



# **EMP Monitor Operation Guide**

## **V4.30**

## Meanings of symbols used

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

s	Indicates a page where a related topic or a more detailed explanation is provided.
[ (name) ]	Indicates the name of the buttons on the remote control or the control panel. Example: Esc button
"(name)" <b>Timer</b>	Indicates the name of the buttons or items on EMP Monitor. Example: Select " <b>Timer</b> " - " <b>Timer Settings</b> ". Select <b>Timer</b> - <b>Timer Settings</b> .

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## **Meanings of symbols used**

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# EMP Monitor Features

## EMP Monitor Functions

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 problems or warnings requiring attention 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 the details of information such as input sources, problems, and warnings for these projectors.

- **Controlling registered projectors**

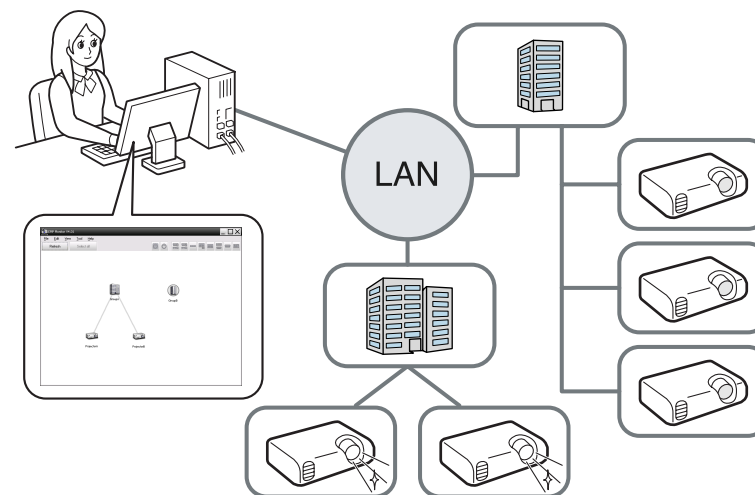
Projectors can be selected in groups or as single projectors, and you can then carry out operations for the selected projectors such as turning the power on and off and switching their input sources.


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.

- **Mail notification function settings**

You can set e-mail addresses to which notifications are sent if a status requiring attention, such as a problem, occurs with a projector that has been registered.



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.  *Projector User's Guide*

- Set Network Monitoring to ON.
- Set Standby Mode to Network ON.

\* When the projector's  indicator is lit orange.

## Operating environment

### Compatible computers

Only Windows is supported.

OS	Windows 98 Second Edition SP1 Windows Me Windows NT4.0 SP6 Windows 2000 Professional SP4 The following 32-bit operating systems: Windows XP Home Edition SP2 or later Windows XP Professional SP2 or later Windows Vista (All editions except Starter Edition) Windows Vista SP1 All editions except Starter Edition • 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 X 600) or higher resolution, 32 bit or higher display colour

- Macintosh computers cannot be used.
- 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.
- Windows NT4.0 does not support Arabic and Hebrew versions of EMP Monitor.
- You must update Windows Vista to Windows Vista SP1 to use the Ukrainian version of EMP Monitor.

### Installing EMP Monitor

When you are using Windows 2000/Windows NT4.0/Windows XP/Windows Vista, you must have administrator authority in order to install EMP Monitor.

When the language selected for the EMP Monitor installation varies from that of the OS being used, the EMP Monitor screens may not be displayed correctly.

#### Procedure

- 1 Turn the computer on.**  
 To prevent problems from occurring during the installation, we recommend that you terminate all resident applications that can be ended.
- 2 Load the following CD-ROM in your computer: “EPSON Projector Software for Meeting & Monitoring” or “EPSON Projector Software for Monitoring”.**  
 The installer automatically starts up.
- 3 From here, continue with the installation by following the on-screen messages.**

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## Limitations imposed by a Windows Vista environment.

When using EMP Monitor under Windows Vista, note the following limitations.


- You must have administrator authority in order to use **Register at startup** on the Environment setup screen of EMP Monitor.
- Even after EMP Monitor has been uninstalled, the settings and log information will remain on the hard disk. If this information is no longer required, you may delete the EMP Monitor V4.30 folder. Provided the default settings were used at installation, this folder can be found at:

"C:\Users\*(User Name)*\AppData\Local\VirtualStore\Program Files\EPSON Projector\EMP Monitor V4.30"

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## 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/Windows NT4.0/Windows XP/Windows Vista, the computer must be started up in Administrator mode.
- Depending on the projector model, a commercially-available serial TCP/IP conversion adapter and a connection cable are required in order to use EMP Monitor.  *Projector User's Guide* "

Make the settings for the serial TCP/IP conversion adapter before connecting to the projector.





## Using EMP Monitor

## Registering and deleting projectors for monitoring

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.

