1 Click [System Settings] → [User management] when DMS2 web page menu screen appears.
- 2 Click the user name to edit when user management screen appears.
 - ◆ User information window will be displayed.
- 3 Edit user information when the user information window appears.
 - ◆ You cannot change user ID.
 - ◆ Password should be within 12 letters. You can use small letter/big letter, number(except space) only.
 - ◆ Name should be within 20 letters, and description should be in 50 letters.
 - ◆ Registration date is input automatically as system date. Therefore you cannot edit registration date.
 - ◆ Select authorization for the user from 'Admin', 'Manager' and 'Regular user'. Admin has all rights and 'Manager'/'Regular user' has some rights.
- 4 Click [Save].
 - ◆ Modified user information will be saved in DMS2.

Note

- ◆ User information can be changed only with the admin account.
- ◆ Authorization of admin and guest account cannot be modified.
- ◆ Administrator(Admin) can change all setting of indoor/outdoor unit.
- ◆ Administrator(Admin) can check all indoor/outdoor units connected to DMS2.
- ◆ Administrator(Admin) can edit zone information and assign the zone information to manager.
- ◆ A manager can check and control indoor/outdoor units which belong to assigned zones only.

System Settings (Continued)

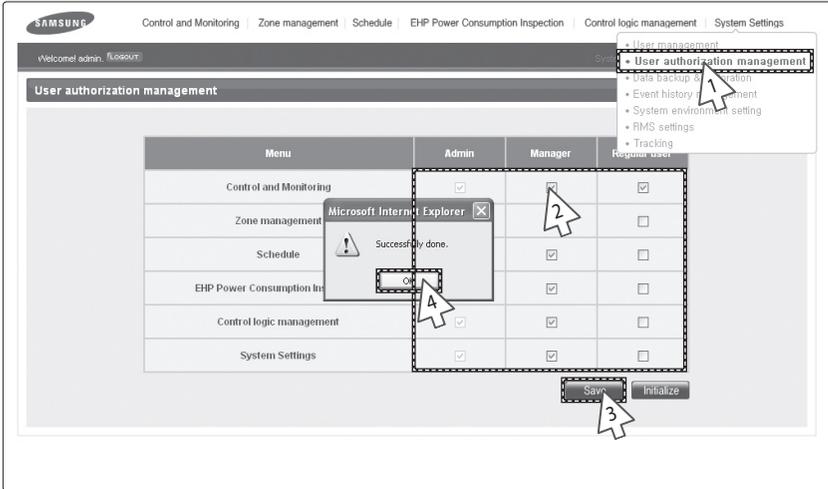
Deleting a User



- 1 Click [System Settings] → [User management] when DMS2 web page menu screen appears.
- 2 Click the user name to delete when user management screen appears.
 - ◆ User information window will be displayed.
- 3 Click [Delete] when the user delete window appears.
 - ◆ Confirm window will pop up saying, "Do you want to delete the user?"
- 4 Click [OK].
 - ◆ Selected user information will be deleted in DMS2.

Note You cannot delete admin account and guest account.

Editing User Authorization



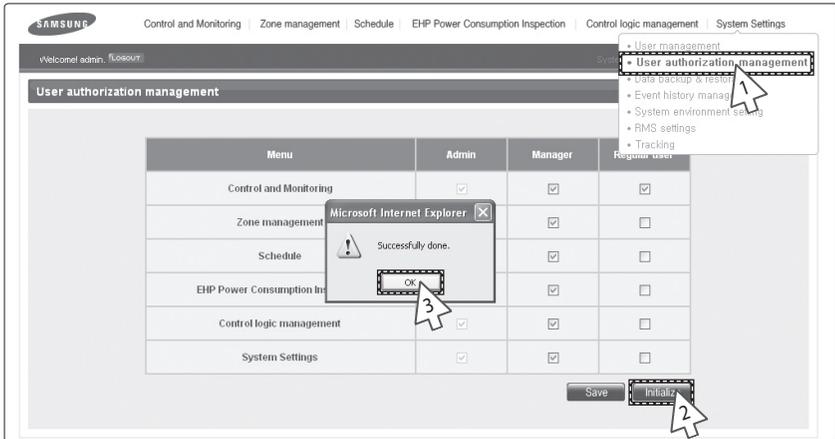
- 1 Click [System Settings] → [User authorization management] when DMS2 web page menu screen appears.
- 2 Select/Deselect accessible menu by authorization when the user authorization management screen appears.
- 3 Click [Save] after setting is completed.
- 4 Click [OK] when "Successfully done." message appears.
 - ◆ Changed user authorization information will be saved in DMS2 by clicking [OK].

Note

- ◆ Administrator (Admin authorization) is allowed to access to all menus.
- ◆ You cannot edit authorization (menu access) of administrator (Admin).

System Settings (Continued)

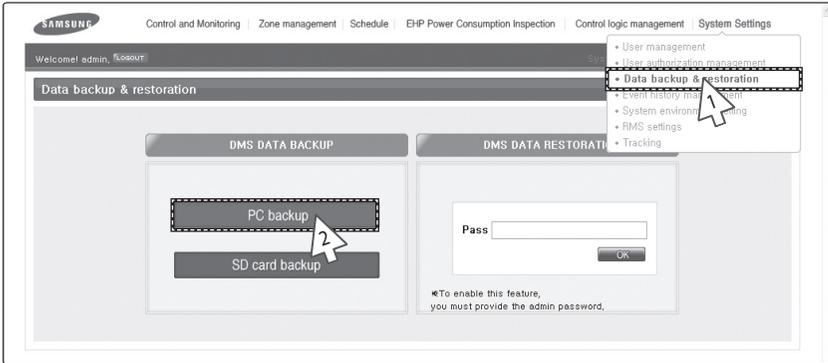
Initializing a User Authorization



- 1 Click [System Settings] → [User authorization management] when DMS2 web page menu screen appears.
- 2 Click [Initialize] when user management screen appears.
- 3 Click [OK] when “Successfully done.” message appears.
 - ◆ User authorization information saved in DMS2 will be initialized by clicking [OK].

Note You can restore user authorization information as factory setting by using initialization function.

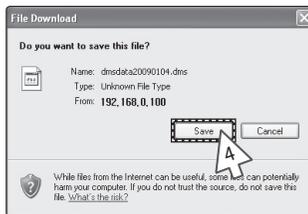
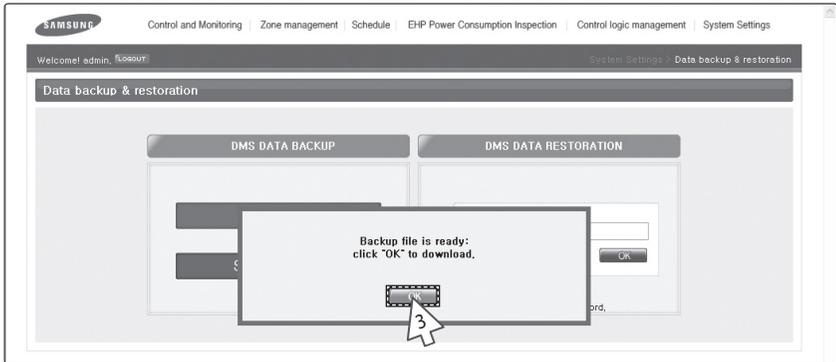
DMS2 Data Backup – PC Backup



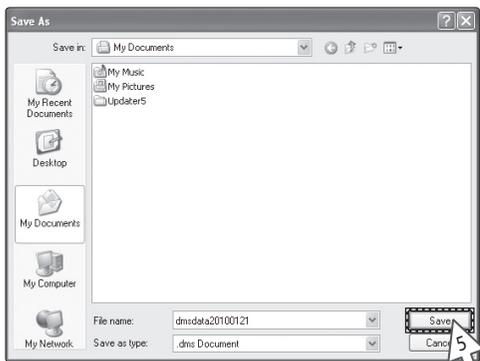
You can back up DMS2 data to PC or SD card.

- 1 Click [System Settings] → [Data backup & restoration] when DMS2 web page menu screen appears.
- 2 Click [PC backup] when DMS2 data backup & restoration screen appears.
 - ◆ "Reading data from DMS2. Please wait." message will appear.
 - ◆ Depending on the size of the data, backup time may vary. It will usually take few seconds.

System Settings (Continued)



- 3 Click [OK] when "Backup file is ready. Click "OK" to download." message appears.
- 4 Click [Save] when "File download" window appears.



5 When “Save as” window appears, select saving location and file name and then click [Save].

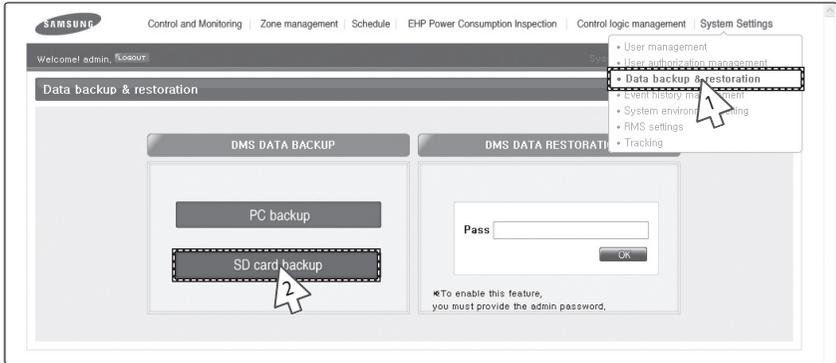
- ◆ Backup file will be saved as the name you made in the location you select by clicking [Save].
- ◆ Basic backup file name is “DMS2dataYYYYMMDD.dms”. (YYYY: year, MM : month, DD : day)
- ◆ The extension of the backup data files is “. dms”.
- ◆ If you want to edit the file name, use English alphabets or numbers only.
- ◆ File name should be less than 32 letters. If the file name exceeds 32 letters, proper restoration may not be possible.

6 Click [Close] after completing the download.

Note Backup data includes DB data, setting data, data related indoor/outdoor unit control and various kinds of history data. They will be backed up in single unified file.

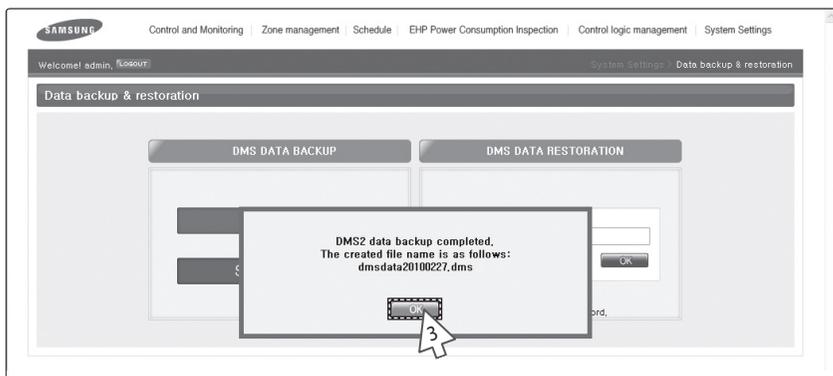
System Settings (Continued)

DMS2 Data Backup – SD card backup



You can back up DMS2 data to PC or SD card.

