

7 [E-MAIL ADDRESS 1]/[E-MAIL ADDRESS 2]
Enter the E-mail address to be sent. Leave [E-MAIL ADDRESS 2] blank when two E-mail addresses are not to be used.

8 Settings of the conditions to send E-mail
Select the conditions to send E-mail.

[MAIL CONTENTS]:

Select either [NORMAL] or [SIMPLE].

[ERROR]:

Send an E-mail when an error occurred in the self-diagnosis.

[LAMP RUNTIME]:

An E-mail message is sent when the remaining lamp on time for the lamp has reached the value set at the right field.

[INTAKE AIR TEMPERATURE]:

Send an E-mail when the air intake temperature has reached the value set at the above field.

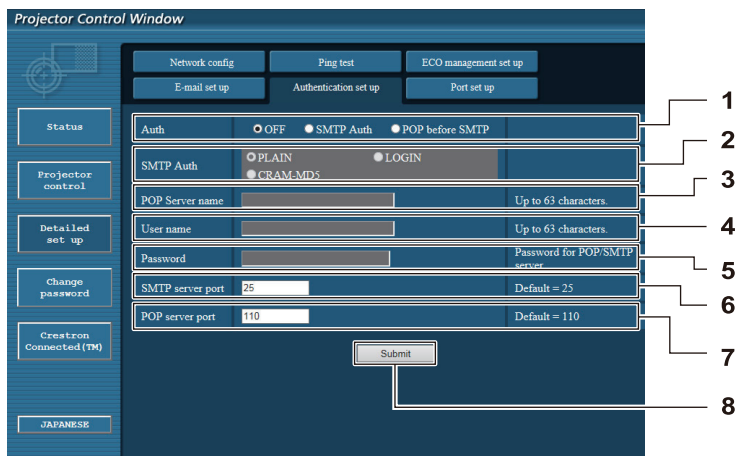
9 [Submit]

Update the settings.

[Authentication set up] page

Set the authentication items when POP authentication or SMTP authentication is necessary to send an E-mail.

Click [Detailed set up] → [Authentication set up].



1 [Auth]

Select the authentication method specified by your Internet service provider.

2 [SMTP Auth]

Set when the SMTP authentication is selected.

3 [POP server name]

Enter the POP server name.

Allowed characters:

Alphanumerics (A - Z, a - z, 0 - 9)

Minus sign (-) and period (.)

4 [User name]

Enter the user name for the POP server or the SMTP server.

5 [Password]

Enter the password for the POP server or the SMTP server.

6 [SMTP server port]

Enter the port number of the SMTP server. (Normally 25)

7 [POP server port]

Enter the port number of the POP server. (Normally 110)

8 [Submit]

Update the settings.

Contents of mail sent

Example of E-mail sent when E-mail is set

Mail with the contents shown below is sent when the e-mail settings have been established.

```

=== Panasonic projector report (CONFIGURE) ===
Projector Type      : PT-VW350
Serial No          : 000000000
----- E-mail setup data -----
TEMPERATURE WARNING SETUP
MINIMUM TIME      at [ 60] minutes interval
INTAKE AIR TEMPERATURE Over [ 32degC / 89degF ]

ERROR             [ OFF ]
LAMP RUNTIME      [ OFF ]   at REMAIN [ 400] H
LAMP RUNTIME      [ OFF ]   at REMAIN [ 200] H
INTAKE AIR TEMPERATURE [ OFF ]

----- check system -----
FAN               [ OK ]
INTAKE AIR TEMPERATURE [ OK ]
EXHAUST AIR TEMPERATURE [ OK ]
OPTICS MODULE TEMPERATURE [ OK ]
LAMP REMAIN TIME   [ OK ]
LAMP STATUS        [ OK ]
APERTURE (CONTRAST-SHUTTER) [ OK ]
AIR FILTER         [ OK ]
(Error code 00 00 00 00 00 00 00 00)

Intake air temperature : 31 degC / 87 degF
Exhaust air temperature : 37 degC / 98 degF
Optics module temperature : 39 degC / 102 degF

PROJECTOR RUNTIME      800 H

LAMP NORMAL           500 H
LAMP ECO               700 H
LAMP REMAIN           4000 H
----- Current status -----
MAIN VERSION          1.00
NETWORK VERSION       1.00
SUB VERSION           1.00
LAMP STATUS           LAMP=ON
INPUT                 RGB
SIGNAL NAME           XGA6
SIGNAL FREQUENCY      0.00kHz / 0.00Hz

----- Wired Network configuration -----
DHCP Client           OFF
IP address            192.168.10.100
MAC address           04:20:9A:00:00:00

----- Memo -----

```

Example of E-mail sent for an error

Mail with the contents shown below is sent when an error has occurred.

```

=== Panasonic projector report(ERROR) ===
Projector Type       : PT-VW350
Serial No           : 000000000
----- check system -----
FAN                 [ OK ]
INTAKE AIR TEMPERATURE [ OK ]
EXHAUST AIR TEMPERATURE [ OK ]
OPTICS MODULE TEMPERATURE [ OK ]
LAMP REMAIN TIME    [ OK ]
LAMP STATUS         [ OK ]
APERTURE (CONTRAST-SHUTTER) [ OK ]
AIR FILTER          [ FAILED ]
(Error code 00 00 00 20 00 00 00 00)

Intake air temperature : 31 degC / 87 degF
Exhaust air temperature : 37 degC / 98 degF
Optics module temperature : 39 degC / 102 degF

PROJECTOR RUNTIME      800 H

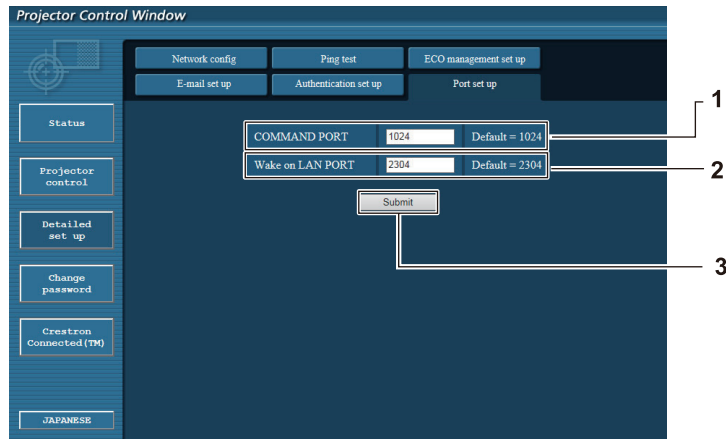
LAMP NORMAL           500 H
LAMP ECO              700 H
LAMP REMAIN           4000 H

----- Current status -----
MAIN VERSION          1.00
NETWORK VERSION       1.00
SUB VERSION           1.00
LAMP STATUS           LAMP=OFF
INPUT                 RGB
----- Wired Network configuration -----
DHCP Client           OFF
IP address             192.168.10.100
MAC address            04:20:9A:00:00:00

----- Memo -----
    
```

[Port set up] page

Set the port number used for command control.
 Click [Detailed set up] → [Port set up].



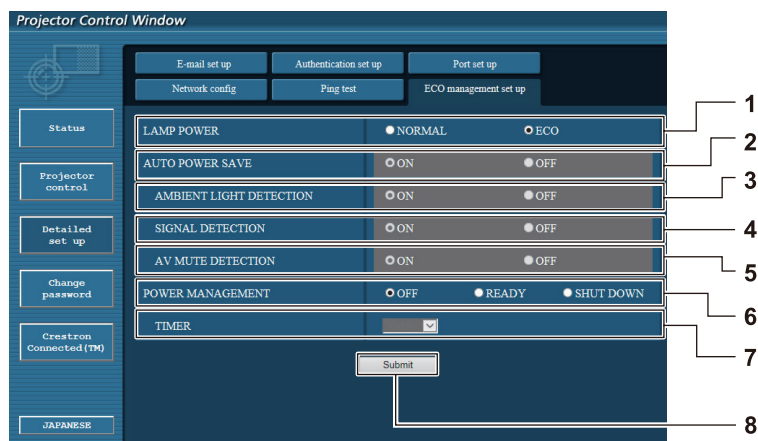
- 1 [COMMAND PORT]**
Set the port number used for command control.
- 2 [Wake on LAN PORT]**
When [STANDBY MODE] is set to [NETWORK], set the port number used for the Wake on LAN function.

- 3 [Submit]**
Update the settings.

[ECO management set up] page

You can make settings for the ECO management function of the projector.

Click [Detailed set up] → [ECO management set up].