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## Starting EMP Monitor

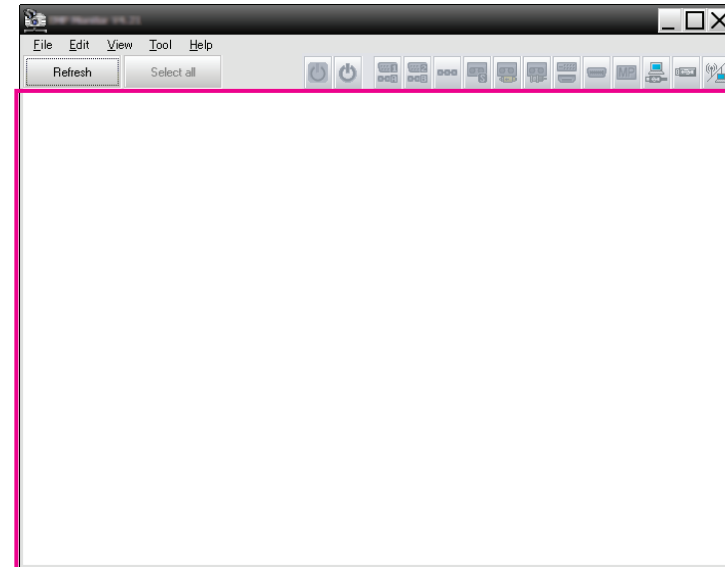
### Procedure

- 1 Click Start - Programs (or All Programs) - EPSON Projector - EMP Monitor V4.30 in that order to start EMP Monitor.

2

### The main window will be displayed.

The area described in red box is referred to as 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 as the computer in which EMP Monitor is installed. (☞ "Registering projectors using automatic search (Searching for and registering projectors that are located in the same segment)" p.11
- When registering projectors that are in multiple segments of the network. (☞ "Setting the range of addresses to do an automatic search and registration" p.13

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

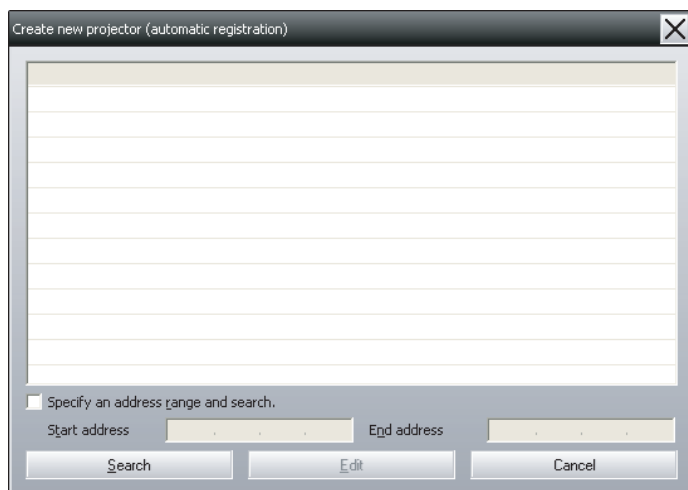
### Procedures for automatic search

#### Procedure

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

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

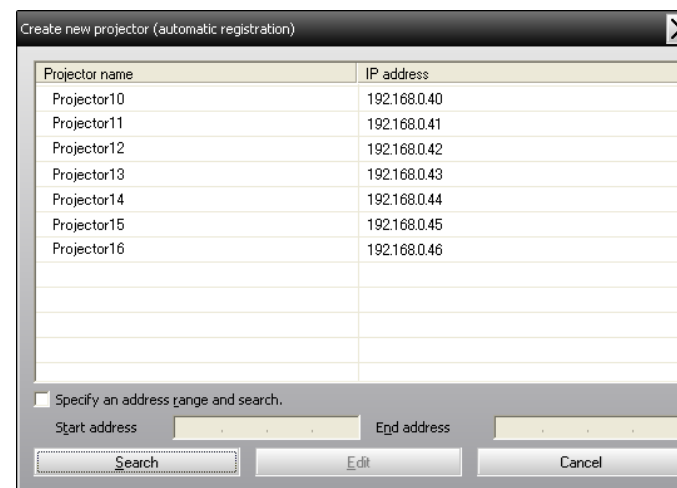
If Detail list view is displayed, select "New" - "Projector (automatic search)" from the Edit menu.



- 2 Click "Search".

Automatic searching 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)". [p.17](#)



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

## Procedures for registration

### Procedure

- 1 **Select the projector(s) to be registered from the displayed list, and then click "Edit".**

The following window will be displayed.




Make the necessary settings while referring to the following table.

<b>Display name</b>	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.
<b>Display icon</b>	Select the icon(s) to be displayed in Grouping view or Detail list view.
<b>Parent group</b>	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" <a href="#">p.18</a>
<b>Projector name</b>	This shows the name that has been registered on the projector.
<b>IP address</b>	This shows the IP address for the registered projector.
<b>Use Serial TCP/IP conversion adaptor.</b>	This cannot be selected when registering projectors using automatic search.
<b>Port Number</b>	This cannot be selected when registering projectors using automatic search.
<b>Monitor Password</b>	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.
<b>Description</b>	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.
<b>Monitor</b>	Select this when you want monitoring to start.


- 2 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 1 and 2.

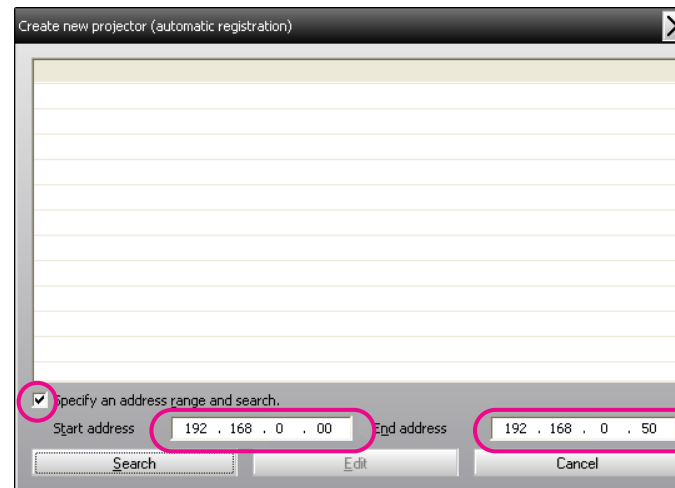
Projectors that have been registered using automatic search are searched for again by projector name each time EMP Monitor is started.

