



Projector Firmware Update Information

Multimedia Projector

EB-L20002U

EB-L20000U

EB-L12002Q

EB-L12000Q

Introduction to the Updated Firmware 3

Features of Firmware Version 2.10 4

Updates to Projector Menus (Version 2.10) 4

Updates to User Operations (Version 2.10) 4

Features of Firmware Version 3.00 5

Updates to Supported Software (Version 3.00) 5

Updates to Projector Menus (Version 3.00) 5

Updates to Projector Status Information (Version 3.00) 5

Updates to Art-Net Channel Definitions (Version 3.00) 5

Updates to User Operations (Version 3.00) 6

Features of Firmware Version 4.00 7

Updates to Supported Optional Accessory (Version 4.00) 7

Updates to Supported Software (Version 4.00) 7

Updates to Projector Menus (Version 4.00) 7

Features of Firmware Version 4.10 8

Updates to Projector Menus (Version 4.10) 8

Updates to User Operations (Version 4.10) 8

Details of Updated Firmware 9

Details of Updated Optional Accessories (Version 4.00) 10

ELPEC01 Support 10

External Camera Usage 10

Details of Updated Projector Menus (Version 2.10) 11

Cursor Position Memory of Projector Menus 11

Maintain Aspect Ratio Setting 11

Reset All (Factory Default) Menu 11

Details of Updated Projector Menus (Version 3.00) 12

Camera Function Error Details 12

Auto Adjusted Setting Items During Screen Matching 12

Point Correction 12

Adjustment Level for Color Matching 13

Enable and Disable Color Calibration 13

Lens Calibration History 13

Brightness Level 14

Details of Updated Projector Menus (Version 4.00) 15

Simple Stacking 15

Conditions for Simple Stacking 15

Details of Updated Projector Menus (Version 4.10) 17

Command Communication, Web API Settings and PJLink 17

Reset All (User Default) and User Default Setting 18

Details of Updated Projector Status Information (Version 3.00) 19

Errors and Notifications Added 19

Details of Updated Art-Net Channel Definitions (Version 3.00) . 23

Details of User Operation Change (Version 2.10) 29

Focus Adjustment While Displaying the Lens Calibration Message 29

Details of User Operation Change (Version 3.00) 30

Point Correction Number Change 30

Operating Conditions for Light Source Calibration 30

Details of User Operation Change (Version 4.10) 31

Operating the Projector Using Web API 31

Maximum Point Correction Value Change 31

Remote Password Settings Change 31

Epson Web Control Operation Change 31

Epson Projector Management Operation Change 31

Appendix 33

Notices 34

Copyright Notice 34

General Notice 34

Copyright Attribution 34

Introduction to the Updated Firmware

Epson periodically provides firmware updates to enhance your projector features and to address issues of performance. Refer to these sections to learn more about the updated features within each firmware version.

» Related Links

- "Features of Firmware Version 2.10" [p.4](#)
- "Features of Firmware Version 3.00" [p.5](#)
- "Features of Firmware Version 4.00" [p.7](#)
- "Features of Firmware Version 4.10" [p.8](#)

Refer to these sections for a summary of the updated features of projector firmware version 2.10.

» Related Links

- "Updates to Projector Menus (Version 2.10)" [p.4](#)
- "Updates to User Operations (Version 2.10)" [p.4](#)

Updates to Projector Menus (Version 2.10)

The following projector menus change in firmware version 2.10.

- The projector can hold the last position of the cursor in the projector menu.
- The **Maintain Aspect Ratio** menu is added to the **Settings** menu.
- The **Reset All (Factory Default)** menu is added to the **Reset** menu.

» Related Links

- "Cursor Position Memory of Projector Menus" [p.11](#)
- "Maintain Aspect Ratio Setting" [p.11](#)
- "Reset All (Factory Default) Menu" [p.11](#)

Updates to User Operations (Version 2.10)

The following projector operations change in firmware version 2.10.

- You can adjust the focus while displaying the lens calibration message.

» Related Links

- "Focus Adjustment While Displaying the Lens Calibration Message" [p.29](#)

Refer to these sections for a summary of the updated features of projector firmware version 3.00.

» Related Links

- "Updates to Supported Software (Version 3.00)" [p.5](#)
- "Updates to Projector Menus (Version 3.00)" [p.5](#)
- "Updates to Projector Status Information (Version 3.00)" [p.5](#)
- "Updates to Art-Net Channel Definitions (Version 3.00)" [p.5](#)
- "Updates to User Operations (Version 3.00)" [p.6](#)

Updates to Supported Software (Version 3.00)

Version 3.00 firmware supports the following software in addition to the existing optional software available for your projector.

