EPSON

EMP Monitor V4.10
Operation Guide

The following table shows the symbols used in this manual, along with descriptions of what they mean.

CAUTION	Indicates something that may cause injury or damage to the projector.
TIP	Indicates information that is related to a topic or which may be useful to know.
☞	Indicates a page where a related topic or a more detailed explanation is provided. Click on the page number to display that page.
[(Name)]	Indicates the name of a projector port or a computer menu or item name. Example: [InputA] [Start]

Contents

EMP Monitor lets you carry out operations such as checking the statuses of multiple EPSON projectors that are connected to a network at a computer monitor, and controlling the projectors from the computer.
Following are brief descriptions of the monitoring and control functions that can be carried out using EMP Monitor.

- Registering projectors for monitoring and control
  - Projectors on the network can be searched for automatically, and you can then select projectors to be registered from the projectors that are detected.
  - You can enter the IP addresses for target projectors to register them.
- Registered projectors can also be assigned to groups so that they can be monitored and controlled in groups
- Monitoring the statuses of registered projectors
  - The power status (ON/OFF) for projectors and problem and warning statuses can be checked visually by means of icons.
  - You can select groups of projectors or a single projector that you are interested in, and then check the cumulative lamp operating time or check the details of information on input sources, problems and warnings for these projectors.
- Controlling registered projectors
  - Projectors can be selected in groups or as single projectors, and you can then carry out operations for the selected projectors such as turning the power on and off and switching their input sources.
  - Web control functions can be used to change the settings in the projector's configuration menu.
  - If there are certain control actions which are carried out regularly at particular times or on particular days, you can use "Timer Settings" to register timer settings.
- E-mail notification function settings
  You can set e-mail addresses for problem notifications to be sent to if a problem occurs with a projector that has been registered.

Group A

I want to turn on the power for Group A projectors.

LAN

Projector A

Group B

Projector B

EMP Monitor
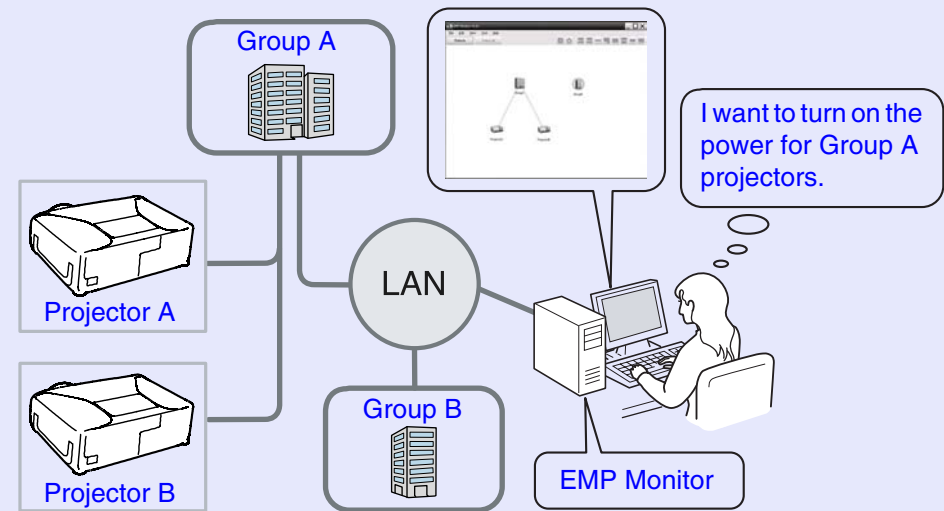
System configuration example

TIP

To enable projectors to be monitored and controlled even when they are in standby mode*, make the following settings at the projectors. The settings that need to be made will vary depending on the projector you are using.

☛ *"Configuration menus" in the projector's User's Guide.*
- *Set "Network Monitoring" to "ON".*
- *Set "Standby Mode" to "Network ON".*

* When the projector's ⏻ (Power) indicator is lit orange

Operating environment

Compatible computers

Macintosh computers cannot be used.

OS	98SE/Me/NT4.0/2000 Professional/XP Home Edition/XP Professional •Internet Explorer Ver. 5.0 or later must be installed.
CPU	Pentium MMX 166 MHz or higher (Pentium II 233 MHz or higher recommended)
Memory capacity	64 MB or more (128 MB or more recommended)
Free hard disk space	50 MB or more
Display	SVGA (800×600) or higher resolution, 32 bit or higher display colour

* Operations carried out at the computer may become slow depending on the number of projectors being managed. If this happens, use a computer with higher specifications.
* EMP Monitor cannot be used in environments which do not allow pings to be transmitted.

Installing EMP Monitor

If using Windows 2000, NT4.0 or XP, the computer must be started up in Administrator mode.

PROCEDURE

1 **Turn the computer on, and quit all running applications.**

2 **Place the "EPSON Projector Software for Monitoring" CD-ROM in the computer's CD-ROM drive.**

The installer automatically starts up.

3 **From here, continue with the installation by following the on-screen messages.**

Before starting operations

Check the following points before starting up EMP Monitor.
• EMP Monitor must be installed on the computer to be used for monitoring and control.
• The computer and the projectors must be connected to the network.
• If using Windows 2000, NT4.0 or XP, the computer must be started up in Administrator mode.

When using EMP-6000/821/81/61

• A commercially-available serial ⇔ TCP/IP conversion adapter and a connection cable are required in order to use EMP Monitor.
☛ "Standby mode" in the projector's *User's Guide*
• Make the settings for the serial ⇔ TCP/IP conversion adapter before connecting to the projector.

This operation is carried out when starting EMP Monitor for the first time after it has been installed and when you would like to add projectors. Once a projector has been registered, the status for the projector will be displayed automatically each time EMP Monitor is started from that point onwards.

Starting EMP Monitor

1 **Click [Start] - [Programs] (or [All Programs]) - [EPSON Projector] - [EMP Monitor V4.10] in that order to start EMP Monitor.**

2 **The main window will be displayed.**

"Grouping view"
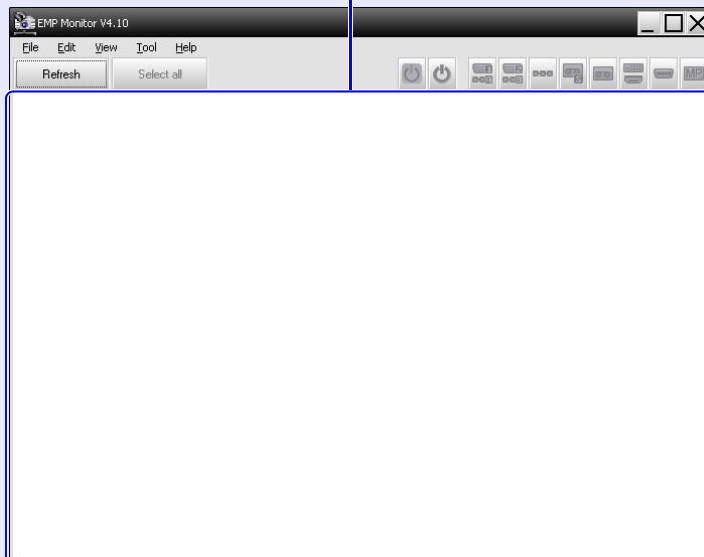
The operations to register projectors using the automatic search will vary depending on where the projectors are connected to in the network.