- 3 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  "Monitoring window layout" p.21 for details on using the Grouping view and Detail list view.

- 2 Select the "Specify an address range and search" check box and then enter "Start address" and "End address" in the range.



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

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

## Procedures for automatic search

### Procedure

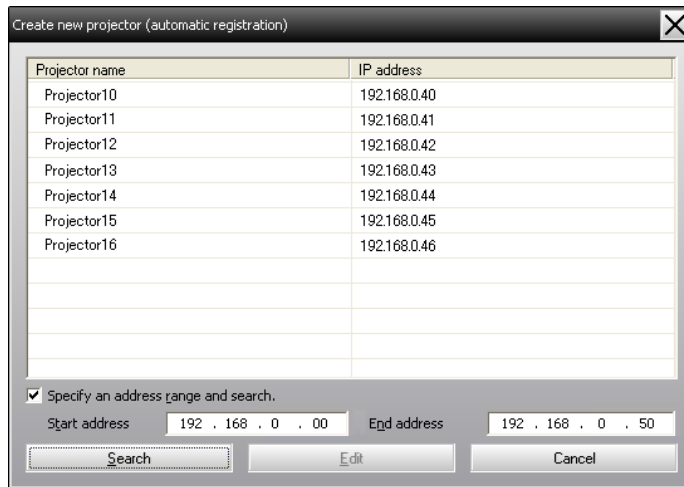
- 1 Right-click in Grouping view and select "New" - "Projector (automatic search)".

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.

**3****Click "Search".**

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



Dialog box: Create new projector (automatic 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: 192 . 168 . 0 . 00      End address: 192 . 168 . 0 . 50

Buttons: Search, Edit, Cancel

## Procedures for registration


### Procedure

- 1 Select the projector(s) to be registered from the displayed list, and then click "Edit".

The following window will be displayed.



Make the necessary settings while referring to the following table.


<b>Display name</b>	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.
<b>Display icon</b>	Select the icon(s) to be displayed in Grouping view or Detail list view.
<b>Parent group</b>	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" <a href="#">p.18</a>
<b>Projector name</b>	This shows the name that has been registered on the projector.
<b>IP address</b>	This shows the IP address for the registered projector.
<b>Use Serial TCP/IP conversion adaptor.</b>	This cannot be selected when registering projectors using automatic search.
<b>Port Number</b>	This cannot be selected when registering projectors using automatic search.
<b>Monitor Password</b>	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.
<b>Description</b>	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.
<b>Monitor</b>	Select this when you want monitoring to start.

- 2** 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 1 and 2.

- 3** 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  "Monitoring window layout" [p.21](#) for details on using the Grouping view and Detail list view.



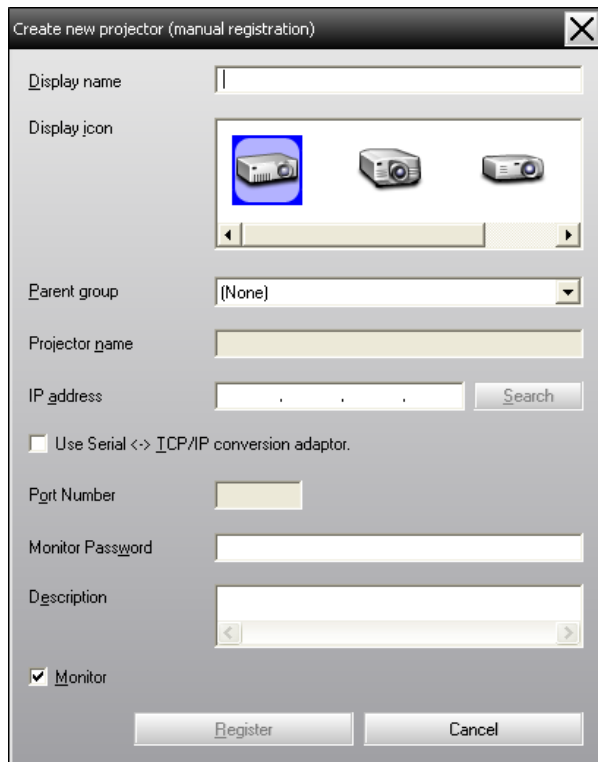
## Registration by specifying an IP address (Manual registration)

### Procedure

- 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.



You can also carry out this operation by selecting **New - Projector (manual registration)** from 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 adaptor 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.

<b>Display name</b>	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.
<b>Display icon</b>	Select the icon(s) to be displayed in Grouping view or Detail list view.
<b>Parent group</b>	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" <a href="#">p.18</a>
<b>Projector name</b>	This shows the name that has been registered on the projector.
<b>IP address</b>	This shows the IP address that you entered in step 2.
<b>Use Serial TCP/IP conversion adaptor.</b>	Select this if using a serial TCP/IP conversion adaptor to connect the projector.

<b>Port Number</b>	If using a serial TCP/IP conversion adapter to connect the projector, enter the port number.
<b>Monitor Password</b>	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.
<b>Description</b>	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.
<b>Monitor</b>	Select this when you want monitoring to start.