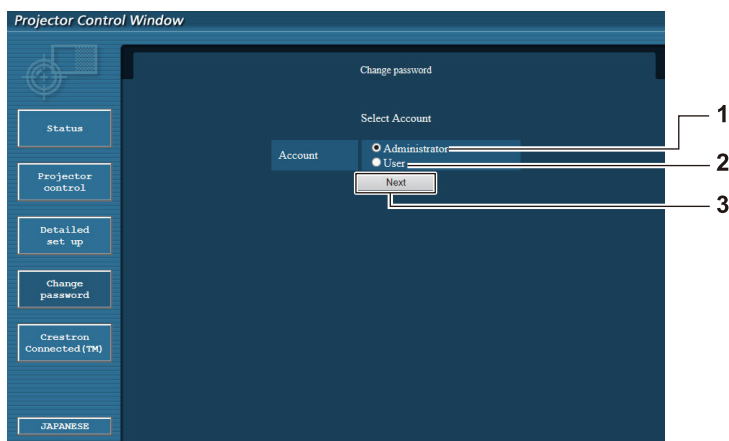
- | | |
|---|---|
| <p>1 [LAMP POWER]
Selects the [LAMP POWER] setting.</p> <p>2 [AUTO POWER SAVE]
Select [ON] to set [AMBIENT LIGHT DETECTION], [SIGNAL DETECTION], and [AV MUTE DETECTION].</p> <p>3 [AMBIENT LIGHT DETECTION]
Enable ([ON])/disable ([OFF]) the ambient light detection function.</p> <p>4 [SIGNAL DETECTION]
Enable ([ON])/disable ([OFF]) the signal detection function.</p> | <p>5 [AV MUTE DETECTION]
Enable ([ON])/disable ([OFF]) the AV mute detection function.</p> <p>6 [POWER MANAGEMENT]
Select the power consumption mode.</p> <p>7 [TIMER]
Select the time that the lamp is turned off when the POWER MANAGEMENT function is using.</p> <p>8 [Submit]
Update the setting.</p> |
|---|---|

Note

- For detailed description of each setting item, refer to the [PROJECTOR SETUP] menu of the projector → [ECO MANAGEMENT] (➔ page 71).

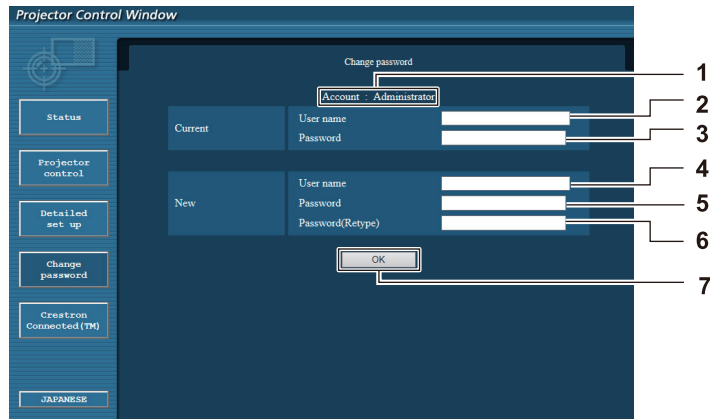
[Change password] page

Click [Change password].



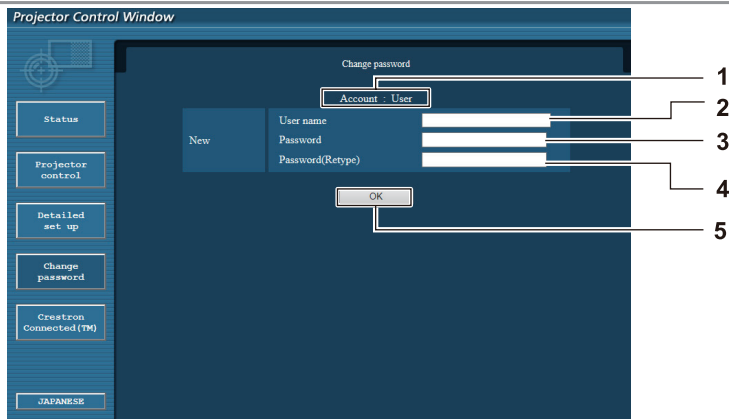
- | | |
|---|--|
| <p>1 [Administrator]
Used to change the setting of [Administrator].</p> <p>2 [User]
Used to change the setting of [User].</p> | <p>3 [Next]
Used to change the setting of the password.</p> |
|---|--|

[Administrator] account



- 1 **[Account : Administrator]**
Displays the account to change.
- 2 **[Current] [User name]**
Enter the user name before the change.
- 3 **[Current] [Password]**
Enter the current password.
- 4 **[New] [User name]**
Enter the desired new user name.
(Up to 16 characters in single byte)
- 5 **[New] [Password]**
Enter the desired new password.
(Up to 16 characters in single byte)
- 6 **[New] [Password (Retype)]**
Enter the desired new password again.
- 7 **[OK]**
Determines the change of password.

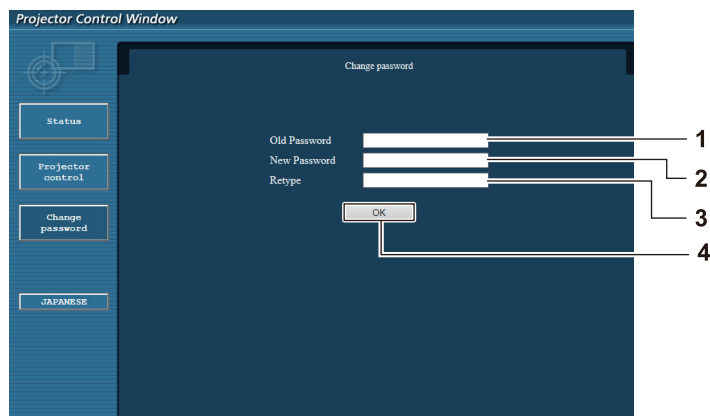
[User] account



- 1 **[Account : User]**
Displays the account to change.
- 2 **[New] [User name]**
Enter the desired new user name.
(Up to 16 characters in single byte)
- 3 **[New] [Password]**
Enter the desired new password. (Up to 16 characters in single byte)
- 4 **[New] [Password (Retype)]**
Enter the desired new password again.
- 5 **[OK]**
Determines the change of password.

[Change password] (For user rights)

Only the change of password is enabled under the user rights.



1 [Old Password]

Enter the current password.

2 [New Password]

Enter the desired new password. (Up to 16 characters in single byte)

3 [Retype]

Enter the desired new password again.

4 [OK]

Determines the change of password.

Note

- To change the account of the administrator, you must enter the [User name] and [Password] in [Current].

[Crestron Connected(TM)] page

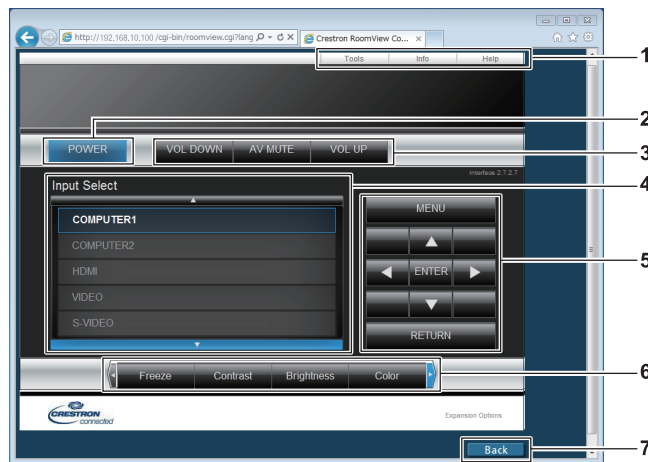
The projector can be monitored/controlled with Crestron Connected™.

To start the Crestron Connected™ control page from the web control screen, you need to access with the administrator rights. (For user rights, the [Crestron Connected(TM)] button is not displayed on the web control screen.)

The control page of Crestron Connected™ is displayed by clicking [Crestron Connected(TM)].

It is not displayed if Adobe® Flash® Player is not installed on the computer used, or the browser used does not support Flash. In that case, click [Back] on the control page to go back to the previous page.

Control page



1 [Tools], [Info], [Help]

Tabs for selecting the setting, information or help page of the projector.

2 [POWER]

Turns on/off the power.

3 [VOL DOWN], [AV MUTE], [VOL UP]

Adjusts the volume.

Switches the AV mute function on/off.

4 [Input Select]

Controls input selection.

Not available when the power of the projector is turned off.

5 Menu screen control buttons

Navigates the menu screen.

6 Freeze/image quality adjustment

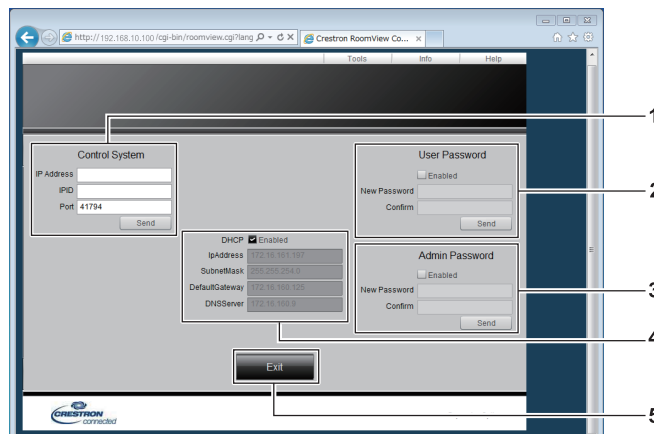
Controls items related to freeze/image quality.

7 [Back]

Performs return to the previous page.

[Tools] page

Click [Tools] on the control page.



1 [Control System]

Set the information required for communicating with the controller to be connected with the projector.

2 [User Password]

Set the user rights password for the Crestron Connected™ control page.

3 [Admin Password]

Set the administrator rights password for the Crestron Connected™ control page.

4 Network status

Displays the settings of wired LAN.

[DHCP]

Displays the current setting.

[IpAddress]

Displays the current setting.

[SubnetMask]

Displays the current setting.

[DefaultGateway]

Displays the current setting.

[DNSServer]

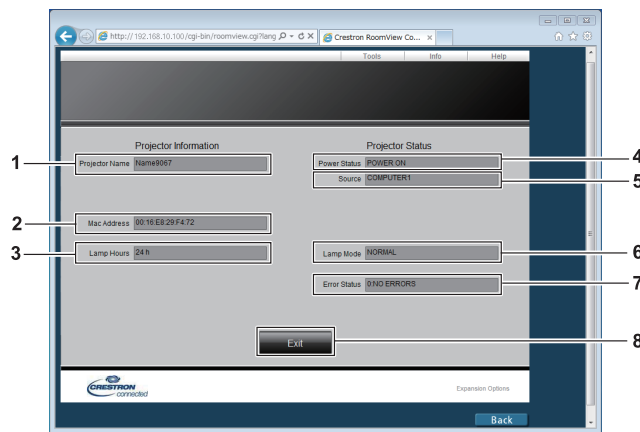
Displays the current setting.