- When registering a projector that is located in the same segment that the computer the EMP Monitor is installed in is associated with. ☛ "Registering projectors using automatic search (Searching for and registering projectors that are located in the same segment)"

- When registering projectors that are in multiple segments of the network ☛ "Setting the range of addresses to do an automatic search and registration"

Registering projectors using automatic search (Searching for and registering projectors that are located in the same segment)

PROCEDURE

■ Procedures for automatic search

1 **Right-click in "Grouping view" and select "New" - "Projector (automatic search)".**

The "Create new projector (automatic registration)" window will be displayed.

• If "Detail list view" is displayed, select "New" - "Projector (automatic search)" from the "Edit" menu.
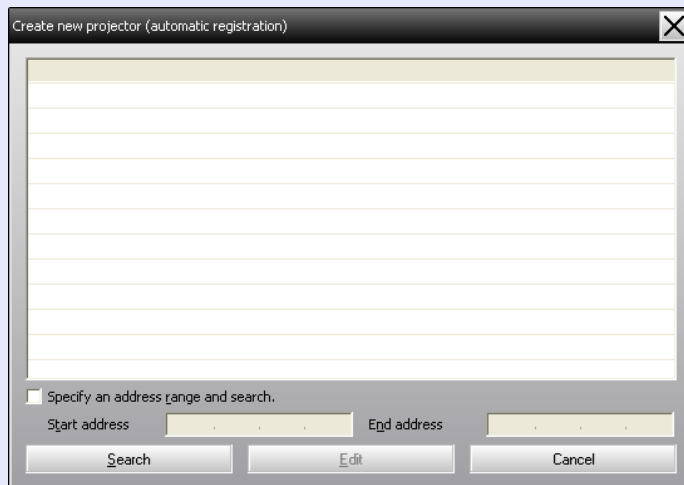
Create new projector (automatic registration)	✕

☐ Specify an address range and search.
Start address [. . .]   End address [. . .]

| Search | Edit | Cancel |

2 **Click [Search].**

Automatic search will be carried out, and the names of the projectors that have been detected will be displayed.

• If a projector does not appear in the list, use "Registration by specifying an IP address (Manual registration)".

Projector name	IP address
Projector10	192.168.0.40
Projector11	192.168.0.41
Projector12	192.168.0.42
Projector13	192.168.0.43
Projector14	192.168.0.44
Projector15	192.168.0.45
Projector16	192.168.0.46

☐ Specify an address range and search.
Start address [. . .]   End address [. . .]

| Search | Edit | Cancel |

TIP
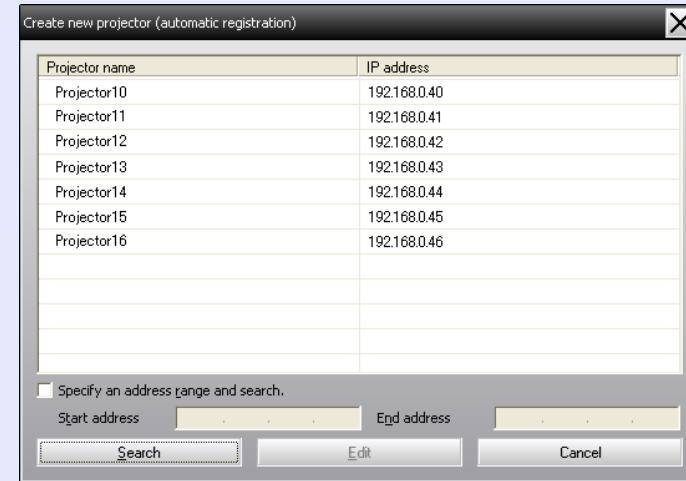
• *You can also carry out this operation by selecting "Projector (automatic search)" from "New" in the "Edit" menu.*
• *Projectors that are using a serial ⇔ TCP/IP conversion adapter cannot be detected.*

■ **Procedures for registration**

3 **Select the projector(s) to be registered, and then click [Edit].**

The following window will be displayed.

Make the necessary settings while referring to the following table.

Display name	Enter the name of the projector(s) to be displayed in "Grouping view" or "Detail list view". Up to a maximum of 32 bytes can be entered. A space cannot be used as the first character.
Display icon	Select the icon(s) to be displayed in "Grouping view" or "Detail list view".
Parent group	Select when registering a projector in a group. If no groups have been created, this cannot be selected. ☛ "Registering several projectors to a monitoring group all at once" p.12

Projector name	This shows the name that has been registered on the projector.
IP address	This shows the IP address for the registered projector.
Use Serial ⇔ TCP/IP conversion adaptor.	This cannot be selected when registering projectors using automatic search.
Port Number	This cannot be selected when registering projectors using automatic search.
Monitor Password	If a Monitor Password has been set for the projector, be sure to enter the Monitor Password that has been set. If the correct password is not entered at this time, it will not be possible to monitor and control the projector even though it is registered.
Description	You can enter some kind of memo about the projector. The details you enter here will be displayed at the projector properties. Up to a maximum of 60 bytes can be entered.
Monitor	Select this when you want monitoring to start.

4 **After entering the details, click [Register] to start the registration. When the message is displayed, click [OK].**

To continue registering other projector(s), repeat Steps 3 and 4.

TIP

Projectors that have been registered using automatic search are searched for again by projector name each time EMP Monitor is started.

5 **To end the registration operation, click the ☒ in the top-right corner of the window or click [Cancel].**

The icon(s) of the projector(s) you registered will be displayed in "Grouping view" or "Detail list view".

Refer to "Monitoring window layout" for details on using the "Grouping view" and "Detail list view". ☛ p.16

Setting the range of addresses to do an automatic search and registration

TIP

Projectors that are using a serial ⇔ TCP/IP conversion adapter cannot be detected.

PROCEDURE

■ Procedures for automatic search

1 **Right-click in "Grouping view" and select "New" - "Projector (automatic search)".**

The "Create new projector (automatic registration)" window will be displayed.

• If "Detail list view" is displayed, select "New" - "Projector (automatic search)" from the "Edit" menu.

2 **Select the "Specify an address range and search" check box and then enter the starting address and ending address in the range.**
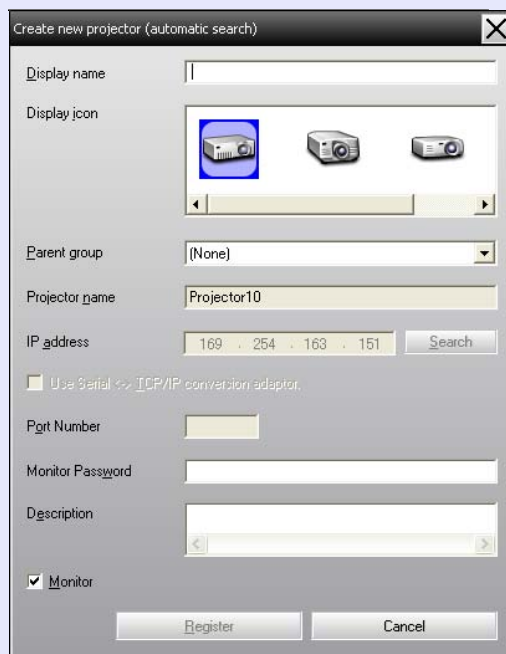

3 **Click [Search].**

Automatic searching will be carried out, and the names of the projectors that have been detected will be displayed.