- 1 Click [System Settings] → [Data backup & restoration] when DMS2 web page menu screen appears.
- 2 Click [SD card backup] when DMS2 data backup & restoration screen appears.
 - ◆ “Reading data from DMS2. Please wait.” message will be displayed.
 - ◆ Depending on the size of the data, backup time may vary. It will usually take few seconds.



- 3** Click [OK] when "DMS2 data backup completed. The created file name is as follows: DMS2dataYYYYMMDD.dms" message appears.
- ◆ The file name of backup file is "DMS2dataYYYYMMDD.dms" and it does not exceed maximum 15 letters. (YYYY: year, MM: month, DD: day)
 - ◆ Backup files recorded on the same date are numbered in order of 001, 002.
 - ◆ The extension of the backup data files is ". dms".
 - ◆ If "Backup failed." message appears, click [OK] . Then check if the SD card is inserted or forbidden for writing.

Note Backup data includes DB data, setting data, data related indoor/outdoor unit control and various kinds of history data. They will be backed up in single unified file.

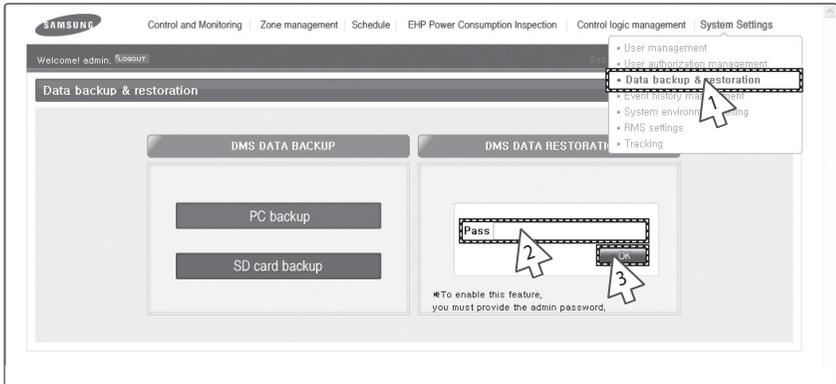


CAUTION

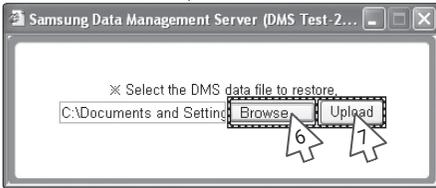
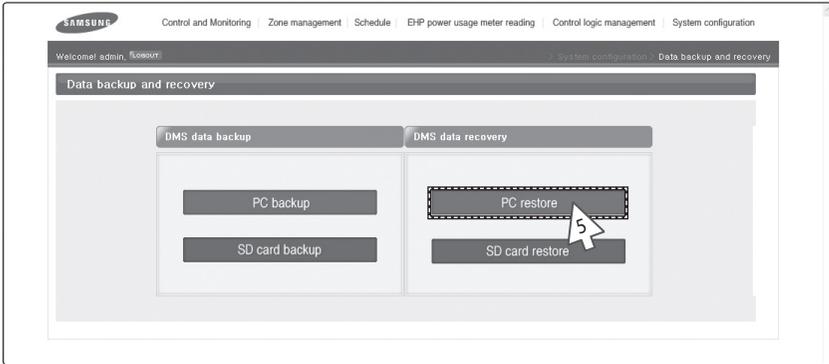
- ◆ To use SD backup and restoration function properly, SD card which is formatted in VFAT file system is required.
- ◆ If SD card is already inserted, automatic backup function will be operated and everyday data will be backed up in SD card.
- ◆ If available space of SD card is smaller than 100Mbytes, deleting oldest DMS2 backup file process will be operated first and then auto backup function will be operated.

System Settings (Continued)

DMS2 Data Restoration - PC Restore



- 1 Click [System Settings] → [Data backup & restoration] when DMS2 web page menu screen appears.
- 2 Enter the password of Admin account when DMS2 data backup and restoration screen appears.
 - ◆ Data restoration function deals with the important data of the system.
To activate the function, you should enter administrator's password.
- 3 Click [OK].
- 4 Click [OK] when caution window appears.



-
- 5 Click [PC restore].

 - 6 Click [Browse].
 - ◆ Select DMS2 data file to restore and then click [Open(O)] when "File selection" window appears.

 - 7 Check if the file route and file name are correctly entered in the text box, and then click [Upload].
-

System Settings (Continued)



-
- 8 Click [OK] when “Restore the DMS by using the file. Do you want to continue?” message appears.
- ◆ “Reading data from DMS2. Please wait.” message window will appear.
 - ◆ Depending on the size of the data, backup time may vary. It will usually take few seconds.
-
- 9 Click [OK] when “Restoration is complete. Click 'OK' to restart DMS.” confirm window appears.
- ◆ DMS2 will restart and restored data will be reflected.
-

- Note**
- ◆ *Backup and restoration of set event history is not available.*
 - ◆ *Backup and restoration of network setting is not available.*

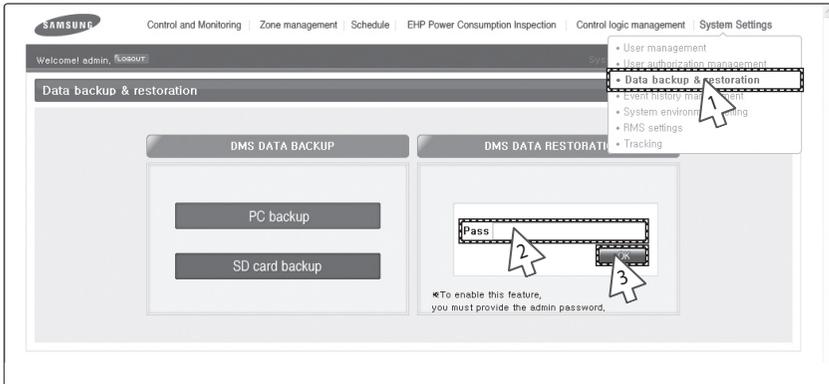


CAUTION

Keep in mind followings when operating restoration using backup file saved in PC.

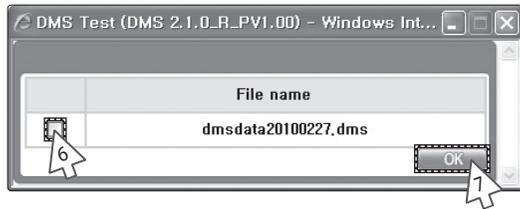
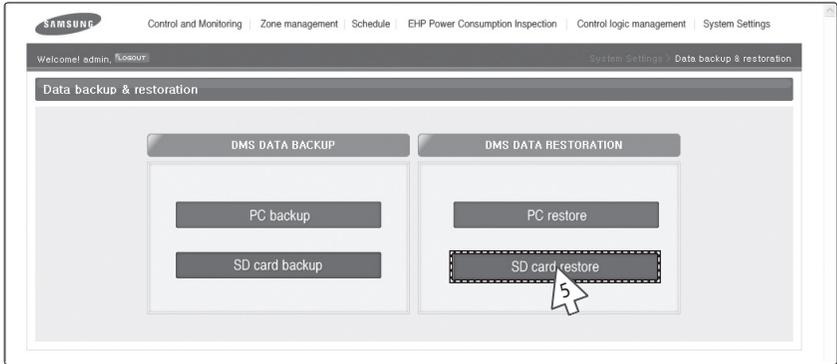
- 1. You cannot use files bigger than 100Mbytes for restoration file.**
- 2. Restoration should be carefully executed because existing data will be deleted during restoration and the data you select will be restored. Before operating restoration, backup current data of DMS2 to PC or SD card.**
- 3. The name of file for restoration should be within 32 letters in English alphabet or numbers. If not, rename the file and upload it again.**

DMS2 Data Restoration - SD Card Restoration



- 1 Click [System Settings] → [Data backup & restoration] when DMS2 web page menu screen appears.
- 2 Enter the password of Admin account when DMS2 data backup and restoration screen appears.
 - ◆ Data restoration function deals with the important data of the system.
To activate the function, you should enter administrator's password.
- 3 Click [OK].
- 4 Click [OK] when caution window appears.

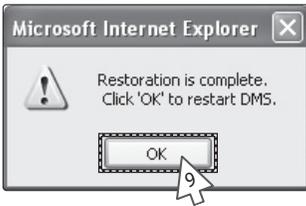
System Settings (Continued)



-
- 5 Click [SD card restore].

 - 6 Select the check box of file to restore.

 - 7 Click [OK].



-
- 8 Click [OK] when “Restore DMS data by using the file. Do you want to continue?” message appears.
 - ◆ “Reading data from DMS2. Please wait.” message window appears.
 - ◆ Depending on the size of the data, backup time may vary. It will usually takes few seconds.
-
- 9 Click [OK] when “Restoration is complete. Click 'OK' to restart DMS.” message window appears.
 - ◆ DMS2 will restart and restored data will be reflected.
-

Note *For proper restoration, unlock the forbidden writing function of SD card.*

System Settings (Continued)

Event History Management “Search(Check)”

The screenshot shows the Samsung DMS2 System Settings web interface. The main content area is titled "Event history management". At the top, there is a search bar with a "Search" button. Below the search bar is a table of event logs. The table has columns for "Time", "Setting subject", and "Event type". The first two rows of the table are highlighted with dashed boxes and arrows, indicating the search results. The first row shows an event at 2010-02-27 08:29:29 for "LCD Button" with the type "Data backup". The second row shows an event at 2010-02-27 00:49:33 for "WEB" with the type "Data backup". Below the table, there is a message "Backup in SD card completed." and a list of events with their times, subjects, and types. At the bottom, there is a note: "※ Click the row for detailed information." and navigation buttons.