5 [Exit]

Returns to the control page.

[Info] page

Click [Info] on the control page.



1 [Projector Name]

Displays the projector name.

2 [Mac Address]

Displays the MAC address.

3 [Lamp Hours]

Displays the runtime of the lamp (converted value).

4 [Power Status]

Displays the status of the power.

5 [Source]

Displays the selected input.

6 [Lamp Mode]

Displays the setting status of [LAMP POWER] (➔ page 71).

7 [Error Status]

Displays the error status.

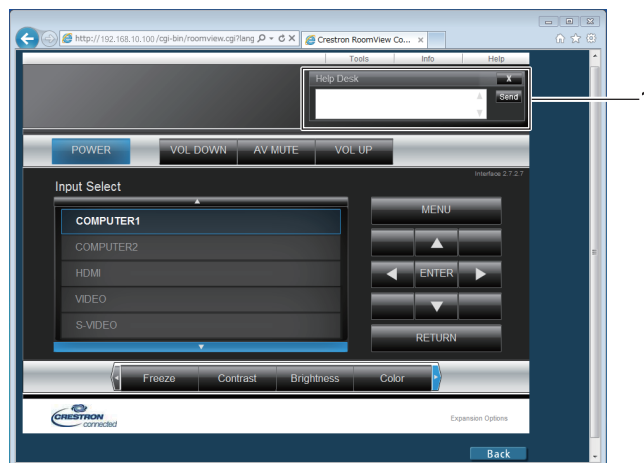
8 [Exit]

Returns to the control page.

[Help] page

Click [Help] on the control page.

The [Help Desk] window is displayed.



1 [Help Desk]

Send/receive messages to/from an administrator who uses Crestron Connected™.

Chapter 5 Maintenance

This chapter describes methods of inspection when there are problems, maintenance, and replacement of the units.

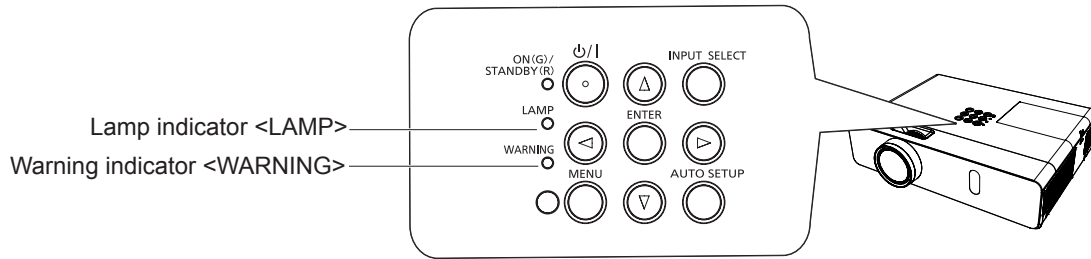
Lamp and Warning Indicators

When an indicator lights up

If a problem should occur inside the projector, the lamp indicator <LAMP> and the warning indicator <WARNING> will inform you by lighting or blinking. Check the status of the indicators and remedy the indicated problems as follows.

Attention

- Before you take a remedial measure, follow the procedure of switching the power off indicated in "Powering Off the projector". (➔ page 39)



Lamp indicator

Indicator	Lighting in red.	Blinking in red.
Status	Time to replace the lamp unit.	A problem is detected in the lamp or the power supply for the lamp.
Check	<ul style="list-style-type: none"> • Was [REPLACE LAMP] displayed when you turned on the power? • The indicator lights up when the runtime of the lamp unit has reached 5 000 hours (when [LAMP POWER] is set to [NORMAL]). 	<ul style="list-style-type: none"> • Have you turned on the power again immediately after turning it off? • Some error has occurred in the lamp circuit. Check for fluctuation (or drop) in the source voltage.
Remedy	<ul style="list-style-type: none"> • Replace the lamp unit. 	<ul style="list-style-type: none"> • Wait a while until the luminous lamp cools off, and then turn on the power. • Turn off the projector, and unplug the AC power cord, and consult your dealer.

Note

- If the lamp indicator <LAMP> is still lighting or blinking after taking the preceding measures, ask your dealer for repair.

Warning indicator

Indicator	Lighting in red.	Blinking in red.	Blinking in red. (Slow)
Status	Internal temperature is high (warning).	Internal temperature is high (standby status).	The projector detects an abnormal condition and cannot be turned on.
Check	<ul style="list-style-type: none"> • Is the air intake/exhaust port blocked? • Is the room temperature high? • Is the air filter unit dirty? 		
Remedy	<ul style="list-style-type: none"> • Remove any objects that are blocking the air intake / exhaust port. • Install the projector in a location with an ambient temperature of 0 °C (32 °F) to 40 °C (104 °F). • Do not use the projector at high altitudes of 2 700 m (8 858') or higher above sea level. • Replace the air filter unit. (➔ page 99) 		<ul style="list-style-type: none"> • If the projector is turned off again, unplug the AC power cord and contact the dealer or the service center for service and checkup.

Note

- If the warning indicator <WARNING> is still lighting or blinking after taking the preceding measures, ask your dealer for repair.

Maintenance/replacement

Before performing maintenance/replacement

- When you perform maintenance or replacement of the parts, make sure to turn off the power and disconnect the power plug from the wall outlet. (➔ pages 35, 39)
- Be sure to observe the procedure “Powering Off the projector” (➔ page 39) when performing power supply operation.

Maintenance

Outer Case

Wipe off dirt and dust using a soft dry cloth.

- If the dirt is persistent, soak the cloth with water and wring it thoroughly before wiping. Dry off the projector with a dry cloth.
- Do not use benzene, thinner or rubbing alcohol, other solvents or household cleaners. Using them may cause deterioration of the outer case.
- When using chemical treated dusters, follow its instruction.

Front glass surface of the lens

Wipe off the dirt and dust off the front surface of the lens with soft clean cloth.

- Do not use a cloth that has an abrasive surface or a cloth that is moist, oily or covered with dust.
- Do not use excessive force when wiping the lens as it is fragile.
- Do not use benzene, thinner or rubbing alcohol, other solvents or household cleaners. Using them may cause deterioration of the lens.

Attention

- The lens is made of glass. Impacts or excessive force when wiping may scratch its surface.
Please handle with care.

Replacing the unit

Air filter unit

The air filter prevents dust from accumulating on the optical elements inside the projector. Should the air filter become clogged with dust particles, it will reduce cooling fans' effectiveness and may result in internal heat buildup and adversely affect the life of the projector.

If the air filter unit become clogged, it will result in internal heat buildup, the power of the projector may be turned off for safety. If a warning message appears on the screen, replace the air filter immediately.

Consult your dealer to purchase a replacement air filter unit (ET-RFV300).

Removing the air filter unit

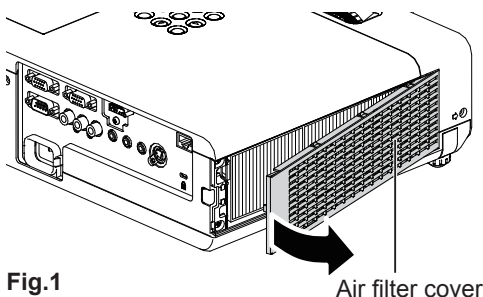


Fig.1

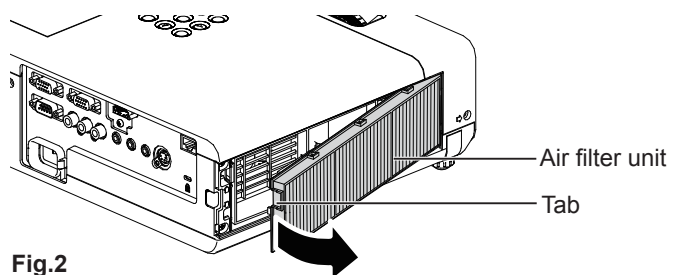


Fig.2

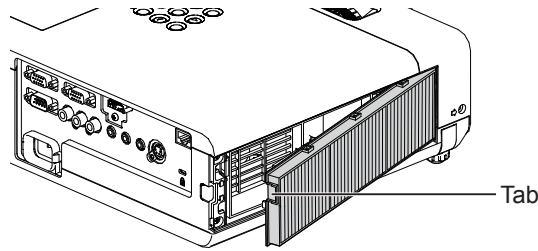
1) Remove the air filter cover. (Fig.1)

- Open the air filter cover in the direction of the arrow and remove it.

2) Remove the air filter unit.

- Hold the tab of the air filter unit and pull out in the direction of the arrow. (Fig.2)
- After removing the air filter unit, remove foreign objects and dust from the air filter compartment and the projector's air intake port if there are any.

Attaching the air filter unit



1) Attach the unused air filter unit to the projector.

- Hold the air filter unit that the tab is in up-left side in the figure, put the right side in the figure first, and press the tab side until make a click sound.
- Please press the tab of the air filter unit other than the pleated filter during installation.

2) Install the air filter cover.

- Perform Step 1) in "Removing the air filter unit" (➡ page 99) in the reverse order to close the air filter cover and press it firmly until make a click sound.
- Make sure that the air filter cover is closed tightly.