**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 can be created.

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

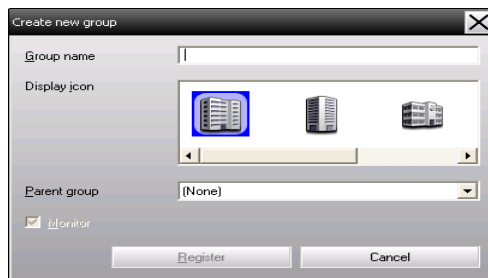
## Procedure

- 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.



<b>Group name</b>	Enter the name of the group 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.
<b>Display icon</b>	Select the icon(s) to be displayed in Grouping view or Detail list view.
<b>Parent group</b>	This selects the parent group. If no groups have been created, this cannot be selected.
<b>Monitor</b>	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.

You can also carry out this operation by selecting **New - Group**

from the Edit menu.

- 2 **When the setup is complete, 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".**

You can also carry out this operation by selecting **Edit** in the Edit menu.

- 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.

The registration details can also be checked using Projector list in the View menu.

## 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"**.

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**.  [p.20](#)

- 2 Carry out automatic search to re-register the projector(s).  [p.11](#)

## 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.

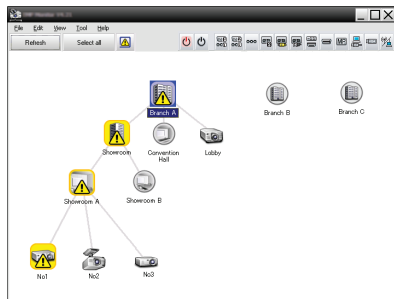
You can also carry out this operation by selecting **Delete** in the **Edit menu**.

## Monitoring window layout

You can monitor using either of the window layouts below.

### • Grouping view

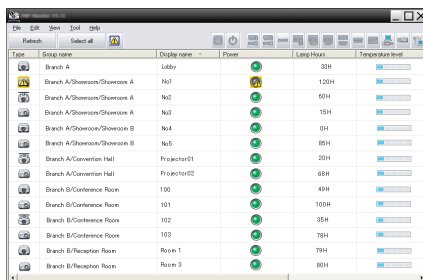
This view lets you check the status of group registrations in a hierarchical diagram.



Grouping view

### • 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.



Type	Group name	Display name	Power	Lamp status	Temperature level
Branch A	Lobby				33H
Branch A/Showroom/Showroom A	No1				120H
Branch A/Showroom/Showroom A	No2				60H
Branch A/Showroom/Showroom A	No3				15H
Branch A/Showroom/Showroom B	No4				0H
Branch A/Showroom/Showroom B	No5				85H
Branch A/Convention Hall	Projector01				20H
Branch A/Convention Hall	Projector02				68H
Branch B/Conference Room	100				49H
Branch B/Conference Room	101				105H
Branch B/Conference Room	102				35H
Branch B/Conference Room	103				79H
Branch B/Reception Room	Room 1				79H
Branch B/Reception Room	Room 3				80H

Detail list view

### • How to switch views

Grouping view and Detail list view are switched as follows.

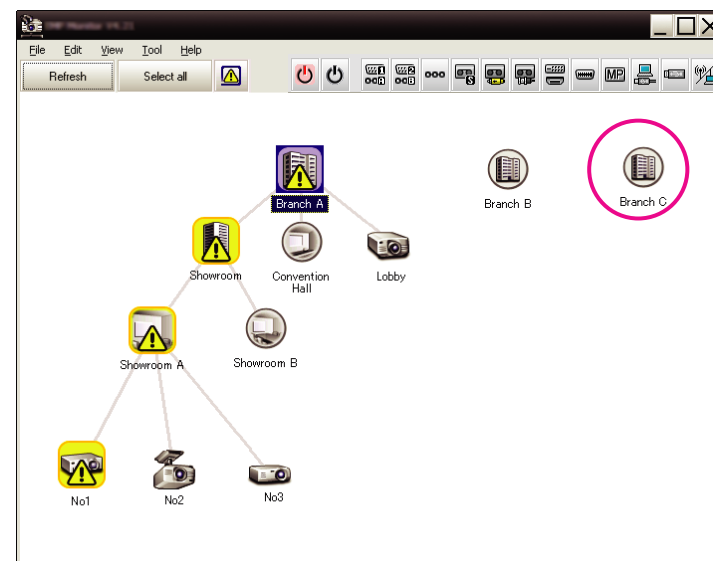
### Procedure

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. If the group icons are round in shape, it indicates that there is another level below them. [p.22](#)




The icon patterns and their meanings are explained below.

Group	
	<b>No warnings or problems</b> All projectors in the group are normal.
	<b>Warning or problem</b> A projector in the group has a warning or problem status.
	<b>Notification</b> A projector requiring immediate attention has been detected within the group.
	<b>Monitoring disabled</b> The projector is not being monitored. If you right-click the icon and select <b>Monitoring enabled</b> , the projector will be added to the projectors that are being monitored.
	<b>Data being updated</b>

Projector	
	<b>No warnings or problems</b> <sup>*1</sup>
	<b>Warning or problem</b>
	<b>Notification</b>
	<b>Monitoring disabled</b>
	<b>Data being updated</b>

Projector	
	<b>Network error (monitor password authentication error)</b> No Monitor Password was entered when the projector was registered, or an incorrect Monitor Password was entered.  <a href="#">p.12, p.15, p.17</a>
	<b>Network error (TCP connection error)</b> <sup>*2</sup>
	<b>Network error (ESC/VP.net communication error)</b> <sup>*3</sup>

\*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 temperature level is displayed, you can make improvements to the projector's operating environment before a high internal temperature error or high-temperature warning occur.  [p.27](#)

\*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.

