



USER'S MANUAL

MIM-D00
MIM-D00U

DMS (Data Management Server)



Ⓔ DB98-25059A(1)





Safety Precautions

- *Before using the DMS, 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 DMS by yourself.*



WARNING

- ◆ Do not attempt to install or repair this DMS by yourself.
- ◆ This DMS contains no user-serviceable parts.
Always consult authorized service personnel for repairs.
- ◆ When moving, consult authorized service personnel for disconnection and installation of the DMS.
- ◆ Ensure that the wall is strong enough to support the weight of the DMS.
- ◆ Must install the DMS 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 DMS.
- ◆ Do not spill water into the DMS.
- ◆ Do not operate the DMS with wet hands.
- ◆ Do not install the DMS 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 DMS cable excessively.
- ◆ Do not use this DMS for other purpose.
- ◆ Do not spray an insecticide or other combustible things on the DMS.
- ◆ Do not clean the DMS with benzene, solvents or other chemicals.
- ◆ Do not give a shock to the DMS or disassemble it by yourself.





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General Description

INTRODUCTION OF DMS (DATA MANAGEMENT SERVER)

The DMS 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 DMS SYSTEM

The DMS provides the following advantages:

- ◆ Everyday Device – The DMS is operational all year long 24 hours.
- ◆ Independent Operation – The DMS 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 DMS has a built-in web server function and can be accessed from a remote location to operate status monitoring, control, error history, and schedule setting of the system air-conditioners.
 - ✓ Using an Upper Level Controller – When a separate upper level controller (SNET series) is used, a number of DMS can be controlled with one central management system.
- ◆ Data Storage – The DMS has its own database built-in, therefore, error 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 DMS and therefore, only one DMS can manage small and medium size buildings.



Main Function

Interface with Upper Level Controller

The DMS receives control data from the upper level controller and sends the received data to the lower level system.

The upper level controllers of the DMS are the SNET series and the connectible SNET series are SNET-III, SNET-*i* and SNET mini. SNET-III is a program that is used by installing on a PC: SNET-*i* and SNET mini are touch screen type controllers.

Save Error History

The DMS saves at most 256 cases of error history. If the number of errors exceeds 256, only the latest 256 cases are stored by deleting the oldest error history.

The following errors can be detected by the DMS:

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
Solution Products such as the Centralized Controller	Solution device related communication error

- ※ Device name, address, time when error occurred, time when error was fixed, and error contents are saved on error history.
The error history can be viewed through the Web or the connected upper level controller.



Main Function (Continued)

Set and Run Schedule

The schedule function of the DMS can be set through the Web or using the upper level controller.

Weekly/Yearly schedules can be set and the following information can be assigned to each 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 - Control mode: Heat, Cool, Dry, Fan, and Auto - Allow/Disable the use of remote controllers Both the On time and the Off time can not be set at the same time and only one must be set.	At most 10 events

- ※ Each schedule can be used selectively by using the run schedule/stop schedule order.
At most 256 schedules can be set.
The indoor units can be controlled by the schedule function of the DMS in at least 1 min. intervals.

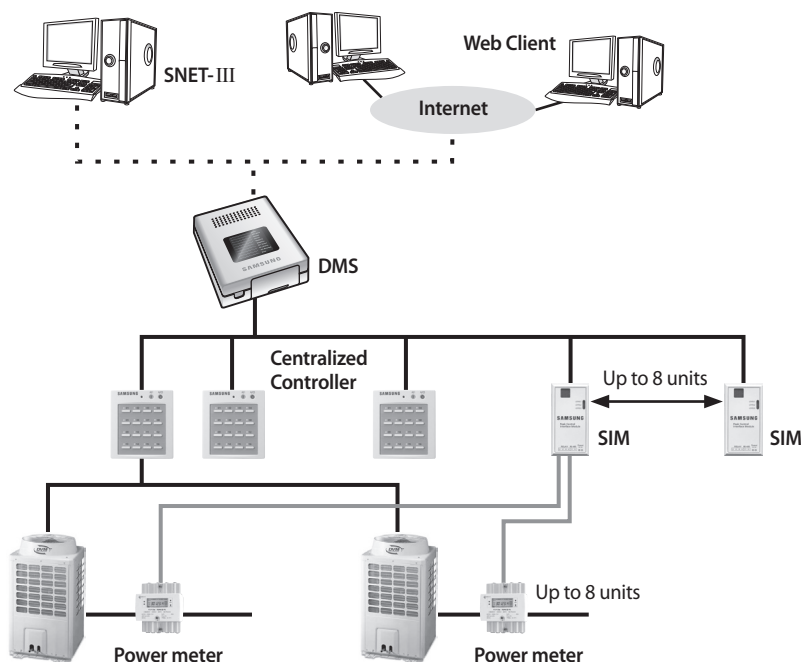
Save Integrated Power Distribution Data

Overview

- ◆ The DMS calculates and distributes the power consumed by each indoor unit by receiving the total power usage from the power meter interface modules (SIM) and taking into account the operation status of the indoor units.
- ◆ The DMS saves at most 62 days worth of data. After 62 days, the oldest data is deleted and the latest data is saved. This data can be viewed through the built-in Web page of the DMS or by SNET-III.



System Architecture



※ In order to use the power distribution function in the DMS, relevant devices as shown above must be installed. (Consult the installers.)