■ **Procedures for registration**

4 **Select the projector(s) to be registered, and then click [Edit].**

The following window will be displayed.

Make the necessary settings while referring to the following table.

Display name	Enter the name of the projector(s) to be displayed in "Grouping view" or "Detail list view". Up to a maximum of 32 bytes can be entered. A space cannot be used as the first character.
Display icon	Select the icon(s) to be displayed in "Grouping view" or "Detail list view".
Parent group	Select when registering a projector in a group. If no groups have been created, this cannot be selected. ☛ "Registering several projectors to a monitoring group all at once" p.12

Projector name	This shows the name that has been registered on the projector.
IP address	This shows the IP address for the registered projector.
Use Serial⇔ TCP/IP conversion adaptor.	This cannot be selected when registering projectors using automatic search.
Port Number	This cannot be selected when registering projectors using automatic search.
Monitor Password	If a Monitor Password has been set for the projector, be sure to enter the Monitor Password that has been set. If the correct password is not entered at this time, it will not be possible to monitor and control the projector even though it is registered.
Description	You can enter some kind of memo about the projector. The details you enter here will be displayed at the projector properties. Up to a maximum of 60 bytes can be entered.
Monitor	Select this when you want monitoring to start.

5 **After entering the details, click [Register] to start the registration. When the message is displayed, click [OK].**

To continue registering other projector(s), repeat Steps 4 and 5.

6 **To end the registration operation, click ☒ in the top-right corner of the window or click [Cancel].**

The icon(s) of the projector(s) you registered will be displayed in "Grouping view" or "Detail list view".

Refer to "Moitoring window layout" for details on using the "Grouping view" and "Detail list view". ☛ p.16

Registration by specifying an IP address (Manual registration)

1 **Right-click in "Grouping view" and select "New" - "Projector (manual registration)".**

The following window will be displayed.

• If "Detail list view" is displayed, select "New" - "Projector (manual registration)" from the "Edit" menu.

TIP
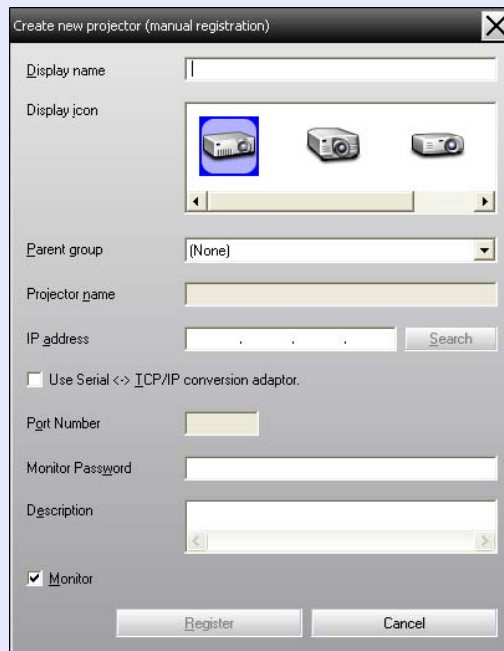
You can also carry out this operation by selecting "Projector (manual registration)" from "New" in the "Edit" menu.

2 **Enter the IP address of the projector to be registered in the "IP address" box and then click [Search]. When the message is displayed, click [OK].**

• If using a serial ⇔ TCP/IP conversion adapter and cable to connect the projector, select "Use Serial ⇔ TCP/IP conversion adaptor". Enter the port number in "Port Number" and then click [Search].

3 **After searching is complete, enter the information for the projector to be registered while referring to the table below.**

Display name	Enter the name of the projector(s) to be displayed in "Grouping view" or "Detail list view". Up to a maximum of 32 bytes can be entered. A space cannot be used as the first character.
Display icon	Select the icon(s) to be displayed in "Grouping view" or "Detail list view".
Parent group	Select when registering a projector in a group. If no groups have been created, this cannot be selected. ☛ "Registering several projectors to a monitoring group all at once" p.12
Projector name	This shows the name that has been registered on the projector.
IP address	This shows the IP address that you entered in step 2.
Use Serial ⇔ TCP/IP conversion adaptor.	Select this if using a serial ⇔ TCP/IP conversion adapter to connect the projector.
Port Number	If using a serial ⇔ TCP/IP conversion adapter to connect the projector, enter the port number.

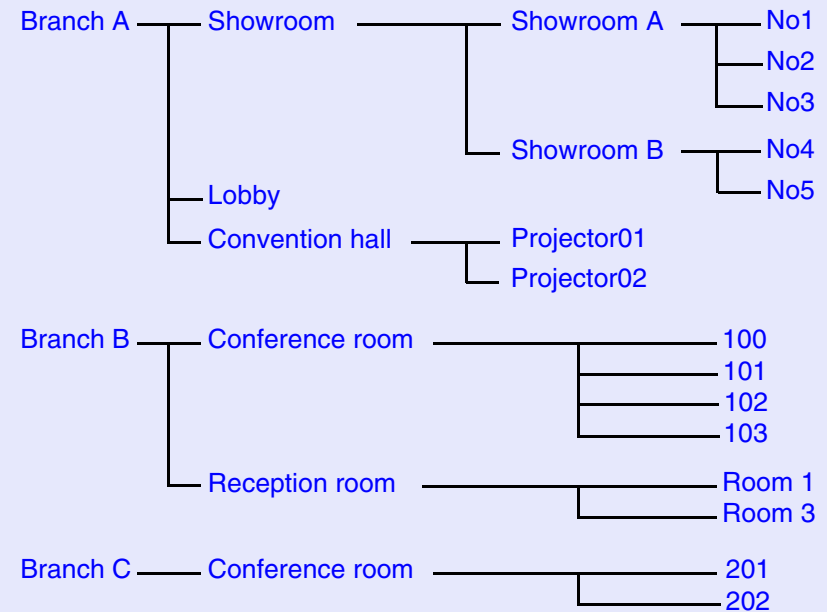| Monitor Password	If a Monitor Password has been set for the projector, be sure to enter the Monitor Password that has been set. If the correct password is not entered at this time, it will not be possible to monitor and control the projector even though it is registered. If using a serial ⇔ TCP/IP conversion adapter to connect the projector, the Monitor Password security function cannot be used.
Description	You can enter some kind of memo about the projector. The details you enter here will be displayed at the projector properties. Up to a maximum of 60 bytes can be entered.
Monitor	Select this when you want monitoring to start.

4 **After entering the details, click [Register] to start the registration. When the message is displayed, click [OK].**

The icon(s) of the projector(s) you registered will be displayed in "Grouping view" or "Detail list view".

Registering several projectors to a monitoring group all at once

Projectors that have been registered can then be registered together into different groups so that they can be monitored and controlled together. Furthermore, if you select one of the registered groups as the "Parent group", monitoring and control operations can be carried out for all projectors in that "Parent group".
A "Parent group" can be set for other parent groups, so that a hierarchical group arrangement such as the following can be created.

Branch A — Showroom — Showroom A — No1
                                    — No2
                                    — No3
                    — Showroom B — No4
                                  — No5
        — Lobby
        — Convention hall — Projector01
                          — Projector02

Branch B — Conference room — 100
                            — 101
                            — 102
                            — 103
        — Reception room — Room 1
                         — Room 3

Branch C — Conference room — 201
                           — 202

First, create the registration groups, and then register projectors into the groups that have been created.