	Time	Setting subject	Event type
1	2010-02-27 08:29:29	LCD Button	Data backup
2	2010-02-27 00:49:33	WEB	Data backup
Backup in SD card completed.			
3	2010-02-27 00:47:31	WEB	Data backup
4	2010-02-27 00:41:51	WEB	Data backup
5	2010-02-27 00:13:56	User	DMS power

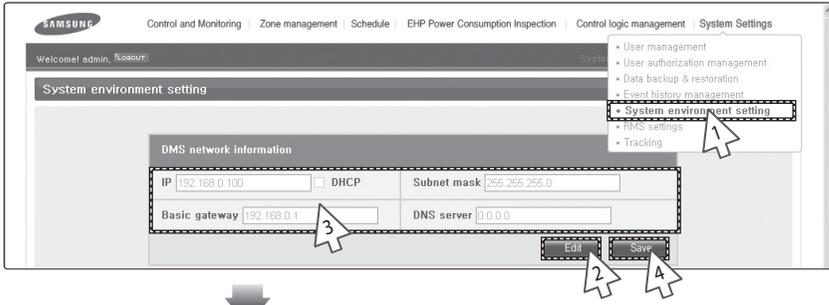
You can search(check) all kinds of set information of event log in DMS2.

- 1 Click [System Settings] → [Event history management] when DMS2 web page menu screen appears.
- 2 Select the period of event history you want to search.
- 3 Click [Search].
- 4 List of events which occurred in the period will be displayed.
 - ◆ You can check detailed information about the event by selecting the item you want to check.

Note You can check following event logs using event history management.

1. DMS2 power related event
2. Schedule setting related event
3. RMS service setting related event
4. Tracking related event
5. User information modification related event
6. System settings related event
7. Operation using external interface related event

DMS2 Network Information Setting – “Manual Setting”



This operation needs web browser restart.
The browser will be closed. Do you want to proceed?

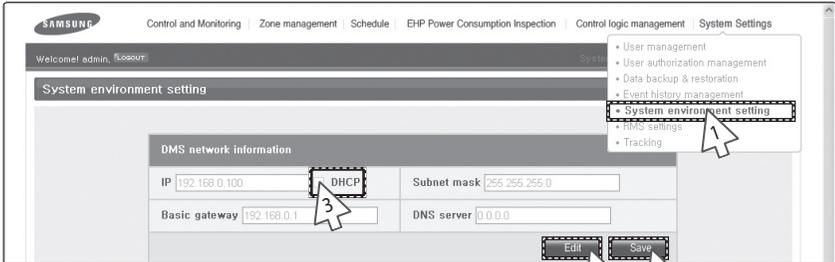
OK Cancel

You can set and check information about DMS2 installation operation.

- 1 Click [System Settings] → [System environment setting] when DMS2 web page menu screen appears.
- 2 Click [Edit] from DMS2 network information window.
- 3 When text boxes of IP address, subnet mask address, default gateway and DNS server are enabled, enter values for each item.
 - ◆ 15 letters can be entered for each item.
 - ◆ Each item should match with the network address form.
- 4 Click [Save] in DMS2 network information window.
- 5 Click [OK] when “This operation needs web browser restart. The browser will be closed. Do you want to proceed?” message appears.
 - ◆ Click [OK] and current web browser will be closed. Run the web browser again and you can access to DMS2 using IP which is manually set.

System Settings (Continued)

DMS2 Network Information Setting – using “DHCP”



- 1 Click [System Settings] → [System environment setting] when DMS2 web page menu screen appears.
- 2 Click [Edit] from DMS2 network information window.
- 3 Check 'DHCP'.
 - ◆ The text boxes of IP address, subnet mask address, default gateway and DNS server will be disabled.
 - ◆ If you want manual setting, uncheck 'DHCP' and then refer to “DMS2 Network information setting-manual setting” steps. (Refer to page 101)
- 4 Click [Save] in DMS2 network information window.
- 5 Click [OK] when “This operation needs web browser restart. The browser will be closed. Do you want to proceed?” message appears.
 - ◆ Click [OK] and current web browser will be closed. Run the web browser again and you can access to DMS2 after checking auto setting IP in the external LCD.

Notes

- ◆ **Factory setting is as follows.**
 1. IP address: 192.168.0.100
 2. Subnet mask address: 255.255.255.0
 3. Default gateway : 192.168.0.1
 4. DNS server: 0.0.0.0
- ◆ **DMS2 sets service engineer IP(192.168.0.254) internally. Therefore, it should be available all the time regardless of current IP setting.**
- ◆ **If several DMS2 units are connected to 1 web site, there can be IP clash because same service engineer IP(192.168.0.254) is applied to each DMS2. In this case, edit the service engineer IP as follows, and then use the IP.**
 1. Run dos command window by entering "cmd" from Windows "Start → Run"
 2. Access to DMS2 by running "telnet 192.168.0.254" from DOS command window.
 3. Enter ID/PASSWORD
 4. Edit "sysenv" file (IP setting related file) as below
 - (1) Run "sudo vi /mnt/nand0/config/sysenv" from telnet connection screen
 - (2) Find "IP2=192.168.0.254" and edit the IP as you want
 - ※ Basic commands
 - 'i'- Modification is possible after entering
 - 'x'- Delete
 - Esc + ":wq" – End after saving
 - (3) Restart
 5. Connect to DMS2 using modified IP
 - ※ There can be IP(192.168.0.254) clash when doing above operation with several DMS2 units are connected. To check accurate operation, change IP after installing each DMS2.
- ◆ **DMS2 gets DHCP IP address when you activate DHCP function.**

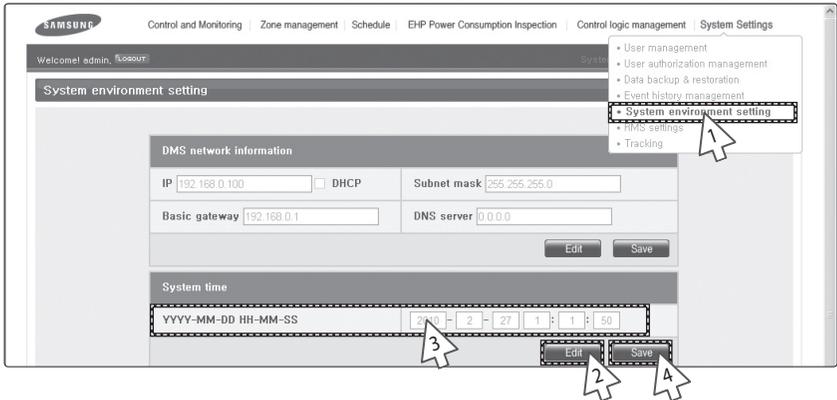
When connecting DMS2 to S-NET series, you can connect them using the IP. However the DHCP IP address can be changed by events such as network environment of restart.

In this case, it may cause communication failure between S-NET series and DMS2. Therefore it is not recommended to connect DMS2 using DHCP address using S-NET series.
- ◆ **You can check network information on external LCD of DMS2 when activating DHCP.**

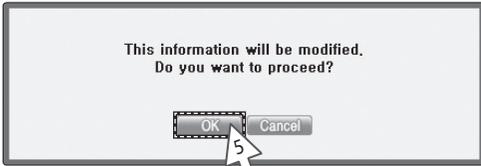
(Refer to page 134)
- ◆ **When DHCP is set, address from DHCP server will be set as DMS2 IP address.**
- ◆ **DHCP function is not available when you use BACnet Gateway function.**

System Settings (Continued)

System Time Setting



- 1 Click [System Settings] → [System environment setting] when DMS2 web page menu screen appears.
- 2 Click [Edit] from system time setting.
- 3 Enter system time(year/month/day/hour/minute/second).
 - ◆ You can enter only numbers.
 - ◆ Year: You can enter from 1980 to 2035.
 - ◆ Month: You can enter from 1 to 12.
 - ◆ Day: You can enter from 1 to 31.
 - ◆ Hour: You can enter from 0 to 23.
 - ◆ Minute: You can enter from 0 to 59.
 - ◆ Second: You can enter from 0 to 59.
- 4 Click [Save] after setting is completed.

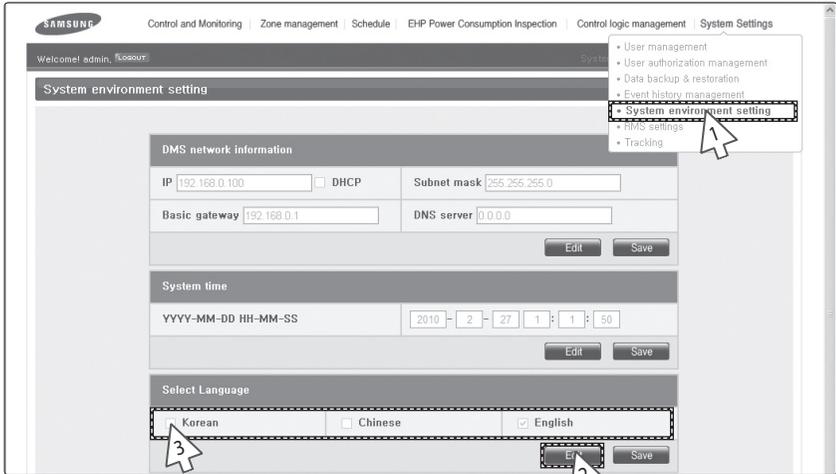


-
- 5 Click [OK] when "This information will be modified. Do you want to proceed?" message window appears.
-
- 6 "Reading data from DMS2. Please wait." message appears and saving is completed. Then, system environment setting screen appears again with all items are disabled.
-

Note Time on the screen shows DMS2 setting time.

System Settings (Continued)

Selecting the Language

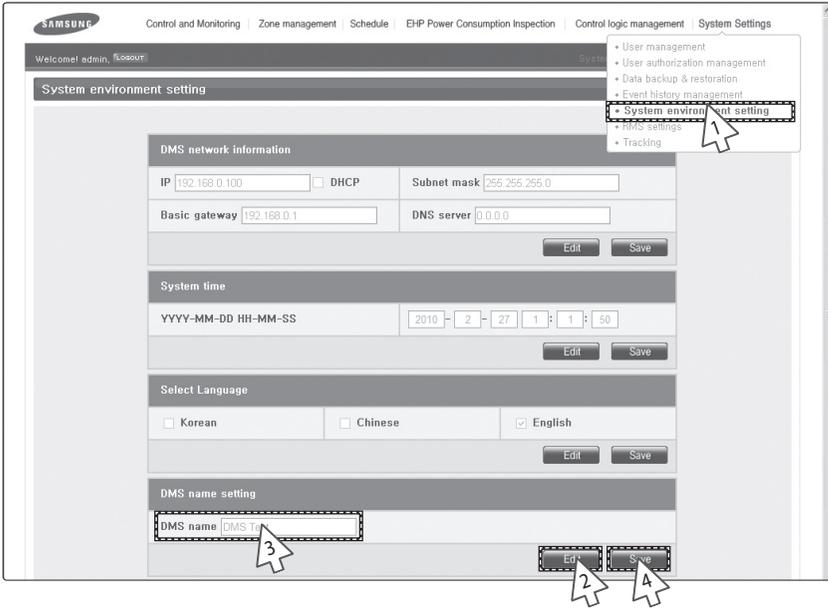


This operation needs DMS to be restarted.
Do you want to apply the setting?