Time Segmentation

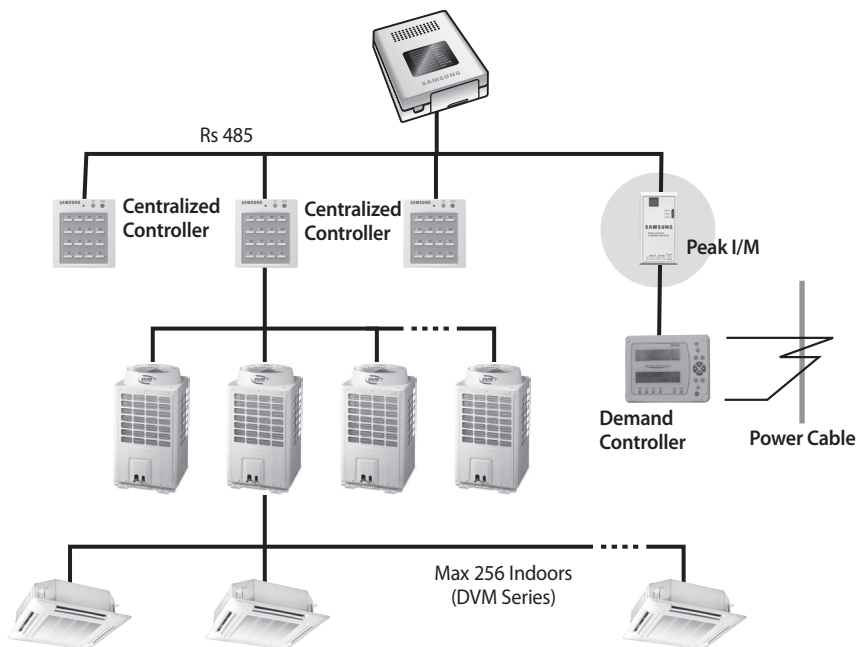
- ◆ Time segmentation is used to divide 24 hours into different sections and to distribute power according to each section. This function is used when the power consumption fee is different according to different time slots or when a building is charged differently depending on the consumption time.
- ◆ Time can be divided into 1 section (a), 2 sections (a,b,a), and 3 sections (a,b,c,b,a).
- ◆ 1 section implies using the whole 24 hours as one section. The default DMS setting is set to 1 section.
- ◆ For 2 sections, 24 hours can be divided as follow:



Main Function (Continued)

Peak Power Control

The DMS performs peak power control without a separate PC.



* In order to use the peak power control function in the DMS, relevant devices as shown above must be installed. (Consult the installers.)

Execute Peak Power Control and View Status

1) Overview

- ◆ The peak power control function is used to minimize instantaneous power usage by switching the indoor units to Fan mode or turning the indoor units off. However, since the DMS has priority over user control when using this function, indoor unit operations by the users are somewhat limited.
- ◆ In order to maintain the peak power control, the DMS performs a function that modulates the indoor unit control by the level signal received from the peak interface module.
- ◆ The peak level consists of 4 steps from 0 to 3 and this level is received from the peak interface module.



2) Operation Mode

◆ Peak power control runs in one of the 3 modes:

'No Control', 'Priority Control Mode', and 'Circulation Control Mode'.

◆ No Control:

If the peak power control mode is set to 'No Control', peak power control will not run. The default DMS setting is set to 'No Control' mode.

◆ Priority Control Mode:

In Priority Control Mode, priorities are set for each indoor unit and the indoor units are controlled according to the priorities set when the peak level is received.

► The operation is as follow:

Input Peak Level	Peak Power Control Applied Group
Level 0	Peak power control not performed.
Level 1	Only groups with priority set to 1 receive peak control.
Level 2	Only groups with priority set to 1 and 2 receive peak control.
Level 3	Only groups with priorities set to 1, 2, and 3 receive peak control.

※ The priority of each indoor unit can be set through the Web or using the upper level controller of the DMS.

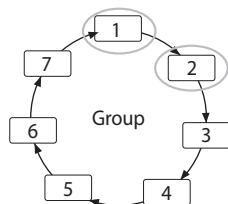
◆ Circulation Control Mode:

In Circulation Control Mode, indoor units are classified into several groups and each group or groups are controlled by the peak power function periodically.

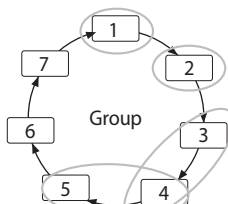
► The operation is as follow:

Input Peak Level	Peak Power Control Applied Group
Level 0	Peak power control not performed.
Level 1	1 group circulation control (Peak control for only 1 group)
Level 2	2 groups circulation control (Peak control for only 2 groups)
Level 3	3 groups circulation control (Peak control for only 3 groups)

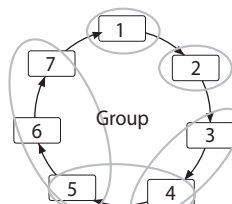
※ A group or a groups of indoor units are controlled by the peak power function for a set period of time and the following group or groups are controlled after the set period of time and so on. The group or groups of indoor units released from peak power function restore their operation status to before being controlled by the peak power function.