PROCEDURE

1 Right-click in "Grouping view" and select "New" - "Group".

The following window will be displayed.
Make the necessary settings while referring to the table below.
• If "Detail list view" is displayed, select "New" - "Group" from the "Edit" menu.

Group name	Enter the name of the group(s) to be displayed in "Grouping view" or "Detail list view". Up to a maximum of 32 bytes can be entered. A space cannot be used as the first character.
Display icon	Select the icon(s) to be displayed in "Grouping view" or "Detail list view".
Parent group	This selects the parent group. If no groups have been created, this cannot be selected.
Monitor	Select this to monitor all projectors that have been registered in the group. If this is not selected, the settings made when the individual projectors were registered will be used. It cannot be set when creating a new group.

2 After entering the details, click [Register] to start the registration. When the message is displayed, click [OK].

The icon(s) of the projector(s) you registered will be displayed in "Grouping view" or "Detail list view".

3 Right-click the projector icon(s) to register to the group you have created in "Grouping view" or "Detail list view", and select "Edit".

4 In the "Edit projector" window, select the group name to use for registering in "Parent group" and then click [Change].

The status of the group registration will be displayed as an icon in "Grouping view" or "Detail list view".

If the projector name or IP address changes after registration

■ For projectors that have been registered manually

PROCEDURE

1 Right-click on a projector icon in "Grouping view" or "Detail list view" and select "Monitoring disabled". Then right-click the projector icon again and select "Edit".

TIP

You can also carry out these operations by using the "Edit" menu.

2 If only the projector name has been changed, click [Search] in the "Edit projector" window that is displayed.
If the IP address has been changed, enter the new IP address in the "IP address" box and then click [Search]. When the message is displayed, click [OK].

3 When the display returns to the "Edit projector" window, click [Change].

■ For projectors that have been registered using automatic search

PROCEDURE

1 Delete the projector(s) whose name or IP address has been changed in "Grouping view" or "Detail list view". ☞

2 Carry out automatic search to re-register the projector(s). ☞

Cancelling (deleting) projector registrations

The registrations for projectors can be deleted if they are no longer required for monitoring or control using EMP Monitor.

PROCEDURE

Right-click the icon for the projector or group that is to be deleted in "Grouping view" or "Detail list view" and select "Delete".
When the message is displayed, click [OK].

More than one projector can be selected for deleting by selecting in "Grouping view" or "Detail list view".
The methods of selecting more than one projector at the same time are as follow.

- If you select a group icon in "Grouping view", all projectors that have been registered in that group will be deleted at the same time.
- Hold down the [Ctrl] key on the keyboard while clicking on the desired icons.
- Use drag and drop to select a range of desired icons.

TIP

You can also carry out this operation by selecting "Delete" from the "Edit" menu.

You can monitor using either of the window layouts below.

- "Grouping view"
  This view lets you check the status of group registrations in a hierarchical diagram.
- "Detail list view"
  This view lets you display the status of each projector as a list so that the projectors can be checked in detail. You can also display specific items as a list, and sort display items using a specific row as a sort key.
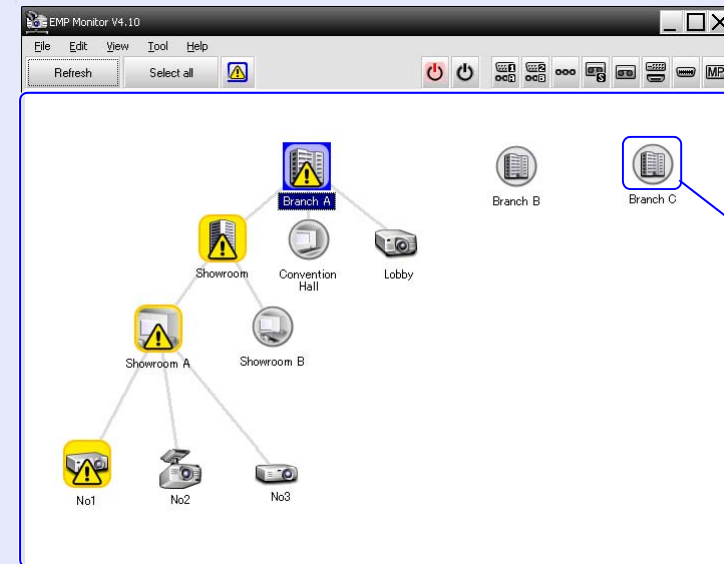

"Grouping view"   "Detail list view"

■ How to switch views

"Grouping view" and "Detail list view" are switched as follows.

PROCEDURE

Click the "View" menu, and select "Grouping view" or "Detail list view".

Monitoring using "Grouping view"

■ Meanings of "Grouping view" icons

In "Grouping view", the patterns on the icons indicate the statuses of the projectors.

"Grouping view"

If the group icons are round in shape, it indicates that there is another level below them. ☛ p.17

The icon patterns and their meanings are explained below.

Group		
	No warnings or problems	All projectors in the group are normal.
	Warning or problem	A projector in the group has a warning or problem status.
	Monitoring disabled	The projector is not being monitored. If you right-click the icon and select "Monitoring enabled", the projector will be added to the projectors that are being monitored.
	Data being updated	

Projector		
	No warnings or problems*1	
	Warning or problem	
	Monitoring disabled	
	Data being updated	
	Network error (Monitor Password error)	No Monitor Password was entered when the projector was registered, or an incorrect Monitor Password was entered. ☛ p.8, 10, 12
	Network error (TCP connection error)*2	
	Network error (ESC/VP.net communication error)*3	

*1 When "Temperature level display group view" is set to "On" at "Environment setup" in the "Tool" menu, an icon indicating the internal temperature of the projector will be displayed on top of the projector icon. The default setting is "Off". As you can get an idea of how the temperature inside the projector is increasing when the internal temperature level is displayed, you can make improvements to the projector's operating environment before a high internal temperature alarm occurs or the temperature becomes abnormally hot. ☛ p.22

*2 Check the following items.
   • Check that the projector's power is turned on.
   • Check that the LAN cable is connected.
   • Check that "Network Monitoring" is set to "ON" or "Standby Mode" is set to "Network ON" in the projector's configuration menu.

*3 Check that the projector has been correctly connected to the network.

TIP

The projector information that is generated when a problem is detected is stored until EMP Monitor is closed. The EMP Monitor displays will not be updated automatically even if the projector status returns to normal. Click [Refresh] in the main window to update the status.

Using the icons in "Grouping view"

The following icon operations can be carried out in "Grouping view".

• Expanding and collapsing icons
  Each time you double-click a group icon, the icons for the projector that have been registered in that group are displayed or hidden.

• Moving icons
  To change the position of an icon within "Grouping view", simply drag and drop the icon to be moved.

Monitoring using "Detail list view"

■ Meanings of "Detail list view" icons

The status of registered projectors is displayed as a list in "Detail list view" regardless of which groups the projectors belong to.

The icon patterns and their meanings are explained below.

Type: Displays the projector status.	
🖥	No warnings or problems*1
⚠	Warning or problem An error has occurred on the projector.