OK Cancel

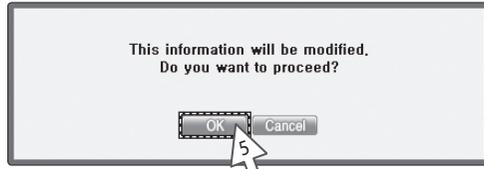
- 1 Click [System Settings] → [System environment setting] when DMS2 web page menu screen appears.
- 2 Click [Edit] from language selection.
- 3 Select a language you want then click [Save].
- 4 Click [OK] when "This operation needs DMS to be restarted. Do you want to apply the setting?" message appears.
 - ◆ Click [OK] and current web browser will be closed. DMS2 will restart and it may take approximately 1 minute.

DMS2 Name Setting



- 1 Click [System Settings] → [System environment setting] when DMS2 web page menu screen appears.
- 2 Click [Edit] from DMS2 name setting.
- 3 Enter name of DMS2 when DMS2 name field enabled.
 - ◆ You can use maximum 30 letters including English alphabets and special symbols.
 - ◆ When DMS2 name is set, the name will be displayed on the top title bar of web browser.
- 4 Click [Save] after setting is completed.

System Settings (Continued)



-
- 5 Click [OK] when “This information will be modified. Do you want to proceed?” message appears.
-
- 6 “Reading data from DMS2. Please wait.” message appears and saving is completed. Then, system environment setting screen appears again with all items are disabled.
 - ◆ You can check new DMS2 name on the title bar of web browser.
-

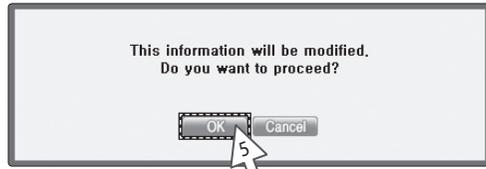
Note *Name of the DMS2 is set to blank as factory default. ‘Samsung electronics DMS2’ is displayed on the title bar of web browser.*

Error Mail Forwarding Setting

The screenshot shows the Samsung DMS2 web interface. The top navigation bar includes 'Control and Monitoring', 'Zone management', 'Schedule', 'EHP Power Consumption Inspection', 'Control logic management', and 'System Settings'. The 'System Settings' menu is open, showing options like 'User management', 'User authorization management', 'Data backup & restoration', 'Event history management', 'System environment setting' (highlighted with a dashed box and callout 1), and 'Tracking'. The main content area is titled 'System environment setting' and contains several sections: 'DMS network information' with fields for IP, Subnet mask, Basic gateway, and DNS server; 'System time' with a date and time selector; 'Select Language' with radio buttons for Korean, Chinese, and English; 'DMS name setting' with a text field for the DMS name; and 'Error email forwarding' with radio buttons for 'Apply' and 'Not apply', and fields for E-mail, ID, and SMTP server. The 'Error email forwarding' section is highlighted with a dashed box and callout 3. At the bottom of the page, there are 'Edit' and 'Save' buttons, with callouts 2 and 4 pointing to them.

- 1 Click [System Settings] → [System environment setting] when DMS2 web page menu screen appears.
- 2 Click [Edit] from error mail forwarding setting.
- 3 Set all the items as the value you want when all items fields are enabled.
 - ◆ If you select 'Apply', you should input e-mail address, SMTP server ID, password, and SMTP server address.
 - ◆ If you select 'Not apply', E-mail, ID, PW and SMTP server items will not affect on the setting.
- 4 Click [Save] after setting is completed.

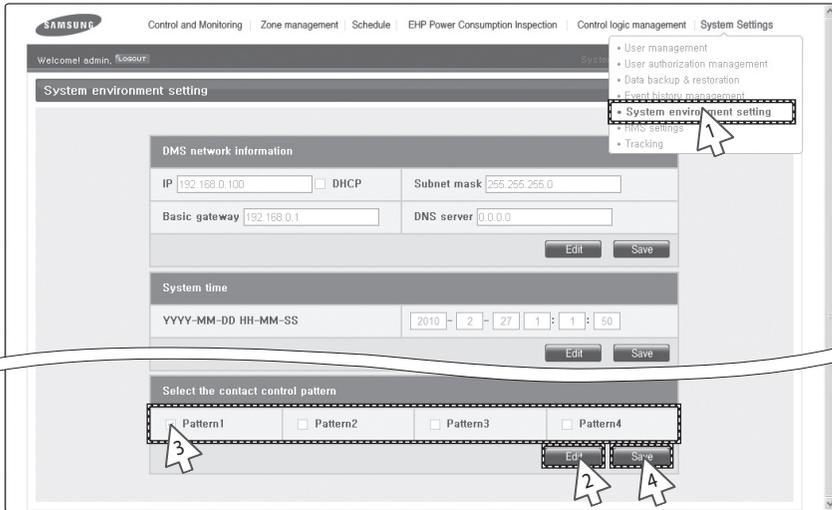
System Settings (Continued)



-
- 5 Click [OK] when “This information will be modified. Do you want to proceed?” message appears.
-
- 6 “Reading data from DMS2. Please wait.” message appears and saving is completed. Then, system environment setting screen appears again with all items are disabled.

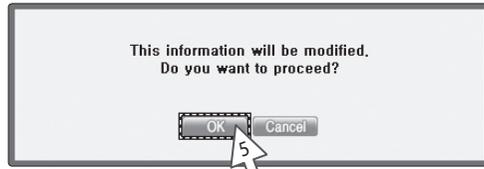
-
- Note*
- ◆ *In factory setting, 'Not apply' is checked and item fields(E-mail, ID, PW, SMTP) are blank.*
 - ◆ *E-mail forwarding function cannot deal with the server using encryption algorithm such as SSH. Use the function to the mail server which uses e-mail address and password based on text transmission method.*

Contact Control Pattern Selection



- 1 Click [System Settings] → [System environment setting] when DMS2 web page menu screen appears.
- 2 Click [Edit] from contact point pattern selection window.
- 3 Select the pattern you want to check.
 - ◆ Pattern 1[No external input]:
No operation will be made when inputting contact control signal.
 - ◆ Pattern 2[Level(Emergency stop)]:
Commands that stop all operation of indoor unit and disable remote control when inputting contact control signal. In level emergency stop status, it will not be controlled even if the command is from upper controller.
 - ◆ Pattern 3[Level(Operation/Stop)]:
Level signal input timing.
It changes operation/stop status of all indoor units.
 - ◆ Pattern 4[pulse (Operation/Stop,Disable/Enable)]:
Pulse signal. It changes operation/stop status of all indoor units.
- 4 Click [Save] after setting is completed.

System Settings (Continued)



- 5 Click [OK] when "This information will be modified. Do you want to proceed?" message appears.
- 6 "Reading data from DMS2. Please wait." message appears and saving is completed. Afterwards, system environment setting screen appears again with all items are disabled.
 - ◆ If at least one of indoor unit is turned on, contact point output port 1 generates contact point signal.
 - ◆ If there is breakdown, contact point output port 2 generates contact point signal.

Note

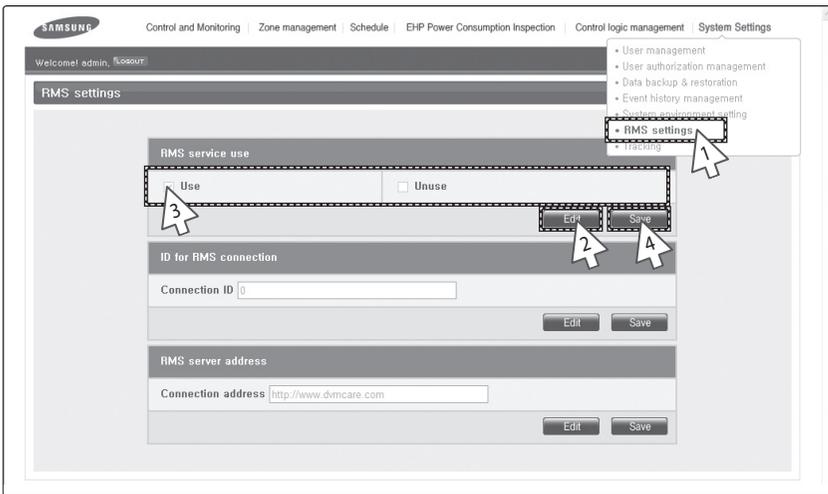
- ◆ *Pattern 1 is set as factory setting of contact control pattern.*
- ◆ *Contact output*
 - *When indoor unit is in operation, DMS2 which executed tracking successfully outputs signal through DO Ch1.*
 - *If there is unsolven breakdown in DMS2, signal will be output through DO Ch2. You can check it through check indicator on DMS2.*



For extension, DMS2 has 10 DI/DO ports. Contact control and output function are assigned to Ch1 and Ch2. Ch3~Ch10 will be assigned to additional functions. For proper contact control, connect using Ch1 and Ch2.

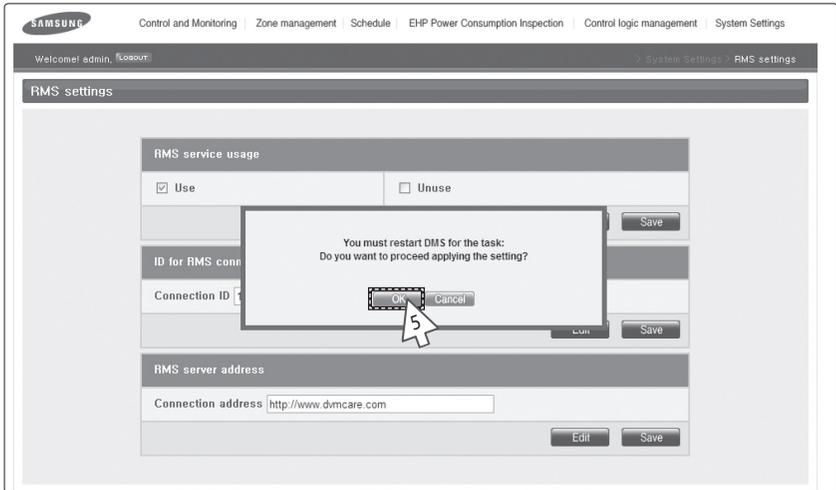
RMS Service Usage Setting

- RMS settings should be set by expert's instruction.
To get RMS service, contact to Samsung electronics service center,
- RMS settings requires to restart the system in following situations.
At this time, system restart will be displayed in the information phrase and restart will be done automatically.
 - When the RMS service usage is changed from 'Unuse' to 'Use'.
 - When you changed connection ID or RMS server address while using RMS service.