Input Peak Level : 0 → 1



Input Peak Level : 0 → 1



Input Peak Level : 0 → 1





Main Function (Continued)

3) Restrictions of indoor unit use

- ◆ If operation mode of an indoor unit is Dry, Cool, and Auto, each indoor unit is converted to Fan mode when peak power control is applied.
- ◆ If an indoor unit is operated under Heat, run with one operation among change to Fan mode, power off, and set temperature change (16 degree.) It can be set on the upper controller or the Web.
- ◆ If an indoor unit which the power is off belongs to a peak power control group and a user turns on this indoor unit during peak control, the DMS turns off the indoor unit again.
- ◆ If an indoor unit which is operated under Fan mode is a peak power control applied group and user changes the mode of an indoor unit that belongs to the applied group to Cool/Heat, the DMS converts the indoor unit to Fan mode again.
- ◆ During peak power control for an indoor unit of peak power control applied groups, all mode change orders from the upper controller are constrained to indoor unit ON control, Cool, Auto, and Dry.
- ◆ Mode change orders are constrained to indoor unit ON control, Cool, Auto, and Dry by a Schedule during peak power control and Schedule Events that is expired during peak power control is nullified.
- ◆ If users want mode change to a centralized controller about the peak power control applied groups and indoor unit ON control, Cool, Auto, and Dry from a cable/wireless remote control during peak power control, the DMS checks the condition of the indoor unit and turns off or converts to the Dry again.
- ◆ If a user turns off an indoor unit under peak power control or an indoor unit is turned off by a Schedule, keep the off status after finishing peak power control.

4) Other Options

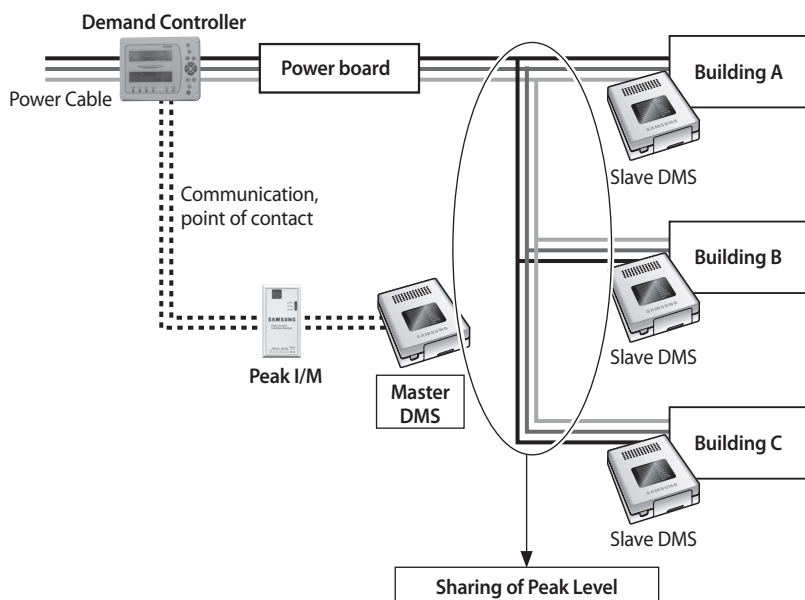
- ◆ If Tracking is executed during peak power control, the indoor unit or the indoor units that was under peak power control does not restore its previous status.
- ◆ Changing the system time of the DMS during peak power control does not affect the peak control circulation time.





Sharing Peak Power Control Information with other DMS'

- ◆ By sharing the peak power control information with other DMS', several buildings can be controlled using the peak power control.
- ◆ This setting consists of one master DMS and several slave DMS' and the information of the master DMS must be set on all slave DMS'. The default DMS setting is set to master.



- ※ Master DMS transmits the received Peak Level periodically to the connected slave DMS' and the slave DMS performs demand control according to the received Peak Level. The master/slave setting can be set through the Web and the DMS with the peak interface module connected must be set to be master.



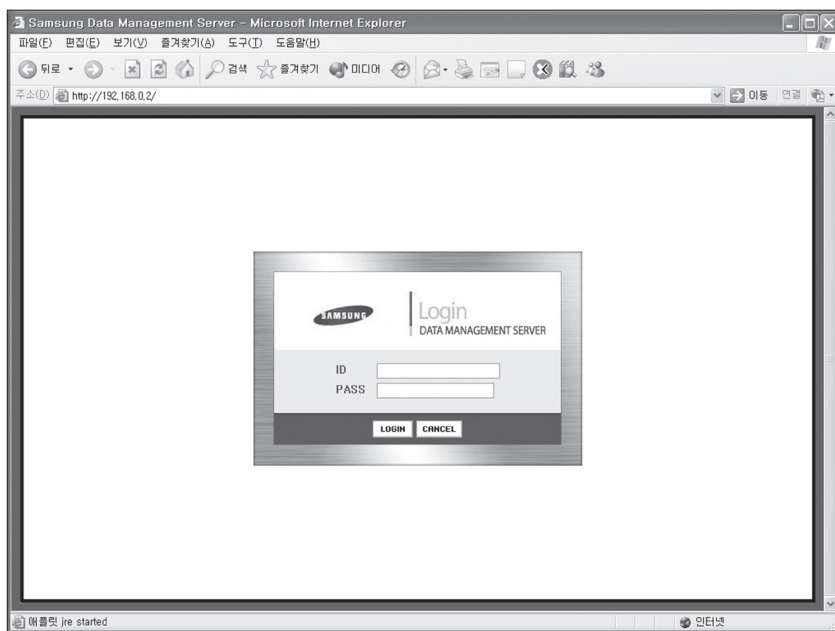
Using the DMS through the Web

Setting the Web Environment

- ◆ **Install JRE 1.3.1 or later version**
Java Runtime Environment 1.3.1 or a later version must be installed on the PC. JRE is installed automatically if the PC is connected to the Internet and when the DMS is accessed for the first time. JRE can also be downloaded from <http://java.sun.com/j2se>.
- ◆ **Install Internet Explorer 6.0 or later version**
IE6.0 or later version must be installed on the PC. Please install IE6.0 or later version through Windows Update.