🖥	Monitoring disabled The projector is not being monitored. If you right-click the icon and select "Monitoring enabled", the projector will be added to the projectors that are being monitored.
🖥	Data being updated
⊗	Network error (Monitor Password error) No Monitor Password was entered when the projector was registered, or an incorrect Monitor Password was entered. ☞ p.8, 10, 12
⊗	Network error (TCP connection error)*2
⊗	Network error (ESC/VP.net communication error)*3

Group name: When projectors are registered to a group, the name of the group that the projector belongs to is displayed.

Display name: Shows the display name.

Power: Shows the power on status for the projector.			
🟢	Power on and normal status	⚠	Power on and abnormal status
⚫	Power off and normal status	⚠	Power off and abnormal status

Lamp Hours: Shows the lamp operating time for the projector.

Temperature level: The following five icons display the differing internal temperature status of the projector.			
🔵	Internal temperature normal	🟠	High-temperature warning
🟢	Internal temperature normal	🔴	Internal temperature error
🟠	High-temperature warning		

Error information: Shows the warning or problem status using the following icons.

Icon	Description	Icon	Description
	Lamp life warning[*4]		Lamp out
	High-temperature warning		Lamp failure at power on
	Replace Air Filter		High internal temperature error
	No Air Filter		Internal (system) error
	Low Air Flow		Fan error
	Air Flow Sensor Err.		Sensor error
	Open lamp cover door error (lamp error)		Other error

*1 When "Temperature level display group view" is set to "On" at "Environment setup" in the "Tool" menu, an icon indicating the internal temperature of the projector will be displayed on top of the projector icon. The default setting is "Off".

*2 Check the following items.
   • Check that the projector's power is turned on.
   • Check that the LAN cable is connected.
   • Check that "Network Monitoring" is set to "ON" or "Standby Mode" is set to "Network ON" in the projector's configuration menu.

*3 Check that the projector has been correctly connected to the network.

*4 You can display the lamp life warning at any time preset at "Environment setup" in the "Tool" menu.

TIP

The projector information that is generated when a problem is detected is stored until EMP Monitor is closed. The EMP Monitor displays will not be updated automatically even if the projector status returns to normal. Click [Refresh] in the main window to update the status.

■ **Selecting display items**

You can select only the required items to be displayed in "Detail list view".

PROCEDURE

1 **Select "Option" from the "View" menu.**

The "Option" window will be displayed.
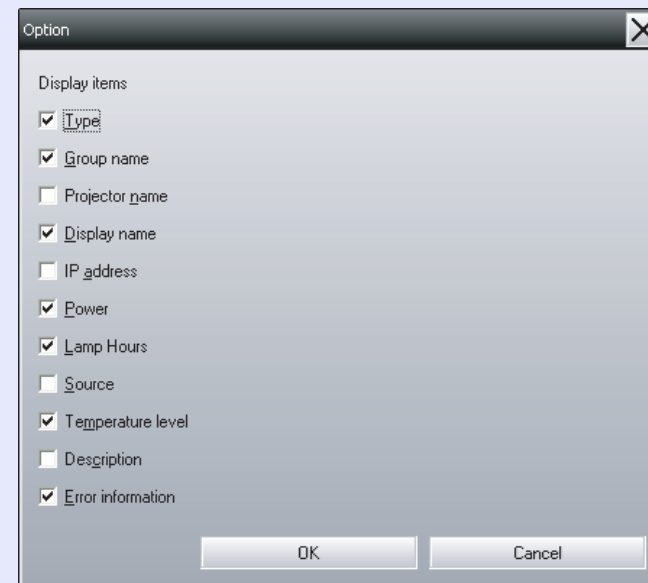
2 **Select the check box of the item you want to display.**

3 **Click [OK].**

4 **When all of the details of the item cannot be displayed in "Detail list view", drag the boundary line on the right of the item name so that the view is extended to the desired width.**

■ Sorting lists

You can sort detailed lists by using a specific row as a sort key, such as projector name order or IP address order.

PROCEDURE

Click the item name of the row you want to use as the sort key.

Searching for desired icons (Projector list)

The "Projector list" feature is useful for searching in lists when many groups and projectors are registered and the icon you are looking for is not displayed on screen.

PROCEDURE

Select "Projector list" from the "View" menu.

```
Show projector list                              ✕
  ⊟ ⚠ Branch A
      ⊞ 🖥 Convention Hall
         📺 Lobby
      ⊟ ⚠ Showroom
         ⊟ ⚠ Showroom A
            ⚠ No1
            📺 No2
            📺 No3
         ⊞ 🖥 Showroom B
  ⊞ 🖥 Branch B
  ⊞ 🖥 Branch C
```
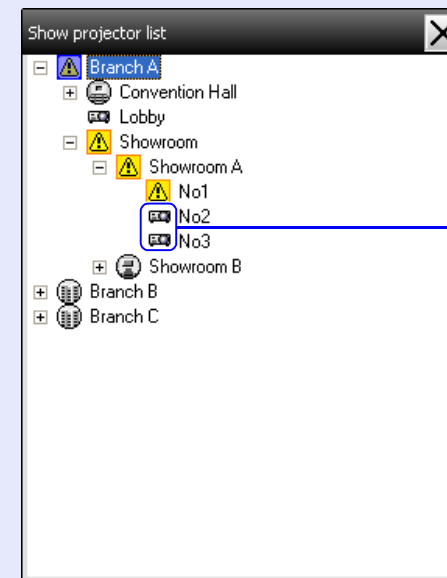
With "Projector list", temperature level icons are not displayed regardless of the setting of "Temperature level display group view" at "Environment setup".

The "Projector list" lets you check the registration details for groups in a hierarchical diagram. When you click on an icon, "Grouping view" and "Detail list view" are scrolled so that the selected icon is displayed in the window.

Monitoring using the system tray

The projector statuses are always displayed as icons in the system tray, even when "Grouping view" or "Detail list view" is not always displayed, and the statuses can be checked by the icon patterns.

When the configuration menus are set using the following operations, an icon appears in the system tray and the status can be monitored by means of the icon's pattern.

🔘 10:13

🔘 : No problem

⚠️ : Problem

PROCEDURE

1 **Select "Environment setup" from the "Tool" menu.**
The "Environment setup" window will be displayed.

2 **Select "Resident in the task tray".**

Environment setup				
Update interval	5	minutes		
Temperature level display group view	⊙ Off	○ On		
Lamp schedule notification	⊙ Off	○ On	1000	Time
Log output	⊙ Off	○ On		
☐ Register at startup				
☑ Resident in the task tray				
☐ Change the application lock password				
Old password				
New password				
New password (confirm)				
	OK	Cancel		
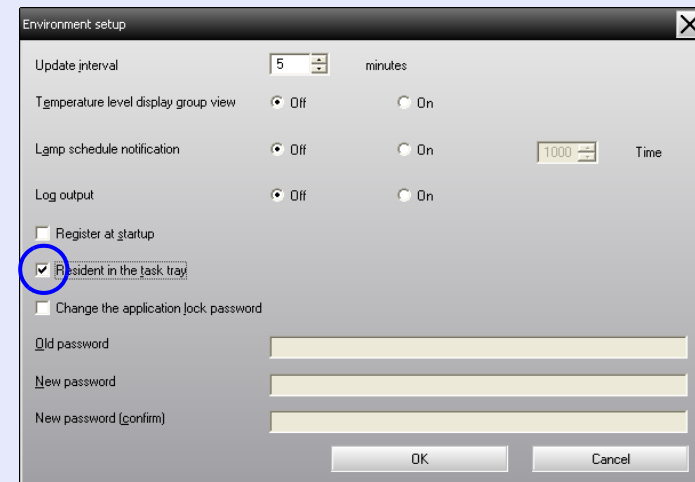
3 **Click [OK].**

TIP

- *Right-click the icon in the system tray to open a pop-up menu to select the "Open the main screen" or "Exit".*
- *If "Register at start up" in the "Environment set up" is selected, EMP Monitor starts automatically when the computer's power is turned on.*

Displaying projectors with problem or warning statuses in a list

You can display a list of only the projectors which have a problem or warning status.