The projector information that is generated when a problem is detected is stored until EMP Monitor is closed. 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**

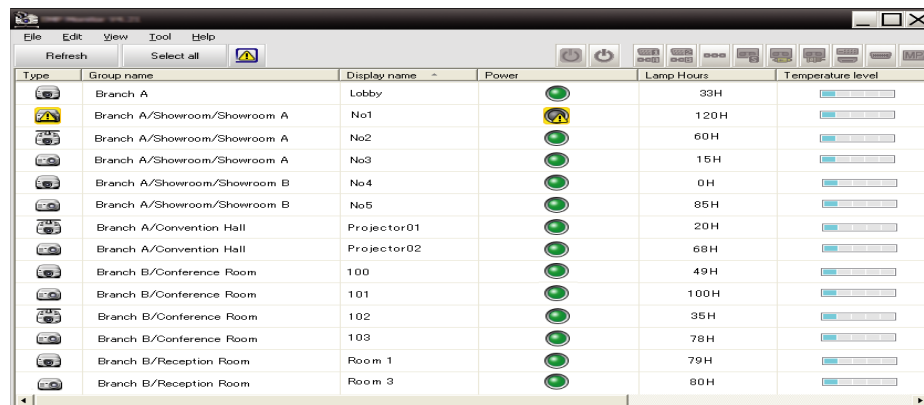
To change the position of an icon within Grouping view, simply drag and drop the icon to be moved.

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## 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.



Type	Group name	Display name	Power	Lamp Hours	Temperature level
	Branch A	Lobby		39H	
	Branch A/Showroom/Showroom A	No1		120H	
	Branch A/Showroom/Showroom A	No2		60H	
	Branch A/Showroom/Showroom A	No3		15H	
	Branch A/Showroom/Showroom B	No4		0H	
	Branch A/Showroom/Showroom B	No5		85H	
	Branch A/Convention Hall	Projector01		20H	
	Branch A/Convention Hall	Projector02		68H	
	Branch B/Conference Room	100		49H	
	Branch B/Conference Room	101		100H	
	Branch B/Conference Room	102		35H	
	Branch B/Conference Room	103		78H	
	Branch B/Reception Room	Room 1		79H	
	Branch B/Reception Room	Room 3		80H	

The icon patterns and their meanings are explained below.

<b>Type:</b> Displays the projector status.	
	No warnings or problems* <sup>1</sup>
	Warning or problem An error has occurred on the projector.
	Notification The projector requires immediate attention.
	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 authentication error) No Monitor Password was entered when the projector was registered, or an incorrect Monitor Password was entered. <a href="#">p.12</a> , <a href="#">p.15</a> , <a href="#">p.17</a>
	Network error (TCP connection error)* <sup>2</sup>
	Network error (ESC/VP.net communication error)* <sup>3</sup>
<b>Group name:</b> When projectors are registered to a group, the name of the group that the projector belongs to is displayed.	
<b>Display name:</b> Shows the display name.	
<b>Power:</b> 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
<b>Lamp Hours:</b> Shows the lamp operating time for the projector.	
<b>Temperature level:</b> 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		
<b>Error information:</b> Shows a notification or warning/problem status using the following icons.			
	Clean Air Filter Notice		Lamp Cover Open
	Replace Lamp* <sup>4</sup>		Lamp Error
	High-temperature warning		Lamp failure at power on
	Replace Air Filter		High internal temperature error
	No Air Filter		Internal Error
	Low Air Flow		Fan error
	Air Flow Sensor Err.		Sensor error
	Low air flow error		Supply System Error (Ballast)
	Air filter air flow sensor error		Auto Iris 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 Replace lamp at any time preset at Environment setup in the Tool menu.
- The projector information that is generated when a problem is detected is stored until EMP Monitor is closed. 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.
  - Detectable error information differs with the projector you are using.

## Selecting display items

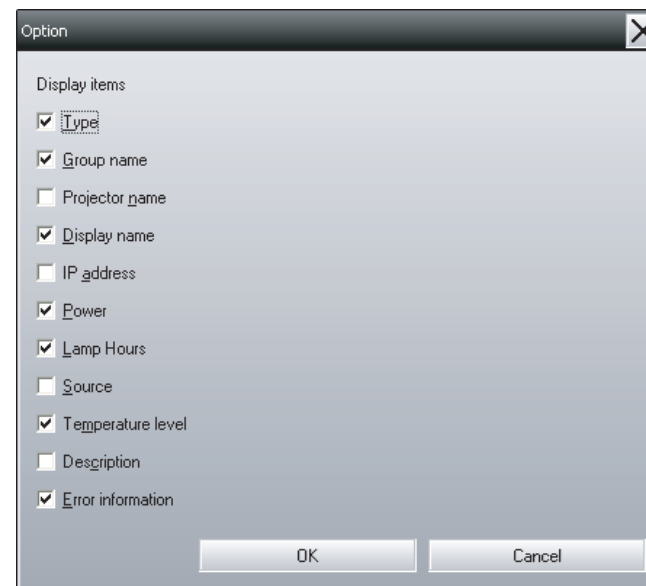
You can select only the required items to be displayed in Detail list view.