Using the DMS through the Web

- ◆ **Access Method**
In order to access the DMS, type in the following address on the web browser:
http://“DMS IP” (The default DMS IP is set to 192.168. 0. 2.)



* Refer to "3.2.9 Setting and Viewing the System Environment" or the installation manual on how to set the IP address of the DMS.



Login

Function Details

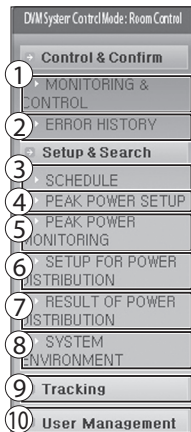
- ◆ Login allows only authorized users to access the web page.
- ◆ There is no limit on the number of users that can access the DMS at the same time, however, less than 5 users are recommended for access speed reasons.

Login

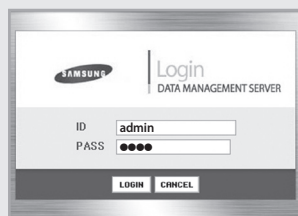
- 1 Type in the ID and the password and click on the LOGIN button.
- 2 If the ID and the password are valid, the monitoring and control page will be displayed.
- 3 If the ID and the password are not matched, the LOGIN page is displayed again.
- 4 If the CANCEL button is pressed after typing in the ID and the password, the ID and password fields are cleared.
- 5 The default DMS user setting as follow:
 - ◆ ID : admin
 - ◆ PASS: 1234Change the ID and the password for security reasons.
* Refer to 3.2.11 for user management.

Menu Organization

If Login is successful, the following menu appears. Click on the menu to move to the corresponding page.



- ① Monitoring and Control
- ② Viewing the Error History
- ③ Set, Run and View schedule
- ④ Setting and Viewing Peak Power Control
- ⑤ Peak Power Monitoring
- ⑥ Setting the Power Distribution function
- ⑦ Viewing the Power Distribution Data
- ⑧ Setting the Viewing the System Environment
- ⑨ Tracking
- ⑩ User Management



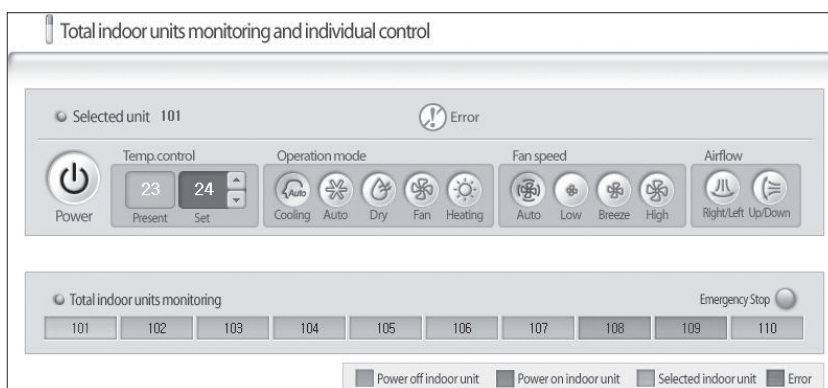
Using the DMS through the Web (Continued)

Monitoring and Control

Function Details

- ◆ On this screen users can monitor the operation status of all indoor units and control each indoor unit. Only one selected indoor unit can be controlled.

Monitoring and Control

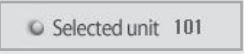


- 1 The status of all indoor units can be viewed from the 'Monitor all indoor units.' The color of the squares represents the following meaning and the name of each indoor unit is displayed inside of squares.





- 2 Select and click on the indoor unit and the background color of the indoor unit is changed to green. The operation status of the selected indoor unit is displayed on the upper part. Displayed items are as follow:

 Selected indoor unit address	Displays the name of the selected indoor unit.
 Error	Displays whether there is an error on the selected indoor unit.
 Power	Click on this button to turn on and turn off the selected indoor unit.
 Temperature Control	The current temperature of the selected indoor unit can be monitored and the desired temperature can be set by clicking the  and  buttons next to the desired temperature.
 Mode Set	The current mode of the selected indoor unit is displayed in light blue. Click on the desired mode to change modes.
 Fan Speed	The current fan speed of the selected indoor unit is displayed in light blue. Click on the desired fan speed to control the fan speed.
 Air Swing	The current air swing of the selected indoor unit is displayed in light blue. Both air swings can be selected at once. Click on the desired air swing to control the airflow.
 Emergency Stop Status	The button is displayed in red if the DMS is currently in the emergency stop status. In the emergency stop status, the indoor units may be monitored but not controlled. (The emergency stop function can only be used when the external contact control of the DMS is used.)