- Epson Projector Professional Tool Version 1.31

See *Epson Professional Projector Tool Operation Guide* for more details.

Updates to Projector Menus (Version 3.00)

The following projector menus change in firmware version 3.00.

- When camera function errors occur, the error details are displayed.
- **Blend Curve** is added to the auto adjusted setting items when you select **Extended > Multi-Projection > Screen Matching > Start Auto Adjustment**.
- The following changes are applied to the point correction function.
 - You can select the grid numbers for vertical and horizontal point correction individually.
 - You can select up to 33×33 for grid point correction.
 - You can select which method is performed for point correction, linear interpolation or curve interpolation.
- The **All** setting value is added to the **Adjustment Level** menu from **Extended > Multi-Projection > Screen Matching > Color Matching**.

- You can enable or disable color calibration in the **Color Calibration** setting.
- The **History** menu is added to the **Lens Calibration** menu.
- You can select **10%** as the minimum setting for the light source brightness in **Settings > Brightness Settings > Brightness Level**.

» Related Links

- "Camera Function Error Details" [p.12](#)
- "Auto Adjusted Setting Items During Screen Matching" [p.12](#)
- "Point Correction" [p.12](#)
- "Adjustment Level for Color Matching" [p.13](#)
- "Enable and Disable Color Calibration" [p.13](#)
- "Lens Calibration History" [p.13](#)
- "Brightness Level" [p.14](#)

Updates to Projector Status Information (Version 3.00)

The following projector status information changes in firmware version 3.00.

- Errors and notifications for status items are described in more detail.

» Related Links

- "Errors and Notifications Added" [p.19](#)

Updates to Art-Net Channel Definitions (Version 3.00)

The following Art-Net channel definitions change in firmware version 3.00.

- Channel 14 **Freeze** is added.
- Channel 15 **Fade-in** is added.
- Channel 16 **Fade-out** is added.
- Channel 17 **Light Source Control** is added.

» Related Links

- "Details of Updated Art-Net Channel Definitions (Version 3.00)" [p.23](#)

Updates to User Operations (Version 3.00)

The following projector operations change in firmware version 3.00.

- You can retain adjustment data even if you change the number of points during point correction.
- Operating conditions for the light source calibration change.

» Related Links

- "Point Correction Number Change" [p.30](#)
- "Operating Conditions for Light Source Calibration" [p.30](#)

Refer to these sections for a summary of the updated features of projector firmware version 4.00.

» Related Links

- "Updates to Supported Optional Accessory (Version 4.00)" [p.7](#)
- "Updates to Supported Software (Version 4.00)" [p.7](#)
- "Updates to Projector Menus (Version 4.00)" [p.7](#)

» Related Links

- "Simple Stacking" [p.15](#)

Updates to Supported Optional Accessory (Version 4.00)

Version 4.00 firmware supports the following optional accessory in addition to the existing optional accessories.

- External camera ELPEC01 is available with your projector.

» Related Links

- "ELPEC01 Support" [p.10](#)

Updates to Supported Software (Version 4.00)

Version 4.00 firmware supports the following software in addition to the existing optional software available for your projector.

- Epson Projector Management Version 5.4
- Epson Projector Professional Tool Version 1.4

See *Epson Projector Management Operation Guide* and *Epson Professional Projector Tool Operation Guide* for more details.

Updates to Projector Menus (Version 4.00)

The following projector menu changes in firmware version 4.00.

- The **Simple Stacking** is added to the **Multi-Projection**.

Refer to these sections for a summary of the updated features of projector firmware version 4.10.

» Related Links

- "Updates to Projector Menus (Version 4.10)" [p.8](#)
- "Updates to User Operations (Version 4.10)" [p.8](#)

- "Epson Projector Management Operation Change" [p.31](#)

Updates to Projector Menus (Version 4.10)

The following projector menus change in firmware version 4.10.

- The settings for the **Command Communication**, **Web API Settings** and **PJLink** are added to the **Others** menu.
- The settings for the **Reset All (User Default)** and **User Default Setting** are added to the **Reset All (Factory Default)** menu.

» Related Links

- "Command Communication, Web API Settings and PJLink" [p.17](#)
- "Reset All (User Default) and User Default Setting" [p.18](#)

Updates to User Operations (Version 4.10)

The following projector operations change in firmware version 4.10.