## 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.**

The following window will be displayed.



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.

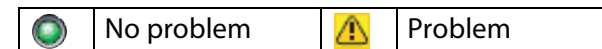
## Monitoring using the system tray

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.



The icon patterns are explained below.



### Procedure
























**Select "Environment setup" from the Tool menu.**



















The Environment setup window will be displayed.



The icon patterns and their meanings are explained below.

<b>Type:</b> Shows the group or projector status.			
<b>Display name:</b> Shows the display name.			
<b>Power:</b> 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
<b>Lamp Hours:</b> Shows the lamp operating time for the projector.			
<b>Source:</b> Shows the input source that has been selected for the projector.			
	Computer or Computer1		DVI or HDMI (Digital)
	Computer2		D-Video
	BNC		Easy MP
	S-Video		USB Display
	Video(RCA)		USB
	Video(BNC)		LAN
<b>Temperature level:</b> 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.

	Replace Lamp*		Lamp Error
	High-temperature warning		Lamp failure at power on
	Replace Air Filter		High internal temperature error
	No Air Filter		Internal Error
	Low Air Flow		Fan error
	Air Flow Sensor Err.		Sensor error
	Low air flow error		Supply System Error (Ballast)
	Air filter air flow sensor error		Auto Iris Error
	Lamp Cover Open		Other error

\* You can display Replace lamp at any time preset at Environment setup in the Tool menu.

Detectable error information differs with the projector you are using.

## Checking properties in detail

You can check the properties of groups and projectors in detail.

## Displaying group properties

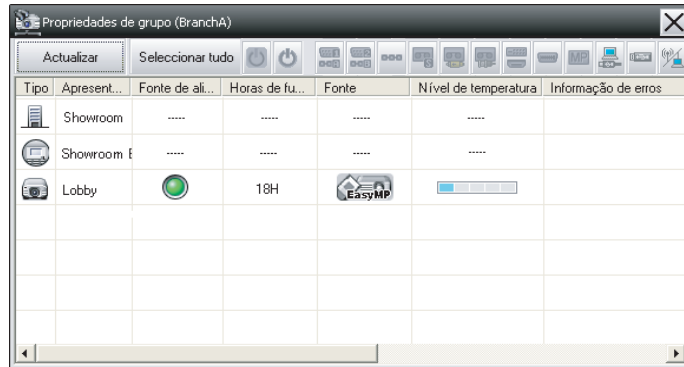
### Procedure

**You can use either of the following methods to display the properties.**

- **Displaying the properties for all groups in Grouping view**  
Right-click in Grouping view and select **Property**.

- **Displaying properties for specified groups**

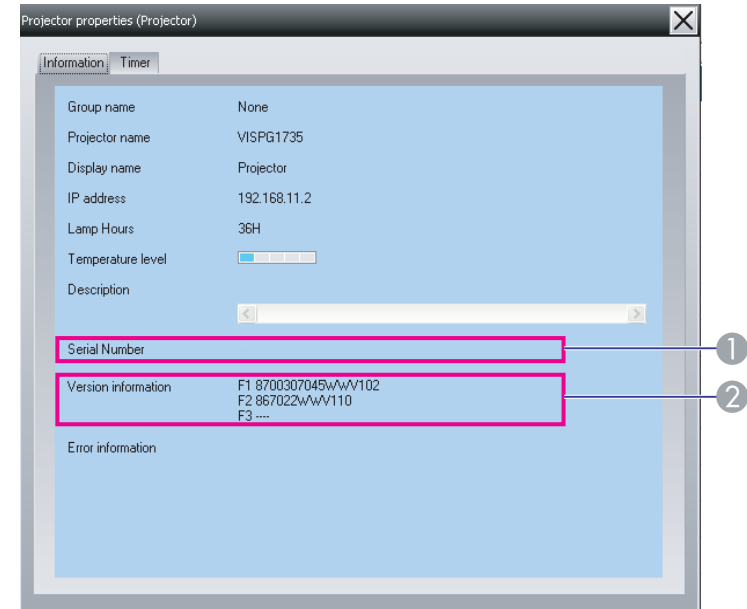
Right-click an icon in Grouping view and then select **Property**.



If you double-click in a line, the properties for that group or projector will be displayed.

## Displaying projector properties

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



- 1 Shows the projector's serial number. If hyphens are displayed, confirm the serial number on the label of the projector.
- 2 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 EMP Monitor, projector errors. You can delete logs once you have checked them.

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" - "View" 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.

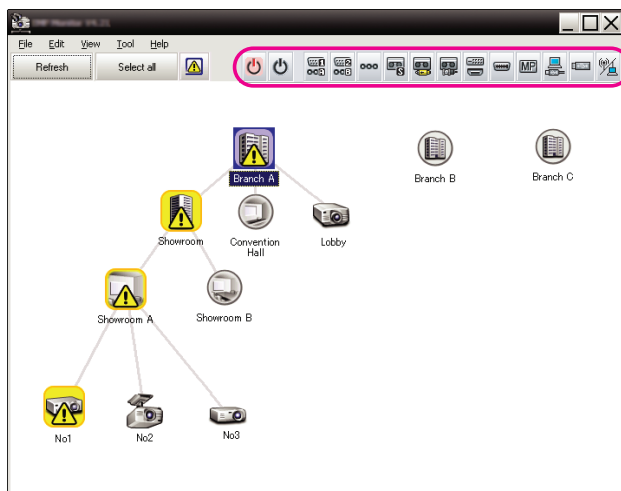
## Using the control functions

### 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.



The following table shows the meanings of the control buttons.