- ※ Consult the installer to use the emergency stop function. Refer to the installation manual for explanation about the emergency stop.



Using the DMS through the Web (Continued)

View Error History

Function Details

- ◆ The DMS users can view and delete error history of the DVM system. The DMS saves up to 256 errors.

Viewing the Error History

☐	Name	Address	Time occurred	Time resolved	Error No.	Error details	Present status
☐	101	00.00.06	2006-02-18 09:13:58.0		431		Unresolved
☐	101	00.00.06	2006-02-12 11:05:18.0	2006-02-18 09:13:46.0	431		Resolved
☐	101	00.00.06	2006-02-11 09:34:20.0	2006-02-11 09:34:25.0	431		Resolved
☐	109	00.03.14	2006-02-11 09:31:59.0	2006-02-11 09:35:19.0	202		Resolved
☐	107	00.03.12	2006-02-10 09:39:37.0	2006-02-10 10:12:12.0	161		Resolved
☐	107	00.03.12	2006-02-10 09:38:46.0	2006-02-10 09:39:18.0	161		Resolved
☐	110	00.03.15	2006-02-10 08:26:24.0	2006-02-10 08:27:24.0	161		Resolved
☐	110	00.03.15	2006-02-10 08:25:51.0	2006-02-10 08:26:05.0	161		Resolved
☐	101	00.00.06	2006-02-08 11:06:21.0	2006-02-08 11:06:52.0	431		Resolved
☐	108	00.03.13	2005-12-19 13:41:51.0	2005-12-19 13:41:59.0	161		Resolved
☐	101	00.00.06	2005-12-19 12:59:17.0	2005-12-19 19:40:40.0	431		Resolved
☐	108	00.03.13	2005-12-19 10:44:16.0	2005-12-19 10:44:33.0	161		Resolved
☐	103	00.02.08	2005-09-12 21:26:13.0	2005-09-12 21:26:16.0	128		Resolved
☐	103	00.02.08	2005-09-12 21:26:06.0	2005-09-12 21:26:10.0	128		Resolved

1

Delete

- 1 All error history can be checked from the 'View Error History' page.
- 2 The error history can be viewed according to date. Select the date in the list box and press the "search" button to view the error history according to the selected period.
- 3 The error history includes the device name, address, time when error occurred, time when error was fixed, error code, error contents, and status (solve/unsolved.)
- 4 Select and 'delete' errors by selecting the check boxes in area ❶.



Set, Run and View Schedule

Function Details

- ◆ Users can set, edit, and delete schedules for controlling the DVM system.

Using the Schedule Function

Schedule list

● Last set by : WEB

	Schedule name	Schedule date	Repeat	Schedule
☐	Schedule3	2006/08/18~2006/09/15	Every day	Stopped
☐	Schedule2	2006/01/01~2006/01/01	1 Day	Stopped
☐	Schedule1	2006/04/01~2006/11/10	Every week	Stopped
☐	Schedule4	2006/01/01~2006/05/31	Every week	Stopped

① ②

The Schedule List screen shows all current schedule information saved in the DMS.

- 1 On the schedule screen, a schedule can be created, edited, viewed, and deleted.
- 2 Press the 'New Schedule' button in ② to create a new schedule. (Refer to Adding a Schedule)
- 3 Press the 'Edit' button in ② after selecting a schedule in ① to edit a set schedule. (Refer to Adding a Schedule)
- 4 Press the 'Delete' button in ② after selecting a schedule in ① to delete the selected schedule.
- 5 Press the 'Run Schedule' button in ② after selecting a schedule in ① to run the selected schedule.
- 6 Press the 'Stop Schedule' button in ② after selecting a schedule in ① to stop running the selected schedule.
- 7 Press the 'All Stop' button in ② to stop running all the schedules.



Using the DMS through the Web (Continued)

Viewing the Error History

Create New Schedule

Last set by : WEB

Schedule name:

Schedule date

Start: 2006 Jan 1

End: 2006 Apr 31

Exception date

Year	Month	Day	
2006	03	17	[X]
2006	04	14	[X]
2006	04	25	[X]

1 Set exception date

The indoor unit

Address	Name	
00,00,06	101	[X]
00,00,07	102	[X]
00,00,08	103	[X]

2 Select indoor unit

3 Every week

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
☐	ON	OFF	Temperature	Mode	Remote control allowed		
☐	08:00	08:30	18	Auto	ON		
☐	08:30	09:00	18	Cooling	ON		
☐	09:00	10:00	20	Cooling	ON		
☐	11:00	12:30	18	Cooling	ON		
☐	12:30	13:30	18	Auto	ON		
☐	17:00	18:00	18	Auto	ON		
☐	18:00	21:00	18	Auto	ON		

4

5

6 Add event Delete event

7 Save Cancel

On the Create New Schedule screen, users can set the Schedule Name, Schedule Period, Applied Indoor Unit, and Event.

- For the event, users can set the Repeat or not, Day, On Time, Off Time, Temperature, Mode, and Remote Control Allow or not. Users can assign the maximum 10 events.
- When pressing the "Exception Day Setup" button from the ①, users can set up the schedule exception day.
- When pressing the "Select Indoor Unit(s)" button from the ②, users can select the schedule indoor unit.
- Users can set one of schedule repetition or not, which are every week, every day, and one day from the ③. If setting to one day, assign the same date of starting date and ending date.