PROCEDURE

Select "Warning and Error Projector list" from the "View" menu.

The following "Warning and Error Projector list" window will be displayed.

If you move the mouse pointer over the icon, details of the error and the remedy will be displayed.

If you double-click in a line, the properties for that projector will be displayed.
☞ p.24

The icon patterns and their meanings are explained below.

Type: Shows the group or projector status. ☞ p.16			

Display name: Shows the display name.			

Power: Shows the power on status for the projector.			
●	Power on and normal status	⚠	Power on and abnormal status
●	Power off and normal status	⚠	Power off and abnormal status

Lamp Hours: Shows the lamp operating time for the projector.			

Source: Shows the input source that has been selected for the projector.			
A	Computer or Computer1		Video
B	Computer2		DVI or HDMI (Digital)
	BNC		D-Video
	S-Video	EasyMP	Easy MP

Temperature level: The following five icons display the differing internal temperature status of the projector.			
	Internal temperature normal		High-temperature warning
	Internal temperature normal		Internal temperature error
	High-temperature warning		

■ Displaying projector properties

Right-click on a projector icon in "Grouping view" or "Detail list view" and select "Property".

Projector properties (No1)		
Information	Timer	
Group name	Showroom A	
Projector name	EMP248214	
Display name	No1	
IP address	192.168.4.165	
Lamp Hours	38H	
Temperature level		
Description		
Version information	F1 48001230C0XV103 F2 443020WWV090	
Error information		
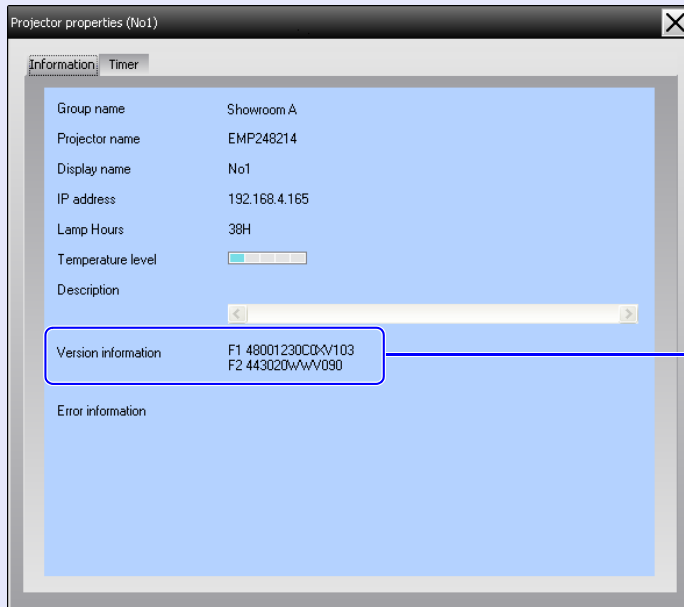
Displays the projector firmware version.

Displaying and deleting logs

In your web browser, you can check a transmission log of content such as what has been controlled by the EMP Monitor, projector errors. You can delete logs once you have checked them.

TIP

When "Log output" is set to "On" at "Environment setup" in the "Tool" menu, transmission logs are stored. The default setting is "Off".

■ Displaying logs

PROCEDURE

Select "Log" - "show" from the "View" menu.

The web browser will open and the communication logs up until that time will be displayed.

■ Deleting logs

PROCEDURE

Select "Log" - "Delete" from the "View" menu.
When the confirmation message is displayed, click [OK].

All logs will be deleted and details of EMP Monitor control operations and details of projector errors from that point onward will be recorded in a new log.

Carrying out control using control buttons

Click the icon of a projector to be controlled in "Grouping view" or "Detail list view", and click a control button to enable control of only that selected projector.

You can also enable control of all selected projectors by selecting more than one projector in "Grouping view" or "Detail list view" and clicking a control button. The methods of selecting more than one projector at the same time are as follow.

- If you select a group icon in "Grouping view", all projectors that have been registered in that group and that are set to be monitored can be controlled at the same time.
- Hold down the [Ctrl] key on the keyboard while clicking on the desired icons.
- Use drag and drop to select a range of desired icons.
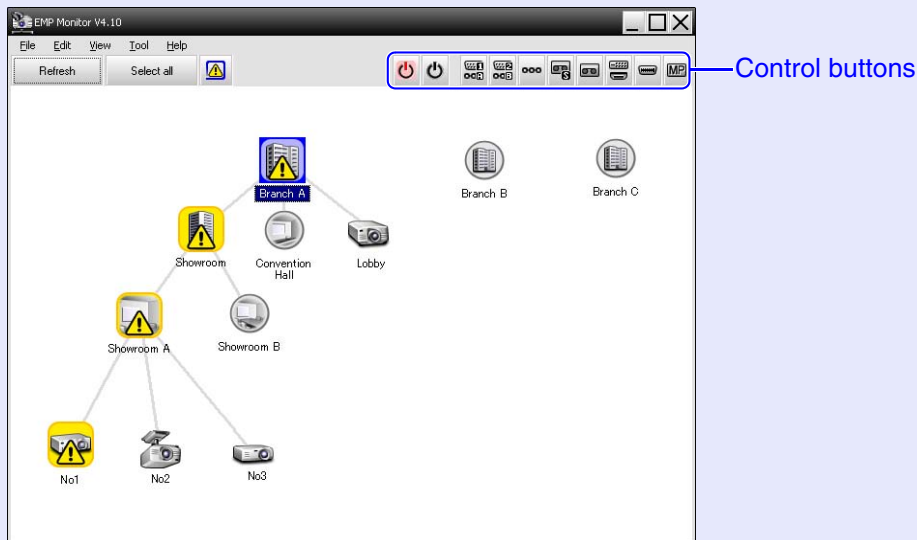
Control buttons

The following table shows the meanings of the control buttons.

	Power On	Turns the projector power on.
	Power Off	Turns the projector power off.

	Switch source Computer 1	Switches the input source to the [Computer1] port or [Computer] port.
	Switch source Computer 2	Switches the input source to the [Computer2] port.
	Switch source BNC	Switches the input source to the [BNC] port.
	Switch source S-Video	Switches the input source to the [S-Video] port.
	Switch source Video	Switches the input source to the [Video] port.
	Switch source DVI, HDMI	Switches the input source to the [DVI] port or [HDMI] port.
	Switch source D-Video	Switches the input source to the [D4] port.
MP	Switch source EasyMP	Switches to EasyMP or EasyMP.net.