Resetting the filter counter

Be sure to reset the filter counter after replacing the air filter unit.

- 1) **Connect the power plug, press the power <⏻/|> button on the control panel or on the remote control.**
- 2) **Press the <MENU> button to display the main menu, then press ▲▼ to select [PROJECTOR SETUP].**
- 3) **Press the <ENTER> button, press ▲▼ to select [FILTER COUNTER].**
- 4) **Press the <ENTER> button, press ▲▼ to select [FILTER COUNTER RESET].**
- 5) **Press the <ENTER> button.**
 - [FILTER COUNTER RESET] confirmation is displayed.
- 6) **Press ◀▶ to select [OK], then press the <ENTER> button.**
 - The filter usage time is 0 after reset.

Attention

- Turn off the power before you replace the air filter unit.
- When attaching the air filter unit, make sure that the projector is stable, and work in an environment that is safe, even in the event of the air filter unit dropping.
- Make sure that the air filter unit is properly attached before using the projector. If it is not attached, the projector will suck in dirt and dust causing a malfunction.
- Do not put anything into the air vents. Doing so may result in malfunction of the projector.
- The air filter unit to be replaced should be an unused product.
- After replacing the air filter, reset the filter counter. Otherwise, "FILTER COUNTER has reached the set time." will appear on screen.

Note

- The replacement cycle of the air filter unit varies greatly depending on the usage environment.

Lamp unit

The lamp unit is a consumable component.

Refer to "When to replace the lamp unit" (➡ page 101) for details about the replacement cycle.

It is recommended to ask an authorized engineer to replace the lamp unit. Contact your dealer.

Consult your dealer to purchase a replacement lamp unit (ET-LAV300).

Warning

Do not replace the lamp unit when it is hot. (Wait at least 1 hour after use.)

The inside of the cover can become very hot, take care to avoid burn injuries.

Notes on the replacement of the lamp unit

- The luminous source of the lamp is made of glass and may burst if you hit it against a hard surface or drop it. Please handle with care.
- A Phillips screwdriver is required for replacement of the lamp unit.
- When replacing the lamp unit, be sure to hold it by the handle.
- When replacing the lamp because it has stopped illuminating, there is a possibility that the lamp may be broken. If replacing the lamp of a projector which has been installed on the ceiling, you should always assume that the lamp is broken, and you should stand to the side of the lamp cover, not underneath it. Remove the lamp cover gently. Small pieces of glass may fall out when the lamp cover is opened. If pieces of glass get into your eyes or mouth, seek medical advice immediately.
- The lamp may be ruptured. Care should be taken not to scatter pieces of the broken lamp glass when replacing the lamp unit. Pieces of the broken lamp may fall from the lamp unit especially when the projector is mounted on the ceiling, so when replacing the lamp unit do not stand directly underneath it or position your face close to it.
- The lamp contains mercury. Consult your local municipality or your dealer about correct disposal of used lamp units.

Attention

- Panasonic takes no responsibility for any damage or malfunction of the product resulting from use of lamp units which are not manufactured by Panasonic. Use only specified lamp units.

Note

- The model numbers of accessories and optional accessories are subject to change without prior notice.

When to replace the lamp unit

The lamp unit is a consumable component. Since its brightness gradually decreases over time, it is necessary to replace the lamp unit regularly. The estimated duration before replacement is 5 000 hours, but the lamp may go off before 5 000 hours has elapsed depending on individual lamp characteristics, usage conditions, and the installation environment. It is recommended that the Replacement lamp unit be prepared earlier.

If you continue to use the lamp unit after 5 000 hours has elapsed, the lamp turns off automatically after approximately 10 minutes, as it will cause malfunction of the projector.

Lamp runtime	On-screen display REPLACE LAMP	LAMP indicator
Over 4 800 hours	The message is displayed for 30 seconds. If you press any button within the 30 seconds, the message disappears.	Lights in red (even in stand-by mode).
Over 5 000 hours	If the power is turned on without replacing the lamp, the power automatically turns off after approximately ten minutes to prevent the malfunction of the projector.	

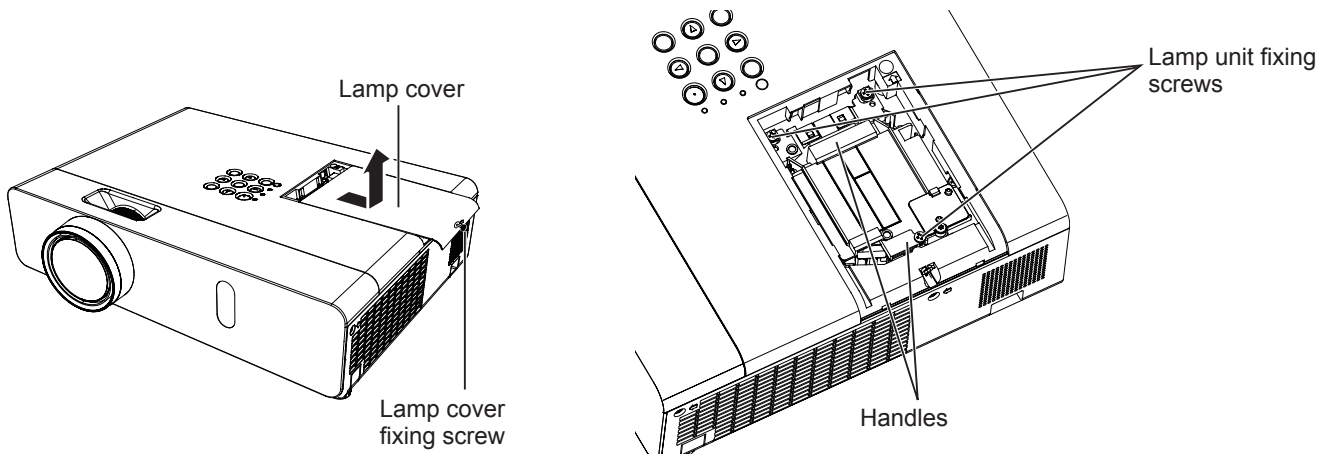
Note

- To predict when to replace the lamp, check the lamp runtime displayed in [RUNTIME] in [STATUS] (▶ page 69).
- 5 000 hours of use is a rough guideline, but is not a guarantee. The lamp runtime differs depending on the setting of "LAMP POWER" menu.

Replacing the Lamp unit

Attention

- When the projector is mounted on a ceiling, do not work with your face close to the projector.
- Do not loosen other than designated screws.
- Attach the lamp unit and the lamp cover securely.



- 1) **Turn off the Power by following the procedure in "Powering Off the Projector". (➔ page 39)**
Remove the AC power plug from the wall outlet.
 - Wait at least 1 hour and make sure the lamp unit and surroundings are cool.
- 2) **Use a Phillips screwdriver to loosen the lamp cover fixing screw (×1) until it turns freely and remove the lamp cover.**
 - Remove the lamp cover by pulling it slowly toward the direction of the arrow.
- 3) **Use a Phillips screwdriver to loosen the three lamp unit fixing screws (×3) until they turn freely.**
- 4) **Hold the used lamp unit by its handles, and pull it gently from the projector.**
- 5) **Insert the new lamp unit in correct direction. Tighten the three lamp unit fixing screws (×3) securely with a Phillips screwdriver.**
 - When you experience difficulty in installing the lamp unit, remove it and try again. If you use force to install the lamp unit, the connector may be damaged.
- 6) **Attach the lamp cover. Tighten the lamp cover fixing screw (×1) securely with a Phillips screwdriver.**
 - Perform Step 2) in the reverse order to attach the lamp cover.

Note

- When you replace the lamp unit with new one, the projector resets the runtime of the lamp unit automatically.

Troubleshooting

Please check following points. For details, see the corresponding pages.

Problem	Cause	Reference page
Power does not turn on.	• The power cord may not be connected.	—
	• No electric supply is at the wall outlet.	—
	• The circuit breakers have tripped.	—
	• Is the <LAMP> indicator or <WARNING > indicator lit or blinking?	98
	• The lamp cover has not been securely installed.	101
No picture appears.	• The video signal input source may not be connected to a terminal properly.	32
	• The input selection setting may not be correct.	40
	• The [BRIGHTNESS] adjustment setting may be at the minimum setting.	52
	• The input source which is connected to the projector may have a problem.	—
	• The AV MUTE function may be in use.	43, 68
The picture is fuzzy.	• The lens cap is still attached to the lens.	17
	• The lens focus may not have been set correctly.	40
	• The projector may not be at the correct distance from the screen.	27
	• The lens may be dirty.	16
	• The projector may be tilted too much.	—
The color is pale or grayish.	• [COLOR] or [TINT] adjustment may be incorrect.	52
	• The input source which is connected to the projector may not be adjusted correctly.	—
	• RGB cable is damaged.	—
No sound from the internal speaker.	• The input terminals may not have been correctly connected.	33
	• The volume may have been set to the minimum level.	44, 73
	• The AV MUTE function may have been turned on.	43, 68
	• When the VARIABLE AUDIO OUT is plugged-in, the projector's built-in speaker is not available.	33
	• The MUTE function may have been turned on.	44, 73
• Is the audio input selection in [AUDIO SETTING] set correctly?	74	
The remote control does not operate.	• The batteries may be weak.	—
	• The batteries may not have been inserted correctly.	23
	• The remote control signal receptor on the projector may be obstructed.	20
	• The remote control unit may be out of the operation range.	20
	• Strong light such as fluorescent shine onto the signal receptor.	20
	• The [REMOTE CONTROLLER] setting is set to [DISABLE] in [CONTROL DEVICE SETUP].	78
	• Is the ID number setting operation correct?	45
Menu screen does not appear.	• Is the on-screen display function turned off (hidden)?	62
The control buttons of the projector do not operate.	• The [CONTROL PANEL] setting is set to [DISABLE] in [CONTROL DEVICE SETUP].	78
The picture does not display correctly.	• There may be a problem with the VCR or other signal source.	—
	• A signal which is not compatible with the projector is being input.	112
Picture from a computer does not appear.	• The cable may be longer than the optional cable.	—
	• The external video output from a laptop computer may not be correct.	—
Picture from a HDMI device does not appear or picture is not stable.	• Is the HDMI cable securely connected?	32, 33
	• Turn off the power of the projector and the connected devices. Then turn the power of the projector and the connected devices back on.	—
	• Isn't unsupported signal cable connected?	112
No sound is output from a HDMI device.	• Set the sound channel of the attached device to Linear PCM.	—

Attention

- If the problem persists, after confirming the contents of the table, please consult your dealer.