	<b>Power On</b>	Turns the projector power on.
	<b>Power Off</b>	Turns the projector power off.
	<b>Switch source Computer1</b>	Switches the video input source to the Computer1 port or Computer port.
	<b>Switch source Computer 2</b>	Switches the video input source to the Computer2 port.
	<b>Switch source BNC</b>	Switches the video input source to the BNC port.
	<b>Switch source S-Video</b>	Switches the video input source to the S-Video port.
	<b>Switch source Video (RCA)</b>	Switches the video input source to the Video port or video2 port.
	<b>Switch source Video (BNC)</b>	Switches the video input source to the Video1 port.
	<b>Switch source DVI, HDMI</b>	Switches the video input source to the DVI port or HDMI port.
	<b>Switch source D-Video</b>	Switches the video input source to the D4 port.
	<b>Switch source EasyMP</b>	Switches to EasyMP or EasyMP.net.
	<b>Switch source USB Display*</b>	Switches to USB Display.
	<b>Switch source USB*</b>	Switches the video input source to the external equipment connected via a USB (Type A) port.
	<b>Switch source LAN*</b>	Switches the video input source to the image currently projected by EMP NS Connection.


- \* If the button does not function, you can switch the input source using the EasyMP control button.
- 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.
  - Group properties  p.28
  - Projector properties  p.29
  - Warning and Error Projector list (Control operations can only be carried out for projectors with a warning status.)  p.27

## 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.

### Procedure


- 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.  *Projector User's Guide*



You can select projectors and right-click on them to select Web control even when the following are being displayed.

Group properties  p.28

Warning and Error Projector list (Control operations can only be carried out for projectors with a warning status.)  p.27

## Carrying out control using timer settings

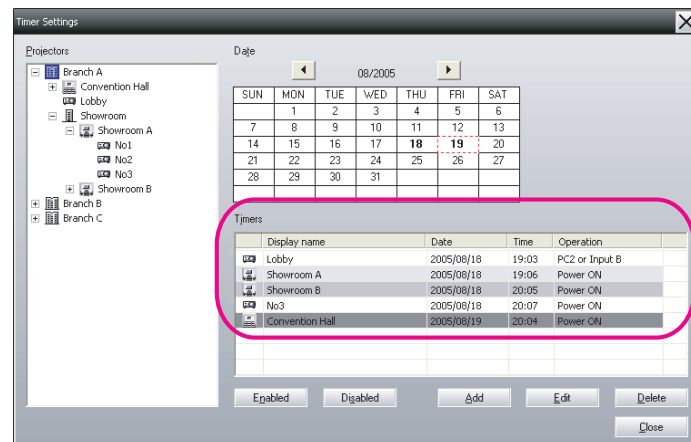
This is useful for carrying out certain control operations such as turning a projector's power on and off at specified times every day or every week.

Timer settings can be carried out either for a single projector only, or all at once for all projectors in a group.





### Procedure

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




The following window will be displayed and you can then check the timer setting status.



The line colors in the Timers list have the following meanings:

	Current day's timer setting
	When some of the projectors in the group have timer setting enabled and others have it disabled for the current day's timer setting
	When the current day's timer setting is a disabled setting
	Timer setting for a day other than the current day

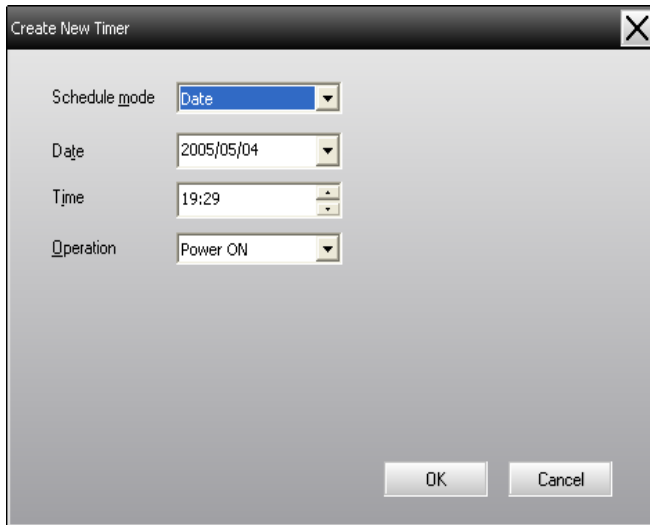
The details that can be checked and operations that can be carried out at this time are given below.

<b>Projectors</b>	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.
<b>Date</b>	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.
<b>Timers</b>	Shows a list of the timer settings.
<b>Enabled/disabled</b>	Switches the timer settings that have been selected from the timer list between enabled and disabled.
<b>Add</b>	Registers new timer settings.  "Procedures for new timer settings" p.34
<b>Edit</b>	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.
<b>Delete</b>	Lets you delete timer settings that have been selected from the timer list.

## Procedures for new timer settings

### Procedure

- 1 Click "Add" on the timer setting window. 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.


- 2 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.

You can enable and disable all of the timer settings that have been registered. Select **Timer - Enable** or **Disable** from the Tool menu.