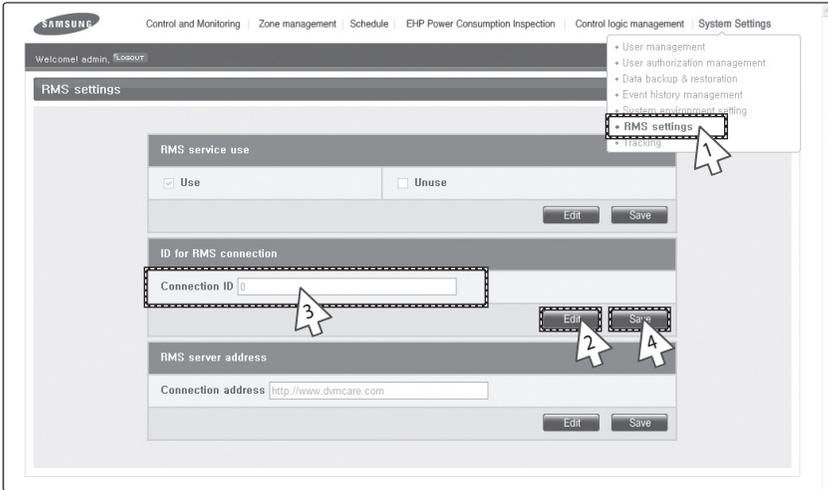
- 1 Click [System Settings] → [RMS settings] when DMS2 web page menu screen appears.
- 2 Click [Edit] from RMS service usage settings window.
- 3 Check 'Use' or 'Unuse'.
- 4 Click [Save] after setting is completed.
 - ◆ If you want to select 'Use', "ID for RMS connection" and "RMS server address" items already should have set.
 - ◆ If you select 'Use' and click [Save] when "ID for RMS connection" and "RMS server address" items are not set, 2 confirm windows which says "ID for RMS connection field is blank. To use it, connection ID is needed." and "RMS connection address field is blank. To use it, connection address is needed." will be displayed.

System Settings (Continued)



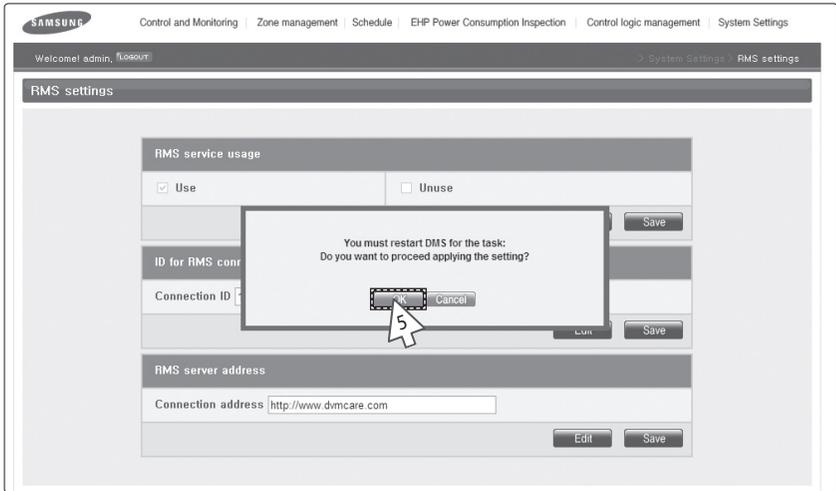
- 5** If 'Use' is selected, "You must restart DMS for the task: Do you want to proceed applying the setting?" message will appear. To restart DMS2, click [OK]. Then RMS service will be started.
- 6** If 'Unuse' is selected, "This information will be modified. Do you want to proceed?" message will appear. Click [OK] to end RMS service.

Setting ID for RMS Connection



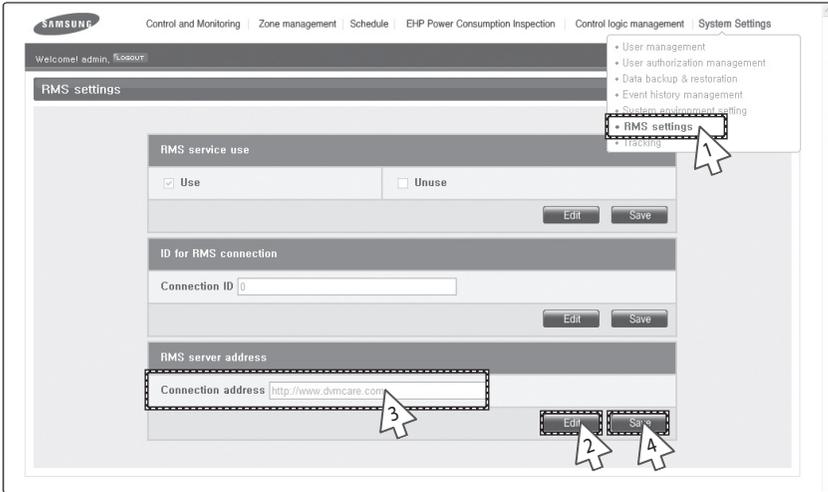
- 1 Click [System Settings] → [RMS settings] when DMS2 web page menu screen appears.
- 2 Click [Edit] from RMS service usage settings window.
- 3 Enter DMS2 ID in connection ID field.
 - ◆ DMS2 ID is unique recognizable ID which is created when you add DMS2 in RMS server.
 - ◆ If you are not given connection ID, add DMS2 to RMS and you can get connection ID.
 - ◆ If connection ID value is 0, RMS service will not be enabled.
- 4 Click [Save] after entering connection ID.
 - ◆ If you enter blank and click [Save] with 'Use' checked in "RMS service usage", confirm window which says "ID for RMS connection field is blank. To use it, connection ID is needed." will be displayed.

System Settings (Continued)



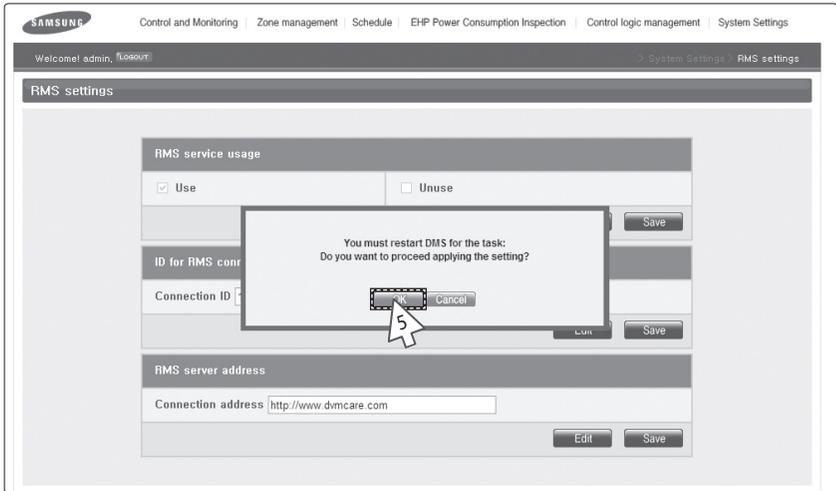
- 5 If the 'Connection ID' is modified with RMS service usage as 'Use' status, "You must restart DMS for the task: Do you want to proceed applying the setting?" message will appear. Click [OK] to restart DMS2.
- 6 If the 'Connection ID' is modified with RMS service usage as 'Unuse' status, "This information will be modified. Do you want to proceed?" message will appear. Click [OK] to modify the 'Connection ID'.

Setting RMS Server Address



- 1 Click [System Settings] → [RMS settings] when DMS2 web page menu screen appears.
- 2 Click [Edit] from RMS server address setting window.
- 3 Enter RMS server address in connection address field.
 - ◆ Current RMS server address is <http://www.dvmcare.com>.
- 4 Click [Save] after entering connection address.
 - ◆ If you enter blank and click [Save] with checking 'Use' in "RMS service usage", confirm window which says "ID for RMS connection field is blank. To use it, connection ID is needed." will be displayed.

System Settings (Continued)



- 5 If the 'Connection address' is modified with RMS service usage as 'Use' status, "You must restart DMS for the task: Do you want to proceed applying the setting?" message will appear. Click [OK] to restart DMS2.
- 6 If the 'Connection address' is modified with RMS service usage as 'Unuse' status, "This information will be modified. Do you want to proceed?" message will appear. Click [OK] to modify the 'Connection address'.

System Setting Initialization

192.168.0.100
06:12:13(AM)

1. Press [Menu], [▲], [▼] or [Set] on LCD if IP and current time are displayed on LCD screen.

- ◆ Main menu screen appears.
- ◆ Initialization is not possible in the screen which time information is displayed.

MAIN MENU
1.IP Config

2. Press [Menu] → [▼] → [▲] → [▼] → [Menu] buttons in order in main menu screen.

- ◆ Caution will be displayed on LCD Display.

Are you sure?
YES:Set, NO:Menu

3. Initialize DMS2 by clicking [Set] when caution phrase appears.

- ◆ If you press [Menu] button, it will turn back to main menu without initialization.



CAUTION

***When initializing system setting, all saved data in DMS2 will be deleted.
After initialization, saved data and IP address will be same as factory setting.***

Tracking

◆ What is tracking?

Tracking is an operation that finds devices which are connected to DMS2.

Through tracking operation, devices which are connected to DMS2 can recognize if they are connecting to DMS2.

To supervise and control system air conditioner using DMS2, tracking should be done first.

◆ Things you can do through tracking

Checking the number of devices installed, setting communication mode by channel, DVM tracking, Renaming is possible through tracking.

◆ Execute tracking

(1) Connect DVM device

- Connect the device to COM1~COM5.

(2) Set communication mode by channel.

- Set proper communication mode which fits to the devices connected in step (1).

- Be careful that if communication mode is not properly set, the device will not be found through tracking.

(3) Execute tracking - Execute DVM tracking.

- DVM tracking is an operation that finds system air conditioner devices such as indoor/outdoor unit, watt-hour meter.

(4) Name setting for each device.

- Name setting for each device is a function that sets the name of connected devices.
Set the name which shows installation location of the device.

◆ Communication mode setting by channel

Roles

- It records what devices are connected to COM1~COM5 of DMS2.

- Through tracking, DMS2 searches proper devices which fits to user's setting.

- Select proper communication mode which fits to connected device.

What is communication mode?