- 5 When pressing the 'Add Event' button from the ⑥, a new event is added. When pressing the 'Delete Event' button from the ⑥ after selecting a check box from the ⑤, the selected event is deleted
- 6 When pressing the 'OK' button from the ⑦ after setting all schedule information, the schedule information is saved to the DMS.
- 7 When pressing the 'Cancel' button from the ⑦, turn back to the schedule list screen.

Editing an Existing Schedule

Edit Schedule

Last set by : WEB

Schedule name: Schedule4

Schedule date

Start: 2006 Jan 1

End: 2006 May 31

Exception date

Year	Month	Day	
2006	02	14	[X]
2006	03	14	[X]
2006	04	14	[X]

Set exception date

The indoor unit

Address	Name	
00,00,06	101	[X]
00,00,07	102	[X]

Select indoor unit

Every week

Mon	Tue	Wed	Thu	Fri	Sat	Sun
☐	☐	☐	☐	☐	☐	☐
☐	ON	OFF	Temperature	Mode	Remote control allowed	
☐	08:00	17:30	18	Cooling	ON	
☐	12:30			Cooling	ON	
☐		11:30		Auto	None	

Add event Delete event

Save Cancel

- ※ On the Edit Schedule screen, users can edit the existing schedule in the same way as adding a new schedule.

Using the DMS through the Web (Continued)

Setting and Viewing Peak Power Control

Function Details

- ◆ The DMS users can set and view the peak power control information.
※ Refer to pg. 5~7 for more information on peak power control.

Using Peak Power Control

- 1 Select the "No Control" mode to disable the peak power control.
- 2 Select the "Priority Control" to run the peak power control in priority control mode.
- 3 Select the "Circulation Control" to run the peak power control in circulation control mode.
- 4 The indoor unit control page is displayed if the 'Edit' button is pressed after selecting either the 'Priority Control' or the 'Circulation Control'. (The 'Edit' button changes to the 'Save' button when the 'Edit' button is pressed.)

Setting the Priority Control

View/Setup Peak Power

Last set by : WEB

Peak power control mode: ☐ No control **1** ☒ Priority Control ☐ Circulation Control

Indoor unit on:

- In cooling mode : switch to fan mode
- In heating mode : switch to fan mode Limit the heating temperature to 16° Power OFF

Name	Address	Priority(0~3)
101	00,00,06	0
102	00,00,07	0
103	00,02,08	0
104	00,02,09	0
105	00,03,10	0
106	00,03,11	0
107	00,03,12	0
108	00,03,13	0
109	00,03,14	0
110	00,03,15	0

2 Edit

- 1 Select the 'Priority Control' as shown in the screen above.
- 2 Click on the 'Edit' button to set the priorities of each indoor unit as shown in the screen below.



View/Setup Peak Power

Last set by : WEB

Peak power control mode: ☐ No control ☐ Priority Control ☐ Circulation Control

Indoor unit on: ☐ In cooling mode : switch to fan mode

3 ☒ In heating mode : ☐ switch to fan mode ☐ Limit the heating temperature to 16° ☐ Power OFF

Name	Address	Priority(0~3)
101	00,00,06	4 0
102	00,00,07	1
103	00,02,08	2
104	00,02,09	3
105	00,03,10	1
106	00,03,11	2
107	00,03,12	3
108	00,03,13	1
109	00,03,14	2
110	00,03,15	3

5 Save

- 3** Select one of the three modes in the indoor unit operation ('Switch to Fan Mode','Set Heating Temperature to 16,' and 'Power OFF')
- 4** The 'Priority' can be set from level 0 to level 3.
(To exclude the indoor unit from the priority control, set the priority level to zero.)
- 5** Click on the 'Save' button to complete the setup.



Using the DMS through the Web (Continued)

Setting the Circulation Control

View/Setup Peak Power

Last set by : WEB

Peak power control mode: ☐ No control ☐ Priority Control ☒ Circulation Control

Indoor unit on:
☒ In cooling mode : switch to fan mode
☐ In heating mode : switch to fan mode Limit the heating temperature to 16° Power OFF

Alternating operation period : 3 Mins. (3~10) Total number of groups(2~8) : 2

Name	Address	Total number of groups(2~8)
101	00,00,06	0
102	00,00,07	0
103	00,02,08	0
104	00,02,09	0
105	00,03,10	0
106	00,03,11	0
107	00,03,12	0
108	00,03,13	0
109	00,03,14	0
110	00,03,15	0

Edit

- 1 Select the 'Circulation Control' as shown in the screen above.
- 2 Click on the 'Edit' button to set the priorities of each indoor unit as shown in the screen below.