TIP

- *Some connected projectors may not be equipped with all of the above ports or functions. If you click a button for a port or function that is not available, nothing will happen.*
- *You can select objects to be controlled and use the control buttons to carry out control operations even when the following are being displayed.* ☞ *For details on each display p.22, 23*
  - *Group properties*
  - *Projector properties*
  - *Warning and Error Projector list (Control operations can only be carried out for projectors with a warning status.)*

Carrying out control using a web browser (Web control)

You can use the computer's web browser to change the configuration menu settings for projectors.

1 **Right-click on the icon of a projector to be controlled in "Grouping view" or "Detail list view" and select "Web control".**

2 **The web browser will open and the Web control window will be displayed.**

Web control lets you set the same details as the configuration menu for the projector. Refer to the Projector's *User's Guide* for details on the configuration menu.

TIP

You can select projectors and right-click on them to select "Web control" even when the following are being displayed.
*   *Group properties* ☛ *p.23*
*   *Warning and Error Projector list (Control operations can only be carried out for projectors with a warning status.)* ☛ *p.22*

Carrying out control using timer settings

This is useful for carrying out certain control operations such as turning a projector's power on and off at specified times every day or every week. Timer settings can be carried out either for a single projector only, or all at once for all projectors in a group.

1 **Select "Timer" - "Timer Settings" from the "Tool" menu.**

The following window will be displayed and you can then check the timer setting status.
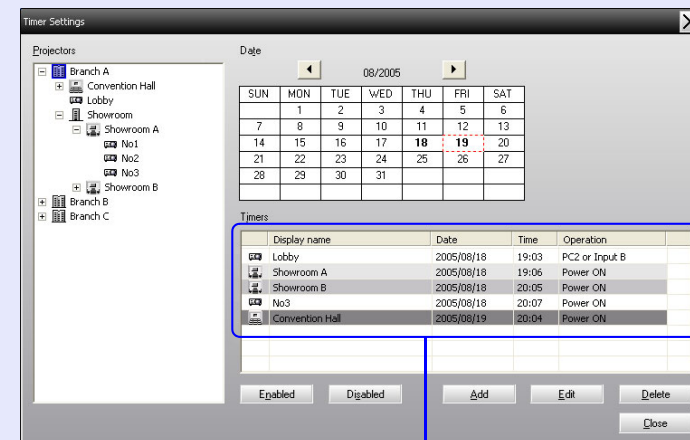
The colours in the lines of the list have the following meanings:

Colour	Meaning
(white)	: Current day's timer setting
(light grey)	: When some of the projectors in the group have timer setting enabled and others have it disabled for the current day's timer setting
(grey)	: When the current day's timer setting is a disabled setting
(dark grey)	: Timer setting for a day other than the current day

The details that can be checked and operations that can be carried out at this time are given below.

Projectors	Selects a group or projector to check the status of. When a group is selected, the timer setting statuses for all projectors in that group are displayed.
Date	Shows the current day in a red box. Days for which timer settings have been made are shown in bold. Click ◀ or ▶ to switch to the calendar for the previous or next month.
Timers	Shows a list of the timer settings.
[Enabled] [Disabled]	Switches the timer settings that have been selected from the timer list between enabled and disabled.
[Add]	Registers new timer settings.
[Edit]	Lets you change the timer settings that have been selected from the timer list. If a group has been selected for status checking, the settings cannot be changed.
[Delete]	Lets you delete timer settings that have been selected from the timer list.

■ **Procedures for new timer settings**

2 **When you click "Add", the following window is displayed and the new timer settings are applied.**

At "Operation", you can carry out the operations of turning the power on and off and switching the input sources, similarly for the control buttons on the main window. If you set the input source switching, the projector's power will turn on at the timer start time even if it is not on at the time. Because of this, it is not necessary to make two separate timer settings for turning the power on and switching the input source.

3 **After completing the timer settings, click [OK].**

The timer settings that have been made will be registered and they can be checked in the displayed timer list.

TIP

You can enable and disable all of the timer settings that have been registered. Select "Timer" - "Enable" or "Disable" from the "Tool" menu.
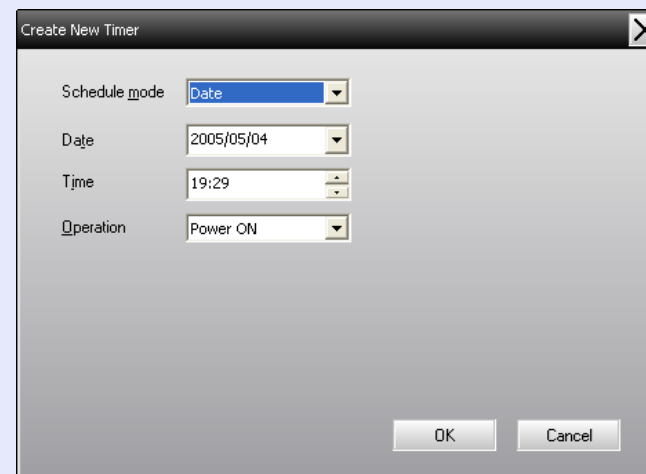
The mail notification function can be used to send notification messages to preset e-mail addresses when a problem or warning occurs with a projector that is connected to the network. By using this function, the operator can be notified of problems with projectors even when the operator is in a different location from the projectors.

TIP

- *Up to three addressees (destinations) can be registered and messages can be sent to all of them at once.*
- *If a critical problem develops with a projector which causes it to suddenly stop working, it may not be possible for the projector to send a message notifying an operator of the problem.*
- *If "Standby Mode" is set to "Network ON" or "Network Monitoring" is set to "ON" in the projector configuration menus, you can monitor the projector even when it is in standby mode (when its power is turned off).* ☛ *Projector's User's Guide*
- *On some projectors, the mail notification function can be set in the configuration menu. When notification messages are set to be sent in the projector's configuration menu, both the settings in the configuration menu and settings made on EMP Monitor are functional.*

PROCEDURE

1 Select "Mail notification function" from the "Tool" menu.
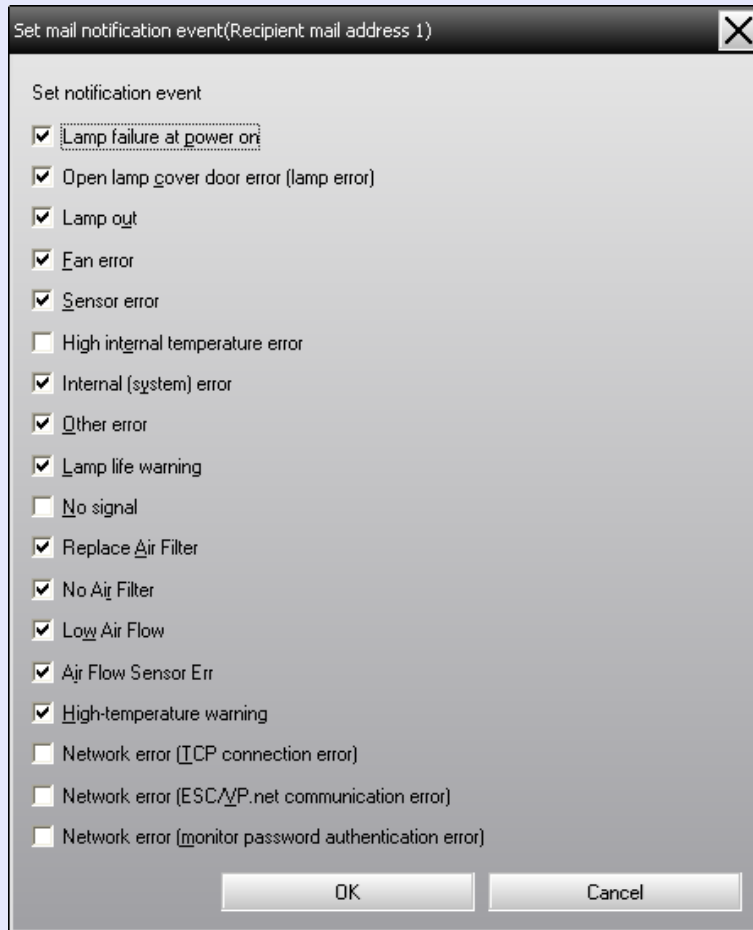
2 The "Set mail notification function" window will be displayed.