- You can use Web API to operate the projector.
- You can perform the point correction up to a larger number of pixels.
- You can enhance the network security with the following changes:
 - **Remote Password** settings
 - Epson Web Control
 - Epson Projector Management

» Related Links

- "Operating the Projector Using Web API" [p.31](#)
- "Maximum Point Correction Value Change" [p.31](#)
- "Remote Password Settings Change" [p.31](#)
- "Epson Web Control Operation Change" [p.31](#)

Details of Updated Firmware

Check these sections for the updated details of firmware.

» Related Links

- "Details of Updated Optional Accessories (Version 4.00)" [p.10](#)
- "Details of Updated Projector Menus (Version 2.10)" [p.11](#)
- "Details of Updated Projector Menus (Version 3.00)" [p.12](#)
- "Details of Updated Projector Menus (Version 4.00)" [p.15](#)
- "Details of Updated Projector Menus (Version 4.10)" [p.17](#)
- "Details of Updated Projector Status Information (Version 3.00)" [p.19](#)
- "Details of Updated Art-Net Channel Definitions (Version 3.00)" [p.23](#)
- "Details of User Operation Change (Version 2.10)" [p.29](#)
- "Details of User Operation Change (Version 3.00)" [p.30](#)
- "Details of User Operation Change (Version 4.10)" [p.31](#)

Refer to the section for more details about newly supported optional accessory.

» Related Links

- "ELPEC01 Support" [p.10](#)

ELPEC01 Support

You can use external camera ELPEC01 with your projector when you update the firmware to version 4.00.

» Related Links

- "External Camera Usage" [p.10](#)

External Camera Usage

You can use extended functions such as the Camera Assist function and Remote Camera Access with the optional external camera.

The extended functions reduce the time and effort needed to adjust the image.

When using the optional external camera, the following operations that are normally required for general camera solutions become unnecessary:

- Preparation such as securing installation location and adjusting the angle of view.

As the optional external camera is installed on the projector or the lens, a tripod and installation space is unnecessary. There is also no need to adjust the focus, angle, and exposure.

- Activation

Epson Projector Professional Tool software and Epson Web Control allow you to use the extended functions.



You can download the Epson Projector Professional Tool software and manual from the following website.

epson.sn

Refer to these sections for details about projector menu changes.

» Related Links

- "Cursor Position Memory of Projector Menus" [p.11](#)
- "Maintain Aspect Ratio Setting" [p.11](#)
- "Reset All (Factory Default) Menu" [p.11](#)

Cursor Position Memory of Projector Menus

The projector can memorize the menu cursor position after the menu screen disappears. This allows you to quickly access the latest-used projector menu settings without moving through the settings.

- When you press the [Menu] button to display the menu screen again, the menu screen appears with the latest-used cursor position highlighted.



When you use the following submenu, the top menu screen is displayed.

- Test Pattern
- Focus, Distortion, Zoom, Lens Shift
- Gamma
- Panel Alignment
- User's Logo
- Black Level
- Date / Time Settings
- Network Settings
- Reset All (Factory Default)

- When you hold down the [Esc] button on the projector menu, you can back the top level menu screen.
- When you turn off the projector, menu operations return to the initial screen.

Maintain Aspect Ratio Setting

The **Maintain Aspect Ratio** setting is added to the **Settings** menu.

Previous Settings Menu (Version 1.00)

Top menu	Sub menu	Items or setting values	
Settings	Geometry Correction	Curved Surface	Correct Shape
			Horizontal Linearity
			Vertical Linearity

New Settings Menu (Version 2.10)

Top menu	Sub menu	Items or setting values	
Settings	Geometry Correction	Curved Surface	Correct Shape
			Horizontal Linearity
			Vertical Linearity
			Maintain Aspect Ratio

To project onto a curved surface while maintaining the aspect ratio, set **Maintain Aspect Ratio** to **On**.

Reset All (Factory Default) Menu

The **Reset All (Factory Default)** menu is added to the **Reset** menu.

You can use the **Reset All (Factory Default)** menu to reset all projector's settings.

You need to enter a password to perform a reset. The default password is set to "0000". Change this to your own desired password.

Refer to these sections for details about projector menu changes.

► Related Links

- "Camera Function Error Details" [p.12](#)
- "Auto Adjusted Setting Items During Screen Matching" [p.12](#)
- "Point Correction" [p.12](#)
- "Adjustment Level for Color Matching" [p.13](#)
- "Enable and Disable Color Calibration" [p.13](#)
- "Lens Calibration History" [p.13](#)
- "Brightness Level" [p.14](#)

Camera Function Error Details

New Error Display (Version 3.00)

When camera function errors occur, the error details are displayed.