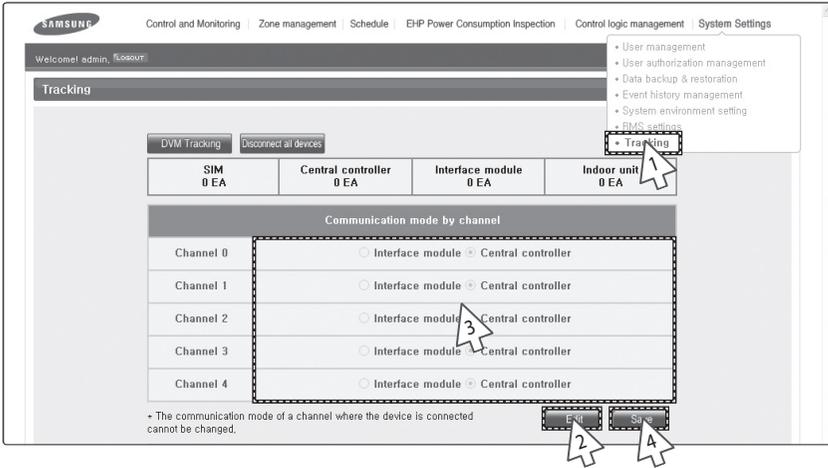
- Interface module, centralized controller, SIM/PIM can be connected to DMS2.

- DMS2 can use only set form of device for each COM port.

- Communicational devices by communication mode is as follows.

- Interface module mode : Interface module, SIM/PIM
- Centralized controller mode : Centralized controller, SIM/PIM

Communication Mode Setting by Channel



- 1 Click [System Settings] → [Tracking] when DMS2 web page menu screen appears.
- 2 Click [Edit] from communication mode by channel setting.
 - ◆ [Edit] will change to [Cancel].
 - ◆ Selection buttons are enabled. However, the channels which have searched device maintains its selection button disabled.
- 3 When each channel is enabled, check the communication mode you want to set by channel.
 - ◆ You cannot change the communication mode of channel which has currently connected device.
 - ◆ When setting communication mode of interface module, tracking, monitoring and controlling for SIM/PIM will be set to be possible.
 - ◆ When setting communication mode of centralized controller, tracking, monitoring and controlling for centralized controller and SIM/PIM will be set to be possible.
- 4 Click [Save] after setting is completed.
 - ◆ "Reading data from DMS2. Please wait." message appears and saving is completed. Then, tracking page with disabled items will be displayed again.
 - ◆ If you click [Cancel], check boxes will be disabled and [Cancel] will change to [Edit].

System Settings (Continued)

DVM Tracking

SAMSUNG Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, [Logout](#)

Tracking

DVM Tracking Disconnect all devices

IM	Central controller	Interface module	Indoor unit
0 EA	0 EA	0 EA	0 EA

Communication mode by channel

Channel	Mode
Channel 0	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 1	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 2	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 3	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 4	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller

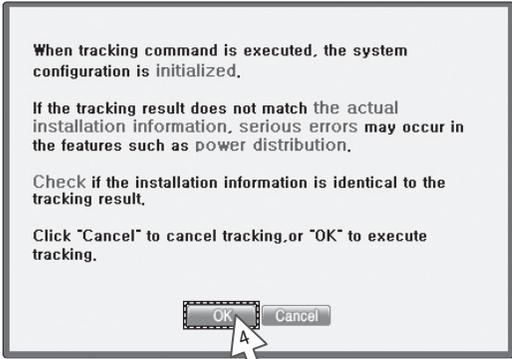
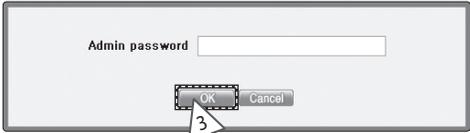
* The communication mode of a channel where the device is connected cannot be changed. [Edit](#) [Save](#)

Channel	Device	Address	Name
DMS	DMS DI-DO Setting	56	DMS DI-DO

[Edit](#) [Save](#)

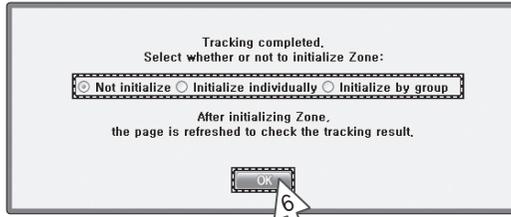
1 Click [System Settings] → [Tracking] when DMS2 web page menu screen appears.

2 Click [DVM Tracking].



-
- 3 Enter administrator's password and then click [OK].
-
- 4 Tracking information window pops up. Check and click [OK] to continue.
 - ◆ Execute tracking depending on the communication mode set by communication mode setting by channel.
 - (1) For the channel which is set to interface module communication mode, DMS2 executes tracking of interface module and SIM/PIM.
 - (2) For the channel which is set to centralized controller communication mode, DMS2 executes tracking of centralized controller and SIM/PIM.
-
- 5 "Tracking is in progress. Please wait." message appears.
 - ◆ Tracking takes from tens of seconds to 3 minutes. However, it may vary depending on the number of installed controllers.
-

System Settings (Continued)



- Tracking completed message will appear. Select Zone initialization mode you want and click [OK].
 - ◆ Not initialize: No zone information initialization will be made.
 - ◆ Initialize individually: Initialize zone information as individual mode.
 - ◆ Initialize by group: Initialize zone information as group mode.

- Note**
- ◆ *If tracking is executed successfully when interface module is set for communication mode setting by channel, virtual centralized controller will be assigned to each channel.*
 - ◆ *For about centralized controller's address, address 11~15 will be assigned to channel 0~4 for each.*
 - ◆ *If there is interface module communication channel, tracking for centralized controller will be restricted for the centralized controller which are in the range of 0~10.*
 - ◆ *If there is no searched interface module, centralized controller, and SIM/PIM, it is regarded as DVM tracking failure.*
 - ◆ *If there are devices which have same address, first searched device will be registered only.*
 - ◆ *The number of centralized controller contains the number of virtual centralized controller which is used in interface module communication.*
 - ◆ *The number of indoor unit contains the number of indoor unit, ERV, AHU, and GHP.*



CAUTION

- ◆ *If you execute tracking, system setting will be initialized.*
- ◆ *If tracking result does not match with actual installation information, there can be critical error in additional functions such as power distribution and peak power control.*
- ◆ *Make sure that tracking information matches to actual installation information after tracking.*

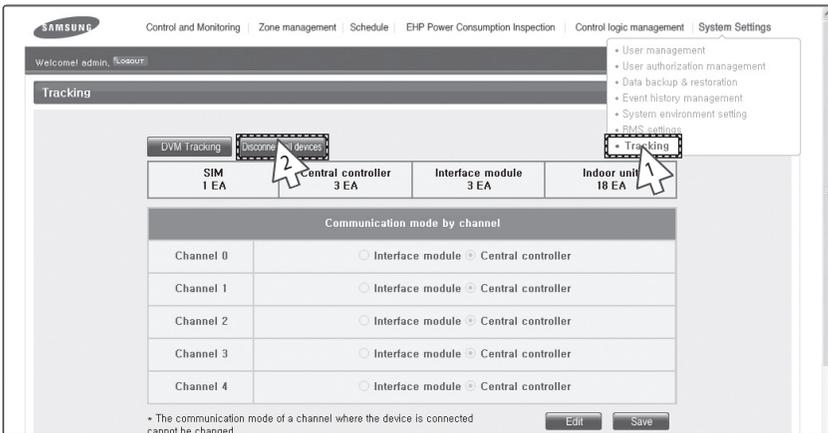
Disconnect All Devices

◆ Function

Initialize searched device status in DMS2. Using this function, monitoring and controlling of all the connected devices to DMS2 will be stopped.

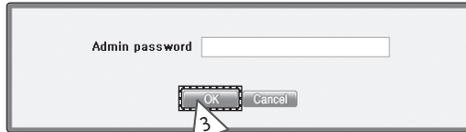
◆ When is it needed?

- Connect searched device to the other channel and execute tracking. If the other device is searched in the channel you want to use, use 'Disconnect all devices' function.
- If you use this function, DMS2 device connection status will be initialized.



- 1 Click [System Settings] → [Tracking] when DMS2 web page menu screen appears.
- 2 Click [Disconnect all devices].

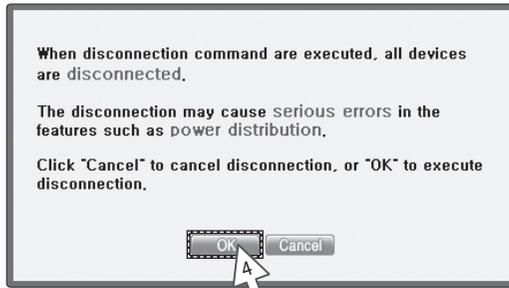
System Settings (Continued)



Admin password

OK Cancel

A mouse cursor with the number 3 is pointing to the OK button.



When disconnection command are executed, all devices are disconnected.

The disconnection may cause serious errors in the features such as power distribution.

Click "Cancel" to cancel disconnection, or "OK" to execute disconnection.

OK Cancel

A mouse cursor with the letter A is pointing to the OK button.

-
- 3 Enter administrator's password and then click [OK].

 - 4 Disconnect all devices information window pops up. Check it and click [OK] to continue.

 - 5 "Reading data from DMS2. Please wait." message appears. After completing disconnect all devices operation, page will be refreshed.

- Note**
- ◆ After executing disconnect all devices function, device search status of DMS2 will be initialized.
 - ◆ You should execute tracking again after using disconnect all devices function.

Renaming the Device

Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, logout

Tracking

DVM Tracking | Disconnected all devices

SIM	Central controller	Interface module	Indoor unit
1 EA	3 EA	3 EA	18 EA

Communication mode by channel

Channel	Mode
Channel 0	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 1	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 2	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 3	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 4	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller

* The communication mode of a channel where the device is connected cannot be changed.

Edit Save

Channel	Device	Address	Name
CH0	Central controller	00	CAUR-00
	Interface module	00,00	
	Indoor unit	00,00,00 (00)	00.00.00
	Indoor unit	00,00,01 (01)	00.00.01
DMS	DMS DI DO <input type="button" value="Setting"/>	56	DMS DI DO

Edit Save

- 1 Click [System Settings] → [Tracking] when DMS2 web page menu screen appears.
- 2 Click [Edit] on the bottom of tracking device list.
 - ◆ [Edit] will change to [Cancel].