Set the following parameters.

Mail notification function	Set to "ON" to use the mail notification function.
SMTP server IP address	Enter the IP address of the SMTP server. Up to a maximum of 255 bytes can be entered. When you change a port number of the SMTP server, specify this port number. The default value is "25". You can enter a valid number from 1 to 65535.
Sender mail address	Enter the sender's e-mail address. Up to a maximum of 255 bytes can be entered.
Recipient mail address 1	Specify the destination addresses for the notification e-mail. Up to three destinations can be set. Up to a maximum of 255 bytes can be entered.
Recipient mail address 2	
Recipient mail address 3	

3 Click [Notification event] and check the items for mail notification in the window that appears.

Set mail notification event(Recipient mail address 1) ✕

Set notification event

☑ Lamp failure at power on
☑ Open lamp cover door error (lamp error)
☑ Lamp out
☑ Fan error
☑ Sensor error
☐ High internal temperature error
☑ Internal (system) error
☑ Other error
☑ Lamp life warning
☐ No signal
☑ Replace Air Filter
☑ No Air Filter
☑ Low Air Flow
☑ Air Flow Sensor Err
☑ High-temperature warning
☐ Network error (TCP connection error)
☐ Network error (ESC/VP.net communication error)
☐ Network error (monitor password authentication error)

[OK]   [Cancel]

4 Click [OK].

When the "Set mail notification function" window appears again, repeat Steps 3 and 4 to set the events to be notified.

5 When the setup is complete, click [OK].

If a problem occurs with a projector, an e-mail message containing the following will be sent to all e-mail addresses that have been specified in "Recipient mail address".
If there is more than one problem or warning, each message will appear on separate lines.

Item	Details shown
E-mail subject	[Display name displayed in "Grouping view" or "Detail list view"] Projector warning/error notification
Body	The following warning/error occurred on <Display name displayed in "Grouping view" or "Detail list view">. <Warning/error message (Please see the table below)> Immediately check the projector.

The details contained in the e-mail message can consist of the following.

Message	Remedy
Internal (system) error	"Reading the indicators" ☛ "Reading the Indicators" in the projector's *User's Guide*
Fan error	
Sensor error	
Open lamp cover door error (lamp error)	
Lamp failure at power on	
Lamp out	
High internal temperature error	
High-temperature warning	

Message	Remedy
Lamp life warning	"Reading the indicators" ☛ "Reading the Indicators" in the projector's *User's Guide*
Replace Air Filter	
No Air Filter	
Low Air Flow	
Air Flow Sensor Err.	
No signal	No image signals are being received by the projector. Check the connection status and check that the power for the connected equipment is turned on.
Other error	Stop using the projector, disconnect the power cable from the electrical outlet, and contact your local dealer or the nearest address provided in the *World-Wide Warranty Terms* supplied with the projector.
Network error (TCP connection error)	Check that the projector's power is turned on and the LAN cable is connected, and also check that "Network Monitoring" is set to "ON" and "Standby Mode" is set to "Network ON".
Network error (ESC/VP.net communication error)	Check that the projector has been correctly connected to the network.
Network error (monitor password authentication error)	Check the projector's Monitor Password.

Messages to inform that the projector has recovered from the error or warning statuses are sent.

You can use the application lock to prevent third parties from operating the projectors using EMP Monitor and from changing settings without authority. Opening and closing EMP Monitor and status monitoring can still be carried out even when the application lock is applied.
In addition, when a password has been set, the password must be entered in order to cancel the application lock. This ensures that the application lock can not be easily cancelled, and thus improves system security.

Switching application lock between enabled and disabled

■ Enabling the lock

PROCEDURE

Select "Application lock" from the "Tool" menu.
The application lock will be enabled and no operations will be possible other than opening and closing EMP Monitor and disabling the application lock.

■ Disabling the lock

PROCEDURE

1 Select "Application unlock" from the "Tool" menu.

2 The password entry window will be displayed, so enter the set password and then click [OK].
If no password has been set (default setting), click [OK] without entering a password. It is recommended that you enter a password in order to strengthen security.
The application lock will be cancelled and operations can be carried out as normal.

Setting a password for cancelling application lock

Carry out the following operations while application lock is cancelled.

PROCEDURE

1 Select "Environment setup" from the "Tool" menu.
The "Environment setup" window will be displayed.

2 Select "Change the application lock password".

3 Enter the password in both the "New password" and "New password (confirm)" boxes and then click [OK].
The password can be up to 16 bytes in length. Single-byte alphanumeric characters can be used.

Projectors cannot be monitored or controlled

Cause	Remedy
Is the projector connected to the network correctly?	Connect the network cable correctly. ☛ "Network Cable Connections" in the projector's *User's Guide*
Has the projector been set up correctly for connection to the network?	Check the settings for the "Network" configuration menu command. ☛ Projector's *User's Guide*
Has EMP Monitor been installed on the computer correctly?	Uninstall EMP Monitor and then re-install it.
Are all the projectors that you want to control or monitor registered?	Register the projectors. ☛ p.6
Is the projector's "Network Monitoring" or "Standby Mode" configuration menu set to "ON" or "Network ON"?	In order to use EMP Monitor to monitor and control the projector when it is in standby mode, the projector's "Network Monitoring" or "Standby Mode" configuration menu must be set to "ON" or "Network ON". ☛ Projector's *User's Guide*

An e-mail message is not sent when a problem occurs with a projector

Cause	Remedy
Is the projector connected to the network correctly?	Connect the network cable correctly. ☛ "Network Cable Connections" in the projector's *User's Guide*
Has the projector been set up correctly for connection to the network?	Check the settings for the "Network" configuration menu command. ☛ Projector's *User's Guide*
Have the SMTP server IP address, port number and recipient e-mail address all been set correctly?	Check the setting details.
Is the projector's "Network Monitoring" or "Standby Mode" configuration menu set to "ON" or "Network ON"?	To use the mail notification function while the projector is in standby mode, set "Network Monitoring" or "Standby Mode" to "ON" or "Network ON" in the projector's configuration menus. ☛ Projector's *User's Guide*
Has a critical problem developed causing the projector to momentarily stop working?	When the projector has momentarily stopped working, it cannot send e-mail messages. If the projector cannot be reset even after it has been checked, contact your dealer or the nearest address provided in the *World-Wide Warranty Terms* supplied with the projector.
Is power being supplied to the projector?	Check if the power supply to the location where the projector is set up has been interrupted, or if the circuit breaker for the electrical outlet that the projector is connected to has been tripped.