Chapter 6 Appendix

This chapter describes specifications and after-sales service for the projector.

Technical Information

PJLink protocol

The network function of the projector supports PJLink class 1, and the PJLink protocol can be used to perform projector setting and projector status query operations from a computer.

Control commands

The following table lists the PJLink protocol commands that can be used to control the projector.

- x characters in tables are non-specific characters.

Command	Control details	Parameter / return string	Remark		
POWR	Power supply control	0 1	Standby Power on		
POWR ?	Power supply status query	0 1 2 3	Standby Power on Cool-down in progress Warm-up in progress		
INPT	Input selection	11	RGB 1		
INPT ?	Input selection query	12 21 22 31	RGB 2 VIDEO S-VIDEO HDMI		
AVMT	AV MUTE control	30	AV MUTE mode off		
AVMT ?	AV MUTE status query	31	AV MUTE mode on		
ERST ?	Error status query	xxxxxx	1st byte	Indicates fan errors, range 0 – 2.	<ul style="list-style-type: none"> • 0 = No error is detected • 1 = Warning • 2 = Error
			2nd byte	Indicates lamp errors, range 0 – 2	
			3rd byte	Indicates temperature errors, range 0 – 2.	
			4th byte	Fixed at 0.	
			5th byte	Indicates filter errors, range 0 – 2.	
			6th byte	Indicates other errors, range 0 – 2.	
LAMP ?	Lamp status query	xxxxxxxxxxxx	1st digits (1 – 5 digits) : Lamp cumulative operating time 2nd digit : 0 = Lamp off, 1 = Lamp on		
INST ?	Input selection list query	11 12 21 22 31			
NAME ?	Projector name query	xxxxx	Returns the name set in [NAME CHANGE] of [NETWORK].		
INF1 ?	Manufacturer name query	Panasonic	Returns manufacturer name.		
INF2 ?	Model name query	VW350 VX420	Returns model name.		
INF0 ?	Other information query	xxxxx	Returns information such as version number.		
CLSS ?	Class information query	1	Returns class for PJLink.		

PJLink security authorization

The password used for PJLink is the same as that of the password set for web control.

When using the projector without security authentication, do not set a password for web control.

- For specifications related to PJLink, refer to the website of Japan Business Machine and Information System Industries Association.

URL <http://pjlink.jbmia.or.jp/english/>

Control commands via LAN

When WEB Control administrator rights password is set (Protect mode)

Connection method

- 1) Obtain the IP address and port number (Initial set value = 1 024) of the projector and make a request for connection to the projector.

- Acquire the IP address from the menu screen of the projector, and the port number from the WEB control page.

IP address :	Obtain from MAIN MENU → [NETWORK] → [STATUS]
Port No. :	Acquire from the WEB control → [Detailed set up] → [Port set up] page

- 2) There is a response from the projector.

	Data section	Blank	Mode	Blank	Random number section	Termination symbol
Command example	"NTCONTROL" (ASCII string)	' '	'1'	' '	"ZZZZZZZ" (ASCII code hexadecimal number)	(CR) 0x0d
Data length	9 bytes	1 byte	1 byte	1 byte	8 bytes	1 byte

- Mode : 1 = Protect mode

- 3) Generate a 32-byte hash value from the following data using MD5 algorithm.

- "xxxxxx:yyyyy:zzzzzzz"

xxxxxx :	Administrator rights user name for WEB CONTROL (Default user name is "admin1")
yyyyy :	Password of above administrator rights user (Default password is "panasonic")
zzzzzzz :	8-byte random number obtained in Step 2

Command transmission method

Transmit using the following command format.

■ Transmitted data

	Header			Data section	Termination symbol
Command example	Hash value (See above <Connection method>)	'0' 0x30	'0' 0x30	Control command (ASCII string)	(CR) 0x0d
Data length	32 bytes	1 byte	1 byte	Undefined length	1 byte

■ Receive data

	Header		Data section	Termination symbol
Command example	'0' 0x30	'0' 0x30	Control command (ASCII string)	(CR) 0x0d
Data length	1 byte	1 byte	Undefined length	1 byte

■ Error response

	String	Details	Termination symbol
Message	"ERR1"	Undefined control command	(CR) 0x0d
	"ERR2"	Out of parameter range	
	"ERR3"	Busy state or no-acceptable period	
	"ERR4"	Timeout or no-acceptable period	
	"ERR5"	Wrong data length	
	"ERRA"	Password mismatch	
Data length	4 bytes	—	1 byte

When WEB Control administrator rights password is not set (Non-protect mode)

Connection method

1) Obtain the IP address and port number (Initial set value = 1 024) of the projector and make a request for connection to the projector.

- Acquire the IP address from the menu screen of the projector, and the port number from the WEB control page.

IP address :	Obtain from main menu → [NETWORK] → [STATUS]
Port No. :	Acquire from the WEB control → [Detailed set up] → [Port set up] page

2) There is a response from the projector.

■ Response data

	Data section	Blank	Mode	Termination symbol
Command example	"NTCONTROL" (ASCII string)	' '	'0'	(CR)
Data length	9 bytes	0x20	0x30	0x0d
		1 byte	1 byte	1 byte

- Mode : 0 = Non-protect mode

Command transmission method

Transmit by the following command format.

■ Transmitted data

	Header		Data section	Termination symbol
Command example	'0'	'0'	Control command (ASCII string)	(CR)
Data length	0x30	0x30	Undefined length	0x0d
	1 byte	1 byte		1 byte

■ Receive data

	Header		Data section	Termination symbol
Command example	'0'	'0'	Control command (ASCII string)	(CR)
Data length	0x30	0x30	Undefined length	0x0d
	1 byte	1 byte		1 byte

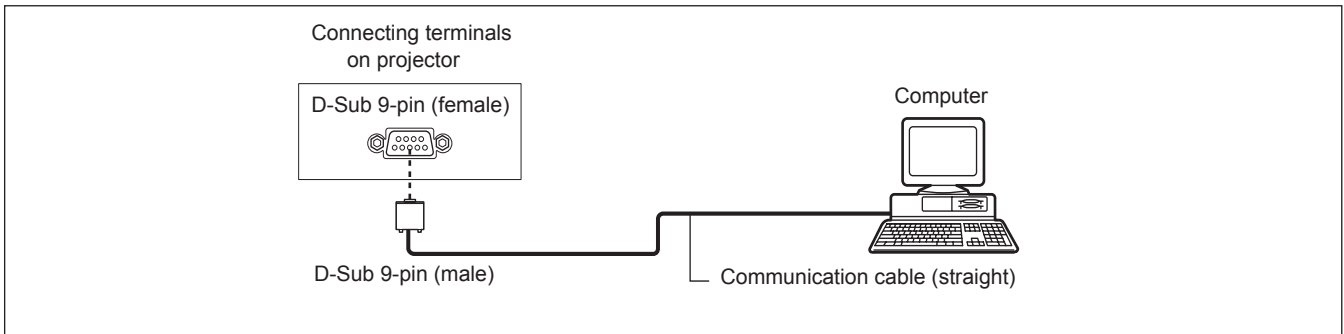
■ Response data

	String	Details	Termination symbol
Message	"ERR1"	Undefined control command	(CR) 0x0d
	"ERR2"	Out of parameter range	
	"ERR3"	Busy state or no-acceptable period	
	"ERR4"	Timeout or no-acceptable period	
	"ERR5"	Wrong data length	
	"ERRA"	Password mismatch	
Data length	4 bytes	—	1 byte

Serial terminal

The serial connector which is on the connector panel of the projector conforms to the RS-232C interface specification, so that the projector can be controlled by a personal computer which is connected to this connector.