System Settings (Continued)

SAMSUNG Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome! admin, (Logout)

Tracking

DVM Tracking | Disconnected all devices

SIM	Central controller	Interface module	Indoor unit
1 EA	3 EA	3 EA	18 EA

Communication mode by channel

Channel	Mode
Channel 0	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 1	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 2	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 3	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller
Channel 4	<input type="radio"/> Interface module <input checked="" type="radio"/> Central controller

* The communication mode of a channel where the device is connected cannot be changed. Edit Save

Channel	Device	Address	Name
CH0	Central controller	00	CAUR-00
	Interface module	00,00	00,00,00
	Indoor unit	00,00,00 (00)	00,00,01
	Indoor unit	00,00,01 (01)	DMS DI DO
DMS	DMS DI DO Setting	56	

Edit Save

3 Enter name in the name field.

- ◆ You cannot use special symbols as device name.

4 Click [Save] after setting is completed.

- ◆ "Reading data from DMS. Please wait." message appears and saving is completed. Then, tracking page with disabled items will be displayed again.
- ◆ If you click [Cancel], input fields are disabled and [Cancel] will change to [Edit].

DMS DI•DO Port Setting

Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome admin, floor01

Tracking

DMS Tracking	Controlled all device
SIM 1 EA	Central controller 3 EA
Interface module 3 EA	Indoor unit 18 EA

Communication mode by channel

Channel	Interface module	Central controller
Channel 0	Interface module	Central controller
Channel 1	Interface module	Central controller
Channel 2	Interface module	Central controller
Channel 3	Interface module	Central controller
Channel 4	Interface module	Central controller

The communication mode of a channel where the device cannot be changed.

Channel	Device	Count
CH0	Central controller	03
	Interface module	
	Indoor unit	
	Indoor unit	
DMS	DMS DI•DO	56

Setting

Control and Monitoring | Zone management | Schedule | EHP Power Consumption Inspection | Control logic management | System Settings

Welcome admin, floor01

System Settings | Tracking

DMS DI•DO

DMS DI•DO 56 Setting

Address	Port type	Device type	Short name	Full name	MIN	MAX
56.00.03	DI	DI	56.00.03		OFF	ON
56.00.04	DI	DI	56.00.04		OFF	ON
56.00.05	DI	DI	56.00.05		OFF	ON
56.00.06	DI	DI	56.00.06		OFF	ON
56.00.07	DI	DI	56.00.07		OFF	ON
56.00.08	DI	DI	56.00.08		OFF	ON
56.00.09	DI	DI	56.00.09		OFF	ON
56.00.10	DI	DI	56.00.10		OFF	ON
56.01.03	DO	DO	56.01.03		OFF	ON
56.01.04	DO	DO	56.01.04		OFF	ON
56.01.05	DO	DO	56.01.05		OFF	ON
56.01.06	DO	DO	56.01.06		OFF	ON
56.01.07	DO	DO	56.01.07		OFF	ON
56.01.08	DO	DO	56.01.08		OFF	ON

Edit Save

- 1 Select [System Settings] and then click [Tracking].
- 2 Click [Setting] which is next to DMS DI•DO of device list.
- 3 Click [Edit] which is on the bottom of DMS DI•DO setting page.
 - ◆ [Edit] will change to [Cancel].

System Settings (Continued)

DMS DI-DO 56 Setting

Address	Port type	Device type	Short name	Full name	MIN	MAX
56.00.03	DI	DI	56.00.03		OFF	ON
56.00.04	DI	DI	56.00.04		OFF	ON
56.00.05	DI	DI	56.00.05		OFF	ON
56.00.06	DI	DI	56.00.06		OFF	ON
56.00.07	DI	DI	56.00.07		OFF	ON
56.00.08	DI	DI	56.00.08		OFF	ON
56.00.09	DI	DI	56.00.09		OFF	ON
56.00.10	DI	DI	56.00.10		OFF	ON
56.01.03	DO	DO	56.01.03		OFF	ON
56.01.04	DO	DO	56.01.04		OFF	ON
56.01.05	DO	DO	56.01.05		OFF	ON
56.01.06	DO	DO	56.01.06		OFF	ON
56.01.07	DO	DO	56.01.07		OFF	ON
56.01.08	DO	DO	56.01.08		OFF	ON

Cancel Save

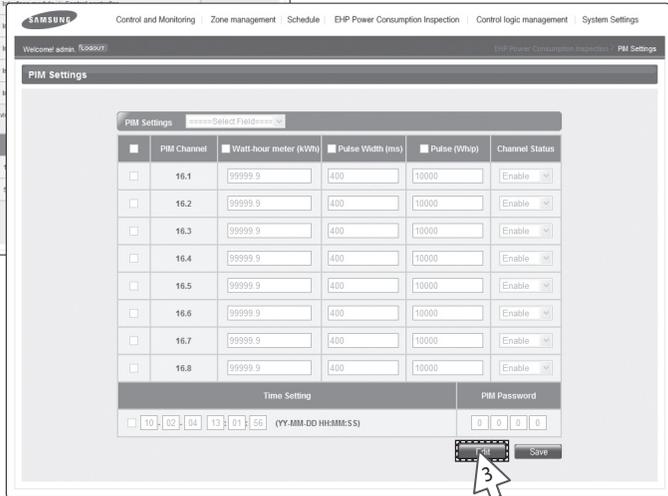
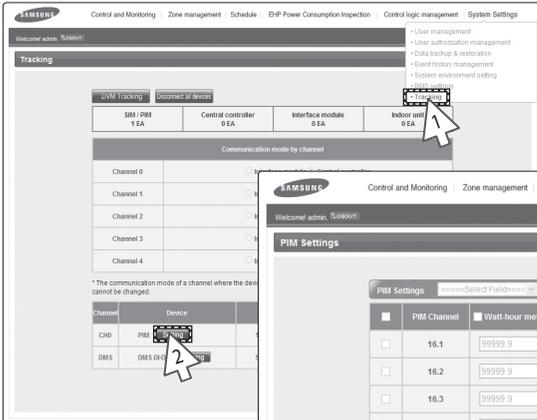
4 Edit each item when DMS DI-DO selection and input fields are enabled.

- ◆ Device type : DI or DO
- ◆ Short name : Input short name of the device.
- ◆ Full name : Input full name of the device.
- ◆ Minimum value / Maximum value : MIN value is fixed as OFF and MAX value is fixed as ON.

5 Click [Save].

- ◆ After the saving is complete, DMS DI-DO setting page with all deactivated items will appear.
- ◆ If you press [Cancel], webpage will refresh and it goes back to the state before the modification.

PIM Setting



- 1 Click [System Settings] → [Tracking] when DMS2 web page menu screen appears.
- 2 Click [Setting] which is next to PIM of device list.
 - ◆ Enter administrator's password and then click [OK].
- 3 Click [Edit] which is on the bottom of PIM setting page.
 - ◆ [Edit] will change to [Cancel].

System Settings (Continued)

The screenshot displays the 'PIM Settings' page in a web browser. At the top, there are navigation tabs: 'Control and Monitoring', 'Zone management', 'Schedule', 'EHP Power Consumption Inspection', 'Control logic management', and 'System Settings'. Below the navigation, there is a header with 'Welcome admin. Logout' and 'EHP Power Consumption Inspection PIM Settings'. The main content area is titled 'PIM Settings' and contains a table with the following columns: PIM ID, Time Setting, Watt-hour meter (kWh), Pulse Width (ms), Pulse (Wh/p), and Channel Status. A dropdown menu is open over the 'Time Setting' column, showing a list of settings to be edited. A dashed box highlights the first row of the table, and another dashed box highlights the 'Save' button at the bottom right.

PIM ID	Time Setting	Watt-hour meter (kWh)	Pulse Width (ms)	Pulse (Wh/p)	Channel Status
16.3	99999.9	400	10000	Enable	
16.4	99999.9	400	10000	Enable	
16.5	99999.9	400	10000	Enable	
16.6	99999.9	400	10000	Enable	
16.7	99999.9	400	10000	Enable	
16.8	99999.9	400	10000	Enable	

At the bottom of the page, there is a 'Time Setting' section with a date and time picker (YY-MM-DD HH:MM:SS) and a 'PIM Password' section with a password input field. There are 'Cancel' and 'Save' buttons at the bottom right.

- 4 Select a field and edit each item when input fields are enabled.

Note Each field range

- ◆ Watt-hour meter: 0~99999.9(kWh)
- ◆ Pulse width: 20~400(ms)
- ◆ Pulse: 1~10000(Wh/Pulse)

- 5 Click the check boxes to select the channel applying for the setting.

- 6 Click [Save].

- ◆ If you press [Cancel], webpage will refresh and it goes back to the state before the modification.

Check Before using Panel

Using LCD and LCD Button

LCD is mounted on DMS2 for installation and convenience of the user.

- ◆ You can search menu and change setting using [▲] and [▼] buttons.
- ◆ If you press and hold [▲] or [▼] button in some menu such as IP setting, the value changes faster.
- ◆ To go to upper menu or cancel, select [MENU] button.
- ◆ To go to sub menu, select or save, press [SET] button.
- ◆ Operates some menus with care because they are related to the proper operation of DMS2 system.
- ◆ If you do not use DMS2 buttons for long periods of time, set button lock to avoid malfunction.
- ◆ Manufacturer is not responsible for the damage caused by wrong operation.

Checking Main Menu

192.168.0.100
06:12:13(AM)

1. If IP and current time are displayed on LCD display, press [Menu], [▲], [▼] or [Set] button.
 - ◆ Main menu screen will be displayed.
2. Check menu options by pressing [▲], [▼] buttons.

1	IP Config	Network information setting
2	In/Outdoor	Checking Indoor/Outdoor unit information
3	DMS2 Version	Checking DMS2 version
4	DMS2 Time	Setting DMS2 time
5	Data Backup	Setting data backup
6	Peak Level	Checking peak level
7	Error Status	Checking error information
8	Password Reset	Password reset
9	Button Lock	Button lock function
10	Safety Halt	Safe end function

Setting Network Information

Network Information Setting(IP Config)

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
1.IP Config

2. Select 1.IP Config by pressing [▲] and [▼] buttons, and press [Set] button.
 - ◆ Network setting screen will be displayed.

IP ADDRESS
192.168.0.100

3. Select the item you want by pressing [▲] and [▼] buttons.
 - ◆ You can select from IP address, subnet mask address, gateway address, and DNS server.

SET YOUR IP
192.168.0.79

4. Edit selected network information by pressing [Set] button.
 - ◆ Number to edit will blink.
 - ◆ You can change value by pressing [▲] and [▼] buttons.
 - To move to next number, press [Set] button.
 - ◆ If you press and hold [▲] or [▼] button, the value changes faster.
 - ◆ After setting all the 4-digit number, press [Set] button to save the new settings.
 - ◆ To cancel the setting, press [Menu] button.

Auto Address Setting (DHCP CONFIG)

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
1.IP Config

2. Select 1.IP Config by pressing [▲] and [▼] buttons, and press [Set] button.
 - ◆ Network setting screen will be displayed.