View/Setup Peak Power

Last set by : WEB

Peak power control mode: ☐ No control ☐ Priority Control ☒ Circulation Control

Indoor unit on:
☒ In cooling mode : switch to fan mode
☐ In heating mode : switch to fan mode ☐ Limit the heating temperature to 16° ☐ Power OFF

Alternating operation period : 5 Mins. (3~10) Total number of groups(2~8) : 3

Name	Address	Total number of groups(2~8)
101	00,00,06	1
102	00,00,07	1
103	00,02,08	2
104	00,02,09	2
105	00,03,10	1
106	00,03,11	1
107	00,03,12	3
108	00,03,13	2
109	00,03,14	3
110	00,03,15	0

Save



- ③ Select one of the three modes in the indoor unit operation ('Switch to Fan Mode,' 'Set Heating Temperature to 16,' and 'Power OFF')
- ④ The 'Circulation Period' can be set between 3 minutes and 10 minutes.
- ⑤ The 'Total Number of Groups' can be set between 2 groups to 8 groups.
- ⑥ Set the groups for each indoor unit.
(Set the group to '0' to exclude the indoor unit from circulation control.)
- ⑦ Click on the 'Save' button to complete the setup.

Peak Power Monitoring

Function Explanation

- ◆ The DMS users can inquire current progress of peak power control on the Web.

Monitoring current progress

Peak power monitoring

Peak Level

① Level

Watt-hour monitoring

②

Target demand kw

Present target demand kw Compared to the target: 0%

Present Demand kw Compared to the target: 0%

Present power consumption kw

③

Peak control mode(minute)	Circulation control	
Alternating operation period(minute)	Time passed	Control group
3	0	1

- ① The Current Peak Level is displayed.
- ② The Current Demand information is displayed.
- ③ The Current Peak execution status is displayed.

* Reference (Explanation of Terms)

- Target Demand: Target Demand power.
Value is set in the Demand controller.
- Current Target Demand: Target Demand of current moment
- Current Demand: Demand power of current moment.
Average consumption power during Demand time limit.





Using the DMS through the Web (Continued)

Setting and Viewing the Power Distribution Function

Function Explanation

- ◆ Users can set, inquire, and edit the information of power distribution section.
 - * Refer to pg. 4 for more information on the Power Distribution Function.

Viewing the Error History

- 1 If clicking the Edit button from the ②, area ① is activated and users can set the desired section. Select one of possible settings which are 1 section, 2 sections, and 3 sections.

Set the section: ☒ The first section ☐ The second section ☐ The third section

- 2 As shown in the above picture, one section, only Section A, is existed. It is from 00:00 to 24:00.
- 3 Section A and Section B are existed in 2 Sections. Can inquire and set the border time between Section A and Section B. When pressing the 'Save' button from the ② after editing the border time from the area ①, set time is adopted. If the border time between Section A and Section B is 08:00, Section A is 00:00~08:00 and Section B starts from 08:01 minute.





View/Setup Power Division

Last set by : WEB

1 Set the section: ☐ The first section ☐ The second section ☐ The third section

Change the section

A section B section C section B section A section

00:00 08:00 12:00 14:00 18:00 24:00

2 Save

- 4 3 Sections are classified into Section A, Section B, and Section C. The setting method is same as 2 sections' setting method.

View/Setup Power Division

Last set by : WEB

1 Set the section: ☐ The first section ☒ The second section ☐ The third section

Change the section

A section B section A section

00:00 08:00 18:00 24:00

2 Save



Using the DMS through the Web (Continued)

Inquire Power Distribution Result

Function Explanation

- ◆ Users can inquire operation breakdowns and power usage by indoor units that is saved in the DMS.

Inquiring the result

Result of power distribution

① Total indoor units (by period) Individual indoor units (by date) ③

② ☒ watt-hour ☐ rate Date: 2005 Jan 1 ~ 2006 Feb 20 calculation ④

⑤ Save As File

Total watt-hour: 26861.2 kw Date: 2005-1-1 ~ 2006-2-20

Address	Name	watt-hour(kw)
00.00.06	101	931.2
00.00.07	102	61.0
00.02.08	103	1659.3
00.02.09	104	994.4
00.03.10	105	516.6
00.03.11	106	2581.1
00.03.12	107	4764.4
00.03.13	108	8353.7
00.03.14	109	6334.7
00.03.15	110	664.8

Total Indoor units (by period)

- 1 Select 'Total Indoor units (by period)' in ① to check the power consumption and the rate by period for all the indoor units.
- 2 Select whether to check the power consumption or the rate for all indoor units (by period) in ②.
Total power consumption can be checked only when the power meters are connected. If not, only the consumption ratio can be checked.
- 3 Select the time period to check in ③.
(Up to 62 hours of data can be saved in DMS.)
- 4 Press 'Calculation' in ④ to display the result.
- 5 Press 'Save As File' in ⑤ to save the result in MS Excel file format. (It is recommended to save the power distribution data regularly.)



Result of power distribution

Total indoor units (by period) Individual indoor units (by date) ❶

❷ 101 ☐ watt-hour ☐ Running Date: 2005 Jan 1 ~ 2006 Feb 20 Search ❸

❹ Total power consumption: 931.2 kw Save As File ❺

Date	watt-hour(kw)
2005-11-04	0.5
2005-11-05	74.0
2005-11-10	6.9
2005-11-14	81.4
2005-11-15	215.0
2005-11-16	243.7
2005-11-18	132.2
2005-11-21	177.0
2005-12-19	0.3
2005-12-30	0.2

Individual Indoor unit (by period)

- 1 Select 'Individual indoor units (by date)' in ❶ to check the power consumption and the running rate by date for individual indoor unit.
- 2 Select the indoor unit to check in ❷.
(If the DMS is set to group mode and one group has more than two indoor units, each individual indoor unit will be checked.)
- 3 Select 'watt-hour' or 'Running' in ❸. (Power consumption or running time per date of the selected indoor unit)
- 4 Select the time period to check in ❹.
- 5 Press 'Search' in ❺ to display the result.
- 6 Press 'Save As File' to save the result in MS Excel file format.
(It is recommended to save the power distribution data regularly.)