Connection



Pin assignments and signal names

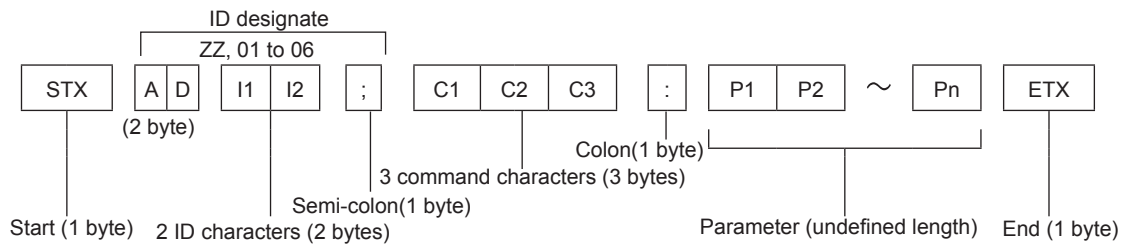
D-Sub 9-pin (female) Outside view	Pin No.	Signal name	Contents
		①	—
②		TXD	Transmitted data
③		RXD	Received data
④		—	NC
⑤		GND	Earth
⑥		—	NC
⑦		CTS	Connected internally
⑧		RTS	
⑨		—	NC

Communication conditions (Factory default)

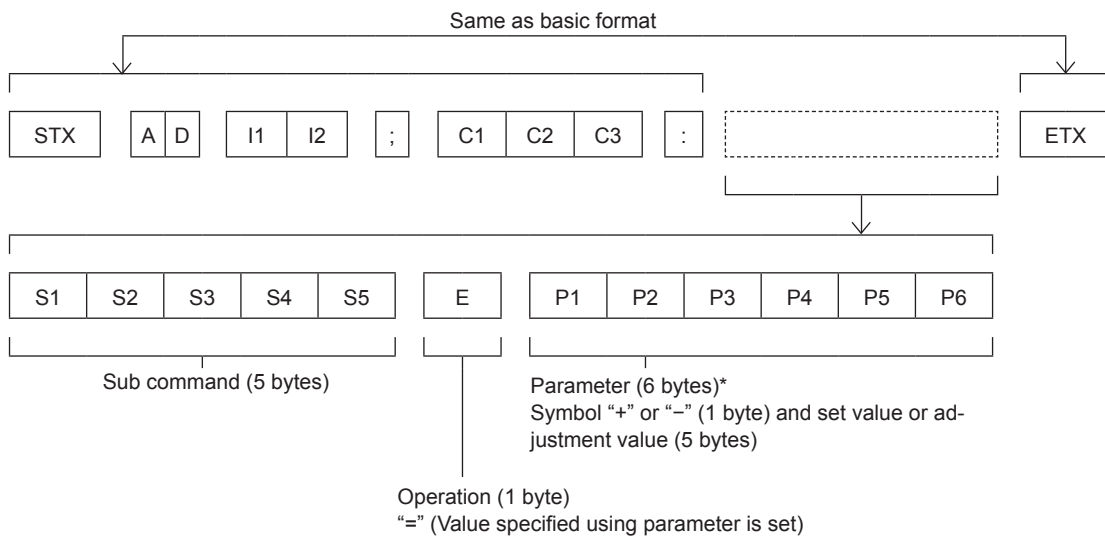
Signal level	RS-232C-compliant
Sync. method	Asynchronous
Baud rate	9 600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

Basic format

Transmission from the computer starts with STX, then the ID, command, parameter, and ETX are sent in this order. Add parameters according to the details of control.



Basic format (with sub command)



* When transmitting a command which does not need a parameter, the operation (E) and parameter are not necessary.

Attention

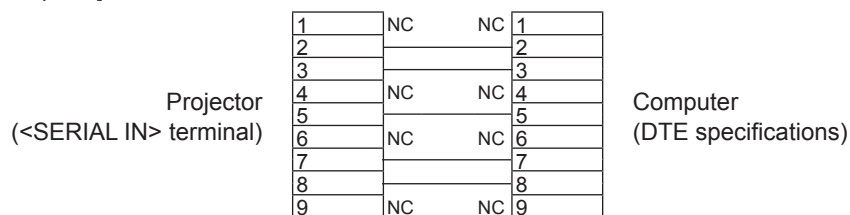
- If a command is transmitted after the lamp starts illuminating, there may be a delay in response or the command may not be executed. Try sending or receiving any command after 60 seconds.
- When transmitting multiple commands, be sure to wait until 0.5 seconds has elapsed after receiving the response from the projector before sending the next command. When transmitting a command which does not need a parameter, a colon (:) is not necessary.

Note

- If a command cannot be executed, the "ER401" response is sent from the projector to the computer.
- If an invalid parameter is sent, the "ER402" response is sent from the projector to the computer.
- ID transmission in RS-232C supports ZZ (ALL) and 01 to 06.
- If a command is sent with a specified ID, a response will be sent to the computer only in the following cases.
 - It matches the projector ID.
 - [PROJECTOR ID] (➔ page 69) is set to [ALL].
- STX and ETX are character codes. STX shown in hexadecimal is 02, and ETX shown in hexadecimal is 03.

Cable specifications

[When connected to a computer]



Control commands

When controlling the projector from a computer, the following commands are available.

■ Projector control command

Command	Control contents	Parameter / return string	Remarks
PON	Power on	—	To check if the power is on, use the “Power query” command.
POF	Power off		
IIS	INPUT selection	VID SVD RG1 RG2 HD1	VIDEO S-VIDEO RGB1 RGB2 HDMI
OSH	AV mute function	0 1	AV MUTE mode off AV MUTE mode on
OFZ	Freeze	0	[OFF]
		1	[ON]
AUU	Volume up		
AUD	Volume down		
DZU	D. ZOOM up		
DZD	D. ZOOM down		
QPW	Power query	000	Standby
		001	Power on
Q\$\$	Lamp condition query	0	Stand-by
		1	Lamp ON control active
		2	Lamp ON
		3	Lamp OFF control active

[MENU LOCK PASSWORD] operations

To revert to the factory default password (AAAA), perform the following operations while the screen prompting input of [MENU LOCK PASSWORD] is displayed.

- 1) Press the <AUTO SETUP> button on the remote control for at least three seconds.
- 2) Press ▼ for at least three seconds.

Two window display combination list

		Sub Window					
		COMPUTER1		COMPUTER2	HDMI	VIDEO	S-VIDEO
Main Window		RGB	Y C _B C _R / Y P _B P _R	RGB			
COMPUTER1	RGB	—	—	—	✓	—	—
	Y C _B C _R / Y P _B P _R	—	—	—	✓	—	—
COMPUTER2	RGB	—	—	—	✓	—	—
HDMI		✓	✓	✓	—	✓	✓
VIDEO		—	—	—	✓	—	—
S-VIDEO		—	—	—	✓	—	—

✓ : Picture in Picture combinations are enabled.

—: Picture in Picture combinations are disabled.

Note

- When setting the movie-based signal 1080/24p, 1080/24sF, 1080/25p, 1080/30p, 1080/50p or 1080/60p for HDMI input, the two window display function will be disabled.
- The image of the sub window picture may be distorted depending on the combination of signals.
- When the selected input combinations or the input signals are not correspond with the two window display, the message "CANNOT DISPLAY THIS INPUT COMBINATION IN P IN P" will be displayed.

List of compatible signals

The following table specifies the type of signals compatible with the projectors.

- Symbols that indicate formats are as follows.

V = VIDEO, S = S-VIDEO, R = RGB, Y = YCbCr/YPbPr, H = HDMI

Mode	Display resolution (dots)	Scanning frequency		Dot clock frequency (MHz)	Format*1	PnP*2	
		H (kHz)	V (Hz)			COMPUTER1 / COMPUTER2	HDMI
NTSC/NTSC4.43/ PAL-M/PAL60	720 x 480i	15.7	59.9	—	V/S	—	—
PAL/PAL-N/SECAM	720 x 576i	15.6	50.0	—	V/S	—	—
525i (480i)	720 x 480i	15.7	59.9	13.5	R/Y	—	—
625i (576i)	720 x 576i	15.6	50.0	13.5	R/Y	—	—
525i (480i)	720 (1 440) x 480i ¹³	15.7	59.9	27.0	H	—	—
625i (576i)	720 (1 440) x 576i ¹³	15.6	50.0	27.0	H	—	—
525p (480p)	720 x 483	31.5	59.9	27.0	R/Y/H	—	✓
625p (576p)	720 x 576	31.3	50.0	27.0	R/Y/H	—	✓
750 (720) /60p	1 280 x 720	45.0	60.0	74.3	R/Y/H	—	✓
750 (720) /50p	1 280 x 720	37.5	50.0	74.3	R/Y/H	—	✓
1125 (1080) /60i ¹⁴	1 920 x 1 080i	33.8	60.0	74.3	R/Y/H	—	✓
1125 (1080) /50i	1 920 x 1 080i	28.1	50.0	74.3	R/Y/H	—	✓
1125 (1080) /24p	1 920 x 1 080	27.0	24.0	74.3	R/Y/H	—	✓
1125 (1080) /24sF	1 920 x 1 080i	27.0	48.0	74.3	R/Y/H	—	—
1125 (1080) /25p	1 920 x 1 080	28.1	25.0	74.3	R/Y/H	—	—
1125 (1080) /30p	1 920 x 1 080	33.8	30.0	74.3	R/Y/H	—	—
1125 (1080) /60p	1 920 x 1 080	67.5	60.0	148.5	R/Y/H	—	✓
1125 (1080) /50p	1 920 x 1 080	56.3	50.0	148.5	R/Y/H	—	✓
VESA400	640 x 400	31.5	70.1	25.2	R/H	—	—
	640 x 400	37.9	85.1	31.5	R/H	—	—
VGA	640 x 480	31.5	59.9	25.2	R/H	✓	✓
	640 x 480	35.0	66.7	30.2	R/H	✓	—
	640 x 480	37.9	72.8	31.5	R/H	✓	—
	640 x 480	37.5	75.0	31.5	R/H	✓	—
	640 x 480	43.3	85.0	36.0	R/H	—	—
SVGA	800 x 600	35.2	56.3	36.0	R/H	✓	—
	800 x 600	37.9	60.3	40.0	R/H	✓	✓
	800 x 600	48.1	72.2	50.0	R/H	✓	—
	800 x 600	46.9	75.0	49.5	R/H	✓	—
	800 x 600	53.7	85.1	56.3	R/H	—	—
MAC16	832 x 624	49.7	74.6	57.3	R/H	✓	—
XGA	1 024 x 768	39.6	50.0	51.9	R/H	—	—
	1 024 x 768	48.4	60.0	65.0	R/H	✓	✓
	1 024 x 768	56.5	70.1	75.0	R/H	✓	—
	1 024 x 768	60.0	75.0	78.8	R/H	✓	—
	1 024 x 768	65.5	81.6	86.0	R/H	—	—
	1 024 x 768	68.7	85.0	94.5	R/H	—	—
	1 024 x 768	81.4	100.0	113.3	R/H	—	—
MXGA	1 152 x 864	64.0	70.0	94.2	R/H	—	—
	1 152 x 864	67.5	75.0	108.0	R/H	—	—
	1 152 x 864	77.1	85.0	119.7	R/H	—	—
MAC21	1 152 x 870	68.7	75.1	100.0	R/H	—	—
1280 x 720	1 280 x 720	37.1	50.0	60.5	R/H	—	—
	1 280 x 720	44.8	60.0	74.5	R/H	—	—
1280 x 768	1 280 x 768	60.3	74.9	102.3	R/H	—	—
	1 280 x 768	68.6	84.8	117.5	R/H	—	—