## E-mail notification function settings

The mail notification function can be used to send corresponding notification messages to a preset e-mail address when a projector that is connected to the network assumes a certain status, or if it experiences a problem or warning. By using this function, the operator can be notified of a projector's status or problems even when the operator is in a different location from the projectors.


- 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 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.
- Detectable status with the mail notification function differs with the projector you are using.

## Procedure

- 1 Select "Mail notification function" from the Tool menu.

- 2

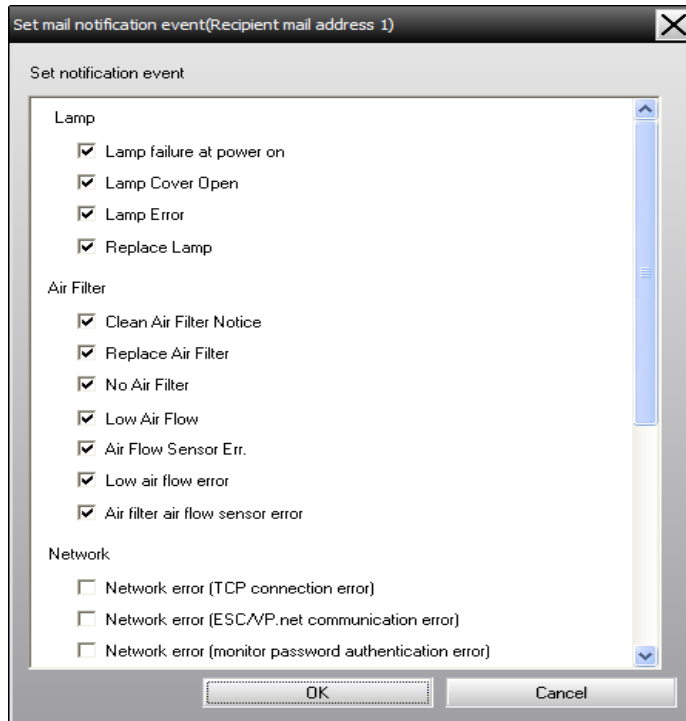
The Set mail notification function window will be displayed.



Make the necessary settings while referring to the table below.

<b>Mail notification function</b>	Set to ON to use the mail notification function.
<b>SMTP server IP address</b>	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.
<b>Sender mail address</b>	Enter the sender's e-mail address. Up to a maximum of 255 bytes can be entered.
<b>Recipient mail address 1</b>	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.
<b>Recipient mail address 2</b>	
<b>Recipient mail address 3</b>	

- 3** Click "Notification event" and check the items for mail notification in the window that appears.



- 4** Click "OK".
- The Set mail notification function window appears again.  
Repeat Steps 3 and 4 to set the notification events to be notified.

- 5** When the setup is complete, click "OK".


## E-mail notification of problem/warning/status




If the projector experiences a problem or enters a status requiring attention, an e-mail like that shown below is sent to the address specified for Recipient mail address.

If there is more than one problem, warning, or status, the corresponding messages are output to separate lines.

Item	Details shown
E-mail subject	[Display name displayed in Grouping view or Detail list view] Projector status notification
Body	<Display name displayed in Grouping view or Detail list view> has entered the following status. <Warning/error/status message (Please see the table below)>

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

Message	Remedy
Internal Error	 <i>Projector User's Guide</i>
Fan error	
Sensor error	
Lamp Cover Open	
Lamp failure at power on	
Lamp error	
High internal temperature error	
Low air flow error	
Air filter air flow sensor error	
High-temperature warning	
Replace Lamp	
Replace Air Filter	
No Air Filter	
Low Air Flow	
Air Flow Sensor Err.	
Clean Air Filter Notice	
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.

Message	Remedy
Other error	Stop using the projector, disconnect the power cable from the electrical outlet, and contact Epson.  <i>Projector's User's Guide</i>
Supply System Error (Ballast)	
Auto Iris Error	
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.  <i>Projector User's Guide</i>
Network error (ESC/VP.net communication error)	Check that the projector has been correctly connected to the network.  <i>Projector User's Guide</i>
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.

## Application lock function

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.

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## Switching application lock between enabled and disabled

### Enabling the application 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 application 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.

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## 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.



# Appendix



## Projectors cannot be monitored or controlled

Cause	Remedy
Is the projector connected to the network correctly?	Check that the network cable has been connected correctly. If the cable is not connected correctly, reconnect it.
Has the projector been set up correctly for connection to the network?	Check the settings for the Network configuration menu command. ☛ <i>Projector User's Guide</i>
Has EMP Monitor been installed on the computer correctly?	Uninstall EMP Monitor and then re-install it. ☛ <a href="#">p.7</a>
Are all the projectors that you want to control or monitor registered?	Register the projectors. ☛ <a href="#">p.10</a>
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. ☛ <i>Projector User's Guide</i>

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

Cause	Remedy
Is the projector connected to the network correctly?	Check that the network cable has been connected correctly. If the cable is not connected correctly, reconnect it.
Has the projector been set up correctly for connection to the network?	Check the settings for the Network configuration menu command. ☛ <i>Projector User's Guide</i>
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?	In order to use the mail notification function when the projector is in standby mode, the projector's Network Monitoring or Standby Mode configuration menu must be set to ON or Network ON. ☛ <i>Projector User's Guide</i>
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 Epson. ☛ <i>Projector User's Guide</i>
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.

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CPD-27479