Using the DMS through the Web (Continued)

Setting and Viewing the System Environment

Function Explanation

- ◆ The DMS users can set and view information related to the DMS system installation and operation. (The installer must complete the system environment setup when installing the DMS.)

System environment setup

DMS Network information

IP Address192.168.0.2

Subnet Mask255.255.255.0

Gateway192.168.0.25

DNS Server10.0.0.1

Edit

Master DMS info

Master/SlaveMasterSlave

IP Address

Edit

System time

Date (YYYY.MM.DD.hh.mm.ss)20060106091037

Edit

Change the password

Old password

New password

Confirm password

Edit

Priority

Cancel

Apply

Edit

Language selection

Korean

Chinese

English

Edit



1 DMS Network Information

Change the set information by inquiring the existing set network information from the DMS network information and clicking the Edit button. If this information is changed, the DMS is restarted automatically.

2 Master DMS Information

Master/Slave is a setting for sharing of time and peak power control information when several DMS are connected to the one system. With assigning basic DMS to the Master and remains to the Slaves, users can share Data among DMS. When delivering, all DMS are basically set to the Master.

3 System Time

Change the system time by inquiring the current system time and clicking the Edit button.
(The time is set when the DMS is installed and it is recommended not to be modified if possible. The schedule function and the power distribution function may be affected by changing the time.)

4 Change Password

For the safety, passwords exchange between the DMS and the upper controller (SNET Series) At this time, users can change passwords of devices that are connected to the DMS.

5 Priority

If a DMS is connected with several upper controllers, users set to allow a setting to only one unit having the higher priority or to allow a setting to all controllers by setting a priority between each upper controller. When delivering, it is set to 'Do not use priority.'

6 Language selection

Can set using languages. (Default: English)



Using the DMS through the Web (Continued)

Tracking

Function Details

- ◆ Tracking is the most initial stage that a DMS recognizes the DVM indoor/outdoor units. When performing a Tracking, some information may be lost; thus, use with care. User can order the Retry of a Tracking and manage the name of devices on the Tracking information screen. (Information may be lost if 'Tracking' is executed. Consult the installer if possible when executing 'Tracking'.)

Unit	Address	Name
Centralized controller	00	00
Interface module	00, 02	
Indoor unit	00, 02, 06	00, 02, 06
Indoor unit	00, 02, 07	00, 02, 07
Indoor unit	00, 02, 08	00, 02, 08
Indoor unit	00, 02, 09	00, 02, 09
Indoor unit	00, 02, 10	00, 02, 10
Indoor unit	00, 02, 11	00, 02, 11
Indoor unit	00, 02, 12	00, 02, 12
Indoor unit	00, 02, 13	00, 02, 13
Indoor unit	00, 02, 14	00, 02, 14
Indoor unit	00, 02, 15	00, 02, 15
Outdoor unit	00, 02, 00	00, 02, 00

- 1 When pressing the 'Tracking' by mode button from ❶, the installation information of the indoor/outdoor units and supplement devices that are connected to the DMS is recognized and the result is displayed on area ❷. In the area, users can check the number of each device.
- 2 When pressing the 'Edit' and 'Save' buttons from area ❹, the name area of devices ❸ can be edited. After editing, save changes.
- 3 Keep the initial installation mode. If it is changed, existing information may be lost.

Warning

- ◆ **The tracking mode must follow the initial tracking mode. If the tracking mode is changed, all information may be lost, therefore keep note of the initial tracking mode.**

User Management

Function Explanation

- ◆ You can manage users to access the Web. By using this menu, you can add, edit, and delete users through the Web.

User account management

①

☐	No.	ID	Password	Description
☐	0	admin	1234	admin
☐	1	huigh	1234	Hui_practice
☐	2	ii5252	74108520	ori

②

ID : Password : Description :

③

Add Edit Delete

- 1 When accessing this page, you can see the current registered user list.
- 2 You can add users by writing an ID, password, and explanation to the ② and clicking the 'Add' button from the ③.
(There are no limits on the number of users registered.)
- 3 When pressing the 'Edit' button from the ③ after selecting a checkbox which you want to edit from the ①, user information is edited.

☒	2	User1
-------------------------------------	---	-------

- 4 If users want to delete a user, same as edit, after selecting a checkbox and pressing 'delete' button, the user is deleted.



Terms

■ DMS

The abbreviation of Data Management Server.

■ UPPER CONTROLLER

It means SNET Series, a local controller of the DVM system.
S-Net i and SNET III are linked to a DMS.

■ 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 DMS and an outdoor unit transmitter.

■ TRANSMITTER

A data transmitter of a DVM system which is located between a
central controller and an outdoor unit.

■ SiM

The Abbreviation of Signal input Module.
A device that transmits power usage of an outdoor unit by being
inputted it from a power meter to a DMS.

■ PEAK TRANSMITTER

A device that transmits peak control information by being
inputted it from the peak power controller to DMS.



Memo

[illegible]



MEMO