Mode	Display resolution (dots)	Scanning frequency		Dot clock frequency (MHz)	Format*1	PnP*2	
		H (kHz)	V (Hz)			COMPUTER1 / COMPUTER2	HDMI
1280 x 800	1 280 x 800	41.3	50.0	68.0	R/H	—	—
	1 280 x 800	49.7	59.8	83.5	R/H	✓	✓
MSXGA	1 280 x 960	60.0	60.0	108.0	R/H	—	—
SXGA	1 280 x 1 024	64.0	60.0	108.0	R/H	✓	✓
	1 280 x 1 024	80.0	75.0	135.0	R/H	✓	—
	1 280 x 1 024	91.1	85.0	157.5	R/H	—	—
1366 x 768	1 366 x 768	39.6	49.9	69.0	R/H	—	—
	1 366 x 768	47.7	59.8	85.5	R/H	✓	✓
SXGA+	1 400 x 1 050	65.2	60.0	122.6	R/H	—	—
	1 400 x 1 050	82.3	74.9	156.0	R/H	—	—
WXGA+	1 400 x 900 ^{*5}	55.5	59.9	88.8	R/H	—	—
1600 x 900	1 600 x 900	46.3	50.0	97.0	R/H	—	—
	1 600 x 900	55.9	60.0	119.0	R/H	✓	✓
UXGA	1 600 x 1 200	75.0	60.0	162.0	R/H	✓	✓
WSXGA+	1 680 x 1 050	65.2	60.0	147.1	R/H	✓	✓
1920 x 1080	1 920 x 1 080 ^{*5}	66.6	59.9	138.5	R/H	—	—
WUXGA	1 920 x 1 200 ^{*5}	74.0	60.0	154.0	R/H	—	—

*1 <COMPUTER 2 IN> terminal is only for RGB signals input.

*2 Where marked "✓" signals indicates in Plug and Play is compatible with EDID of projector. Unmarked signals in Plug and Play may also be compliant if input terminals are written in the format list. Where Plug and Play is unmarked and nothing is written in the format list, difficulties in projecting image may occur even when computer and projector appear to have same resolution.

*3 Pixel-Repetition signal (dot clock frequency 27.0 MHz) only

*4 When a 1125 (1035)/60i signal was input, it is displayed as a 1125 (1080)/60i signal.

*5 VESA CVT-RB (Reduced Blanking)-compliant.

Note

- The number of display dots is 1 280 x 800 for the PT-VW350 and 1 024 x 768 for the PT-VX420.
A signal with a different resolution will be projected after converting the resolution to match the projector display.
- "i" added to the resolution value indicates an interlaced signal.
- When interlaced signals are connected, flicker may occur on the projected image.

Specifications

Power supply		For North America: 120 V ~ (120 V alternating current), 50 Hz/60 Hz For other countries: 100 V - 240 V ~ (100 V - 240 V alternating current), 50 Hz/60 Hz		
Power consumption	Projecting	For North America: 3.2 A, 320 W For other countries: 3.7 A-1.5 A, 320 W		
	In standby mode	When [STANDBY MODE] of [ECO MANAGEMENT] is set to [ECO] : 0.5 W *1 When [STANDBY MODE] of [ECO MANAGEMENT] is set to [NETWORK] : 1.6 W *2 When [STANDBY MODE] of [ECO MANAGEMENT] is set to [NORMAL] : 9.5 W When [STANDBY MODE] of [ECO MANAGEMENT] is set to [NORMAL], and [IN STANDBY MODE] of [AUDIO SETTING] is set to [ON] : 24 W		
LCD panel	Panel size	PT-VW350	1.5 cm (0.59") (aspect ratio 16 : 10)	
		PT-VX420	1.6 cm (0.63") (aspect ratio 4 : 3)	
	Display method	3 transparent LCD panels (RGB)		
	Drive method	Active matrix method		
	Pixels	PT-VW350	1 024 000 (1 280 x 800) x 3 panels	
PT-VX420		786 432 (1 024 x 768) x 3 panels		
Lens		Manual zoom : 1.6x Manual focus : F 1.6 to 1.9, f 15.31 mm to 24.64 mm		
Luminous lamp		240 W UHM lamp		
Light output *3	PT-VW350	4 000 lm		
	PT-VX420	4 500 lm		
Contrast ratio *3		12 000 : 1 (all white / all black) ([LAMP POWER] is set to [NORMAL], meanwhile [IRIS] is set to [ON])		
Applicable scanning frequency *4	for Video signal (including S-video)	Horizontal : 15.73 kHz, Vertical : 59.94 Hz Horizontal : 15.63 kHz, Vertical : 50 Hz		
	for RGB signal	Horizontal 15 kHz to 100 kHz, Vertical 50 Hz to 100 Hz Dot clock frequency: 140 MHz or less		
	for YP_BP_R signal	[525i(480i)]	Horizontal 15.73 kHz, Vertical 59.94 Hz	
		[625i(576i)]	Horizontal 15.63 kHz, Vertical 50 Hz	
		[525p(480p)]	Horizontal 31.47 kHz, Vertical 59.94 Hz	
[625p(576p)]		Horizontal 31.25 kHz, Vertical 50 Hz		
[750(720)/60p]		Horizontal 45.00 kHz, Vertical 60 Hz		
[750(720)/50p]		Horizontal 37.50 kHz, Vertical 50 Hz		
[1125(1080)/60i]		Horizontal 33.75 kHz, Vertical 60 Hz		
[1125(1080)/50i]		Horizontal 28.13 kHz, Vertical 50 Hz		
[1125(1080)/60p]		Horizontal 67.50 kHz, Vertical 60 Hz		
[1125(1080)/50p]		Horizontal 56.25 kHz, Vertical 50 Hz		
[1125(1080)/24p]	Horizontal 27.00 kHz, Vertical 24 Hz			
[1125(1080)/24sF]	Horizontal 27.00 kHz, Vertical 48 Hz			
[1125(1080)/25p]	Horizontal 28.13 kHz, Vertical 25 Hz			
[1125(1080)/30p]	Horizontal 33.75 kHz, Vertical 30 Hz			
for HDMI signal	525i(480i)*5, 625i(576i)*5, 525p(480p), 625p(576p), 750(720)/60p, 750(720)/50p, 1125(1080)/24p, 1125(1080)/24sF, 1125(1080)/25p, 1125(1080)/30p, 1125(1080)/60p, 1125(1080)/50p, 1125(1080)/60i, 1125(1080)/50i Displayable resolution: VGA to WUXGA (non-interlace) Dot clock frequency: up to 162 MHz			
Color system		7 (NTSC, NTSC4.43, PAL, PAL-N, PAL-M, SECAM, PAL60)		

*1 When the [PROJECTOR SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] is set to [ECO], the network function cannot be used in standby mode.

*2 When the [PROJECTOR SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] is set to [NETWORK], only the Wake on LAN function can be used in standby mode via wired LAN.

*3 Measurement, measuring conditions and method of notation all comply with ISO21118 international standards.

*4 For details of video signals that can be projected using this projector, refer to "List of compatible signals".
(➡ page 112)