DHCP CONFIG
Current disabled

3. Select auto address setting function(DHCP CONFIG) by pressing [▼] button.
 - ◆ Auto address setting function status will be displayed.
Current disabled: Auto address setting function disabled
Current enabled: Auto address setting function enabled

Enable DHCP?
YES:Set, NO:Menu

4. Enable/Disable auto address setting function by pressing [Set] button.
 - ◆ If auto address setting function enabled
 - You can change it to disabled status by pressing [Set] button.
 - ◆ If auto address setting function disabled
 - You can change it to enabled status by pressing [Set] button.
 - ◆ To maintain current status, press [Menu] button.
 - ◆ DHCP function is not available when you use BACnet Gateway function.

Checking Indoor/Outdoor Unit Information

Checking Indoor/Outdoor Unit Information

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
2.In/Outdoor

2. Select 2.In/Outdoor by pressing [▲] and [▼] buttons.

IN/OUTDOOR INFO
Indoor:64

3. Press [Set] button.
 - ◆ The number of indoor units connected to DMS2 will be displayed.

IN/OUTDOOR INFO
Outdoor:6

4. Check outdoor unit information by pressing [▼] button.
 - ◆ The number of outdoor units connected to DMS2 will be displayed.
 - ◆ To check indoor unit information again, press [▲] button.
 - ◆ You can go back to main menu by pressing [Menu] or [Set] button.

Checking DMS2 Version

Checking DMS2 Version

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
3.DMS Version

2. Select 3. DMS2 Version by pressing [▲] and [▼] buttons.

DMS version
2.0

3. Press [Set] button.
 - ◆ Current version of DMS2(DMS2 Version) will be displayed.
 - ◆ You can go back to main menu by pressing [Menu] or [Set] button.

Checking DMS2 version (Continued)

■ DMS2 Time Setting – Checking and Setting Date

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
4.DMS time

2. Select 4. DMS2 Time by pressing [▲] and [▼] buttons.
 - ◆ Current set date of DMS2 will be displayed.

CURRENT DATE
1983:04:16

3. When 'CURRENT DATE' appears, set current data by pressing [Set] button.
 - ◆ Number to edit blinks.
 - ◆ You can change value by pressing [▲] and [▼] buttons. To move to the next number, press [Set] button.
 - ◆ Press and hold [▲], [▼] buttons to change the number continuously.
 - ◆ Set year, month and day in order, and then press [Set] button to save.
 - ◆ To cancel the setting, press [Menu] button.

|| DMS2 Time Setting – Checking and Setting Time

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
4.DMS time

2. Select 4. DMS2 Time by pressing [▲] and [▼] buttons.

◆ Current set time of DMS2 will be displayed.

CURRENT TIME
16:46:37(PM)

3. Select 'CURRENT TIME' by pressing [▼] button. Then set time by pressing [Set] button.

- ◆ Current set time of DMS2 will be displayed.
- ◆ Number to edit blinks.
- ◆ You can change value by pressing [▲] and [▼] buttons. To move to the next number, press [Set] button.
- ◆ Press and hold [▲], [▼] buttons to change the number continuously.
- ◆ Set hour, minute and second in order, then press [Set] button to save.
- ◆ To cancel the setting, press [Menu] button.

Data Backup Setting

Data Backup

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
5.Data Backup

2. Select 5.Data Backup by pressing [▲] and [▼] buttons.
 - ◆ DMS BACKUP MENU will appear.

DMS BACKUP MENU
data backup

3. Check if data backup is selected. Then press [Set] button.
 - ◆ You can start backup by pressing [Set] button again.
 - ◆ If data backup is completed successfully, screen below will be displayed.

Backup Completed

- ◆ To cancel backup, press [Menu] button.

Are you sure?
YES:Set, NO:Menu



CAUTION

- ◆ **Before executing data backup, check if SD card is inserted.**
- ◆ **Unlock forbidding writing tab of SD card.**

■ Data Restore

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
5.Data Backup

2. Select 5.Data Backup by pressing [▲] and [▼] buttons, and then press [Set] button.
 - ◆ DMS BACKUP MENU will appear.

DMS BACKUP MENU
data restore

3. Check if data restore is selected by pressing [▲] button. Then select a file you want to restore by pressing [▲] and [▼] buttons.
 - ◆ Before executing data restore, check if SD card is inserted.

Filename:
20090725.dms

4. Start data restore by pressing [Set] button.
 - ◆ To cancel restoration, press [Menu] button.



CAUTION

- ◆ *When controlling DMS2 using panel, data restore is only possible in SD card. You can execute PC restoration through web browser.*
- ◆ *Unlock forbidding writing tab of SD card.*

Checking Error Information

Checking Error Information

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
7.Error Status

2. Select 7. Error Status by pressing [▲] and [▼] buttons, and then press [Set] button.
 - ◆ Unsolved error info will be displayed.

ERROR INFO >
CAU-01 611

3. You can check the other error information by pressing [▲] and [▼] buttons.
 - ◆ You can check the next error information by pressing [▼]. To check the previous error, press [▲] button.

Reset Password

Reset Password

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
8.Password Reset

2. Select 8.Password Reset by pressing [▲] and [▼] buttons, and then press [Set] button.

RESET PASSWORD
WAITING.....

3. When "RESET PASSWORD WAITING....." message appears, press [Menu] and [Set] buttons at the same time.
 - ◆ Button lock function will be released and confirm message for password initialization will appear.
 - ◆ If there is no button input for around 3 seconds, password reset will be failed and it will return to main menu.

Are you sure?
YES:Set, NO:Menu

4. Reset password by pressing [Set] button.
 - ◆ Password will be reset as factory setting. (1234)
 - ◆ To cancel reset password, press [Menu] button.

Button Lock

■ ■ Button Lock

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
9.Button Lock

2. Select 9.Button Lock by pressing [▲] and [▼] buttons.

Are you sure?
YES:Set, NO:Menu

3. Press [Set] button.
 - ◆ Confirm message will appear.

BUTTON LOCKED
07:30:21(AM)

4. Press [Set] button.
 - ◆ LCD operating button will be locked.
 - ◆ To cancel button lock, press [Menu] button.
5. To release button lock function, press [Menu] and [Set] button at the same time for 5 seconds.

Safety Halt

Safety Halt

192.168.0.100
06:12:13(AM)

1. Check main menus by pressing [Menu], [▲], [▼] or [Set] button.

MAIN MENU
10.Safety Halt

2. Select 10.Safety Halt by pressing [▲] and [▼] buttons.

Are you sure?
YES:Set, NO:Menu

3. Press [Set] button.
 - ◆ Confirm message will appear.

Now sleeping..
See you again

4. Press [Set] button.
 - ◆ All functions of DMS2 will stop and 'Now Sleeping..' phrase will appear.

-
- Note**
- ◆ *Safety halt function is an operation that saves data of DMS2 and then stops service safely. Use this function when relocation and system restart are needed.*
 - ◆ *This function will not transfer DMS2 power to OFF status. Therefore, when the screen above appears, press [RESET] button on the bottom of DMS2 or remove power cable. If you do not press [RESET] button or remove power after 10 minutes passed, DMS2 will restart automatically.*

Troubleshooting

Problem	Check	Solution
DMS2 is not working.	Is there an electricity failure?	Check if the power is connected to the other interface module besides centralized controller. Then try again.
	Isn't there a communication error in the other interface module besides centralized controller?	Check the connection of communication cable. Then try again.
	Are the adapter and power cable connected?	Check the connection of adapter and power cable. Then try again.
Access to web page is not available.	Is Microsoft Silverlight installed?	Check the installation status. Refer to Start → Control Panel → Add/Remove Programs.
	Is Microsoft Silverlight installed properly?	Microsoft Silverlight 2.0 or later version should be installed to access web page.
Access to web page from outside is not available.	Are the network settings set?	Contact network manager first.
	Isn't the fire wall set?	
Monitoring of installed centralized controller is not working.	Are the communication cables of DMS2(C1, C2) properly connected?	Connect DMS2 communication cables (C1, C2) properly. Be careful to deal with the RS485 communication cable because it has polarity.
Power distribution is not executed properly.	Isn't the power of DMS2 disconnected?	To use power distribution function properly, the power of DMS2 should be connected all the time.

<u>Problem</u>	<u>Check</u>	<u>Solution</u>
I forgot DMS2 IP.	Press [Menu] button from the main menu and "1. IP Config" will appear. Then press [Set] button.	The factory setting of DMS2 IP address is 192.168.0.100
Indoor unit turned on or off automatically.	Isn't the schedule control of peak power control in operation?	Depending on the schedule control and peak power control, indoor unit can be turned on or off automatically. It is normal operation.
	Is DMS2 system time different from current time?	Set the DMS2 system time according to current time.
DI(Digital Input) external contact point function is not working.	Is the external circuit constituted?	Check if the external circuit is constituted.
	If the contact control pattern of DMS2 set to 1?	Set the pattern which fits to the control pattern you want.
Tracking is not working.	Does it show 'Tracking Fail' and is there no indoor unit?	It means tracking failure. Execute tracking again.

Specifications

Items		Description
Exterior		
Size		240 X 255 X 64.8 mm (Width X Length X Height)
Weight		1.48 Kg
Power	Source	DC ADAPTOR
	INPUT Voltage	100-240V 50/60Hz 1.0A
	OUTPUT Voltage	12V 3A
Inter- face	RS-485	5 Channels
	Ethernet	10/100Mbps 1 Port
	SD CARD	Option (Purchase SD card separately)
	DI	12V Digital Input 10 Channels
	DO	12V Digital Output 10 Channels
	Etc.	Serial Port, Reset Button
Display		16-Character X 2-Line Character LCD
Input method		Menu/Up/Down/Set 4-Tact Button

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10. cron, db4-libs,shadow, xinetd is used on this product.

Memo

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Version 2, June 1991

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Special thanks are due to Chip Rosenthal for his fine testing efforts; to Steve Simmons for his work in porting this code to BSD; and to Bill Kennedy for his contributions of LaserJet printer time and energies. Also, thanks for Dennis L. Mumaugh for the initial shadow password information and to Tony Walton (`olapw@olgb1.oliv.co.uk`) for the System V Release 4 changes. Effort in porting to SunOS has been contributed by Dr. Michael Newberry (`miken@cs.adfa.oz.au`) and Micheal J. Miller, Jr. (`mke@kaberd.rain.com`). Effort in porting to AT&T UNIX System V Release 4 has been provided by Andrew Herbert (`andrew@werple.pub.uu.oz.au`).

Special thanks to Marek Michalkiewicz (`marekm@i17linuxb.ists.pwr.wroc.pl`)

for taking over the Linux port of this software.

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