*5 Pixel-Repetition signal (dot clock frequency 27.0 MHz) only

Chapter 6 Appendix - Specifications

Projection size		0.76 m -7.62 m (30"-300")
Screen aspect ratio		PT-VW350 16 : 10
		PT-VX420 4 : 3
Projection scheme		[FRONT/DESK], [FRONT/CEILING], [REAR/DESK], [REAR/CEILING] (Menu setting system)
Speaker		1 (4.0 cm round-type)
Maximum usable volume output		10 W
Terminals	<COMPUTER 1 IN>	1 (High-density D-sub 15 pin female) [RGB signal] 0.7 V [p-p] 75 Ω (When G-SYNC: 1.0 V [p-p] 75 Ω) HD/SYNC TTL high impedance, automatic positive/negative polarity compatible VD TTL high impedance, automatic positive/negative polarity compatible (SYNC/HD and VD do not support 3 value SYNC.) [Y _B P _R signal] Y: 1.0 V [p-p] including synchronization signal, P _B P _R : 0.7 V [p-p] 75 Ω
	<COMPUTER 2 IN/1 OUT>	1 (High-density D-sub 15 pin female) [RGB signal] 0.7 V [p-p] 75 Ω (When G-SYNC: 1.0 V [p-p] 75 Ω) HD/SYNC TTL high impedance, automatic positive/negative polarity compatible VD TTL high impedance, automatic positive/negative polarity compatible (SYNC/HD and VD do not support 3 value SYNC.)
	<VIDEO IN>	1 (Pin jack 1.0 V [p-p] 75 Ω)
	<S-VIDEO IN>	1 (Mini DIN 4 pin, Y 1.0 V [p-p], C 0.286 V [p-p] 75 Ω, S1 signal compatible)
	<HDMI IN>	1 (HDMI 19 pin, HDCP and Deep color compatible) Audio signals: Linear PCM (Sampling frequency: 48 kHz/44.1 kHz/32 kHz)
	<AUDIO IN>	2 (M3 stereo mini jack, 0.5 V [rms], input impedance 22 kΩ and more) (<AUDIO IN 2 (MIC IN)> terminal support MIC input) 1 (Pin jack x 2 (L-R), 0.5 V [rms], input impedance 22 kΩ and more)
	<VARIABLE AUDIO OUT>	1 (M3 stereo mini jack, stereo monitor output compatible, 0 V [rms] to 2.0 V [rms] variable, output impedance 2.2 kΩ and less)
	<SERIAL IN>	1 (D-sub 9 pin, RS-232C compliant, for computer control use)
	<LAN>	1 (for RJ-45 network connection, PLink compatible, 10Base-T/100Base-TX)
Power cable length		2.0 m (78-3/4")
Cabinet		Molded plastic
Dimensions		Width: 352 mm (13-7/8") Height: 98 mm (3-27/32") (when the adjustable feet shortened) Depth: 279.4 mm (11")
Weight		Approx. 3.3 kg (7.28 lbs.) *6
Noise level *3		When set to [NORMAL] in [LAMP POWER] : 37 dB When set to [ECO] in [LAMP POWER] : 29 dB
Operating environment		Operating environment temperature *7: 0 °C (32 °F) to 40 °C (104 °F) (Elevation: below 1 400 m; [HIGH ALTITUDE MODE]: [OFF]) 0 °C (32 °F) to 30 °C (86 °F) (Elevation: 1 400 m ~ 2 000 m; [HIGH ALTITUDE MODE]: [HIGH1]) 0 °C (32 °F) to 30 °C (86 °F) (Elevation: 2 000 m ~ 2 700 m; [HIGH ALTITUDE MODE]: [HIGH2]) Operating environment humidity: 20 % to 80 % (no condensation)
Remote control	Power supply	DC 3 V (battery (AAA/R03 or AAA/LR03 Type) x 2)
	Operating range	Approx. 7 m (22'11-5/8") (when operated directly in front of receptor)
	Weight	63 g (2.22 ozs.) (including batteries)
	Dimensions	Width : 44 mm (1-23/32"), Length : 105 mm (4-1/8"), Height : 20.5 mm (13/16")

*6 This is an average value. It may differ depending on individual product.

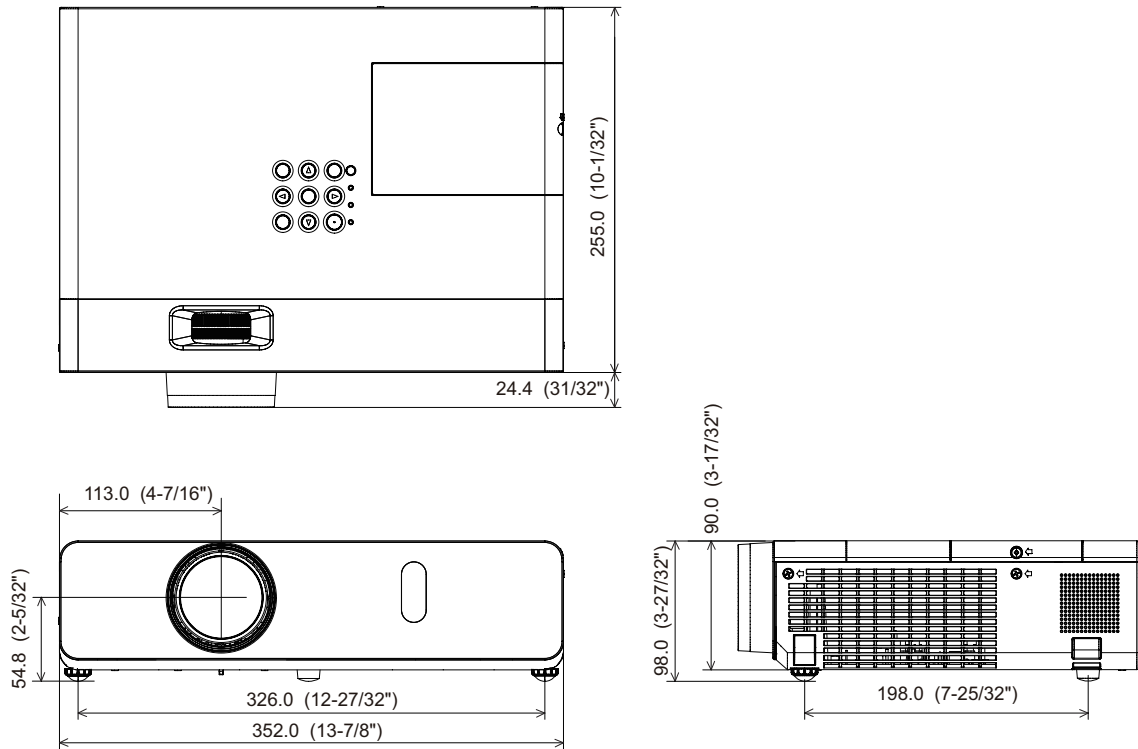
*7 [LAMP POWER] will be switched to [ECO] automatically when the operating environment temperature is 35 °C to 40 °C.

Note

- The part numbers of accessories and separately sold components are subject to change without notice.

Dimensions

<Unit : mm (inch)>

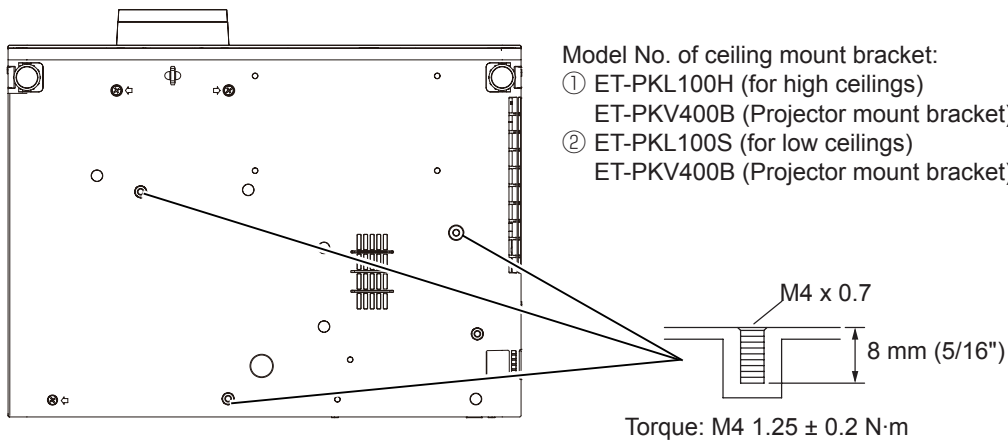


* Actual dimension may differ by product.

Ceiling mount bracket safeguards

- When installing the projector to a ceiling, be sure to use the specified optional Ceiling Mount Bracket for Projectors.
Model No. of ceiling mount bracket:
 - ① ET-PKL100H (for high ceilings), ET-PKV400B (Projector Mount Bracket)
 - ② ET-PKL100S (for low ceilings), ET-PKV400B (Projector Mount Bracket)
- When installing the projector, attach the drop-prevention kit included with the Ceiling Mount Bracket for Projectors.
- Ask a qualified technician to do the installation work such as mounting the projector on the ceiling.
- Panasonic takes no responsibility for any damage to the projector resulting from use of a ceiling mount bracket not manufactured by Panasonic or the inappropriate choice of location for installation, even if the warranty period of the projector has not expired.
- Unused products must be removed promptly by a qualified technician.
- Use a torque screwdriver or Allen torque wrench to tighten bolts to their specified tightening torques. Do not use electric screwdrivers or impact screwdrivers.
- Read the Installation Instructions for the Ceiling Mount Bracket for Projectors for details.
- The model numbers of accessories and optional accessories are subject to change without prior notice.

Bottom view



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Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.



For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.



For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

Product information (for Turkey only)

AEEE Yönetmeliğine Uygundur.

Eski Ekipman ve Bataryaların İşlenmesi.

Sadece geri dönüşüm sistemleri olan Avrupa Birliği ve ülkeleri için geçerlidir.



Ürünler, ambalaj ve/veya ekli belgeler üzerindeki bu semboller kullanılmış elektrik ve elektronik ürünlerin ve pillerin genel ev atığı ile karıştırılmaması gerektiğini ifade eder. Eski ürünlerin ve pillerin toplanması ve geri kazanılması için bu atıkları lütfen yasayla belirlenmiş olan uygun toplama merkezlerine teslim ediniz.

Bu atıkların doğru işlenmesiyle, değerli kaynakların korunmasına ve insan sağlığı ve çevreye olası negatif etkilerinin engellenmesine yardımcı olabilirsiniz.

Atıkların toplanması ve geri dönüşümü için detaylı bilgi için lütfen bağlı olduğunuz yerel yönetimlerle iletişime geçiniz.

Atıkların atılmasıyla ilgili yanlış uygulamalar yasayla belirlenmiş olan cezalara sebebiyet verebilir.

Panasonic Corporation

Web Site : <http://panasonic.net/avc/projector/>

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