Error code	Status
0x01	Measurement value error
0x02	Measurement failure
0x03	Switch camera failure

For details on the operating conditions for the camera function, see the projector's *User's Guide*.

Auto Adjusted Setting Items During Screen Matching

Blend Curve is added to the auto adjusted setting items when you select **Extended > Multi-Projection > Screen Matching > Start Auto Adjustment**.

Previous Setting Items (Version 2.10)

Brightness Settings, Black Level (Color Adjustment only)

New Setting Items (Version 3.00)

Brightness Settings, Black Level (Color Adjustment only), Blend Curve

Point Correction

The following changes are applied to the point correction function.

- You can select the grid numbers for vertical and horizontal point correction individually.
- You can select up to 33×33 for grid point correction.
- You can select which method is performed for point correction, linear interpolation or curve interpolation.

Previous Settings Menu (Version 2.10)

Menu	Setting values
Point Correction	[3x3], [5x5], [9x9], [17x17]
Pattern Color	
Reset	

New Settings Menu (Version 3.00)

Menu	Setting values
Point Correction	
Points (Vert.)	[3], [5], [9], [17], [33]
Points (Horiz.)	
Pattern Color	
Interpolation	Line, Curve
Reset	



If you have already made corrections using **Point Correction**, you may not be able to change Interpolation if the amount of correction is too large.

Adjustment Level for Color Matching

The **All** setting value is added to the **Adjustment Level** menu from **Extended > Multi-Projection > Screen Matching > Color Matching**.

Previous Settings Menu (Version 2.10)

Sub menu		Items or setting values
Color Matching	Adjustment Level	1, 2, 3, 4, 5, 6, 7, 8

New Settings Menu (Version 3.00)

Sub menu		Items or setting values
Color Matching	Adjustment Level	All, 1, 2, 3, 4, 5, 6, 7, 8

There are eight levels from **All**, white, through gray, and up to black. When you select **All**, you can adjust the color for each color in **Adjustment Level 2** to 8 at the same time. (Once the red, blue, and green values are at their maximum or minimum position at any level, you cannot make any further adjustments.) Select **Adjustment Level 1** to 8 to adjust each level individually.

Enable and Disable Color Calibration

You can enable or disable color calibration in the **Color Calibration** setting. You need to set the **Color Calibration** setting to **On** to execute the auto adjustment function for color calibration.

Previous Settings Menu (Version 2.10)

Top menu	Sub menu	Items or setting values	
Extended	Color Calibration	Start Auto Adjustment	
		Undo	
		Redo	
		Color Uniformity	
		Reset	

New Settings Menu (Version 3.00)

Top menu	Sub menu	Items or setting values	
Extended	Color Calibration	Color Calibration	On, Off
		Start Auto Adjustment	
		Undo	
		Redo	
		Color Uniformity	
		Reset	

Lens Calibration History

The **History** menu is added to the **Lens Calibration** menu. You can use the History menu to check the lens calibration history.

Previous Settings Menu (Version 2.10)

Top menu	Sub menu	Items or setting values	
Extended	Operation	Lens Calibration	Start

New Settings Menu (Version 3.00)

Top menu	Sub menu	Items or setting values	
Extended	Operation	Lens Calibration	Start, History

Brightness Level

You can select **10%** as the minimum setting for the light source brightness in **Settings > Brightness Settings > Brightness Level**.

Previous Settings Menu (Version 2.10)

Top menu	Sub menu		Setting values
Settings	Brightness Settings	Brightness Level	100% to 30%

New Settings Menu (Version 3.00)

Top menu	Sub menu		Setting values
Settings	Brightness Settings	Brightness Level	100% to 10%

Refer to these sections for details about projector menu changes.

» Related Links

- "Simple Stacking" [p.15](#)

Simple Stacking

The **Simple Stacking** setting is added to the **Extended** menu > **Multi-Projection**.

Previous Extended Menu (Version 3.00)

Top menu	Sub menu	Items or setting values
Extended	Multi-Projection	Projector ID
		Projector Grouping
		Tiling
		Geometry Correction
		Edge Blending
		Black Level
		Scale
		Reset
		Screen Matching

New Extended Menu (Version 4.00)

Top menu	Sub menu	Items or setting values
Extended	Multi-Projection	Projector ID
		Projector Grouping
		Tiling
		Geometry Correction
		Edge Blending

Top menu	Sub menu	Items or setting values
		Black Level
		Scale
		Reset
		Screen Matching
		Simple Stacking

You can easily and quickly create a bright projected image by overlapping the images of multiple projectors using **Simple Stacking**.

- **Point Correction:** Divides the projected image into a grid and corrects the distortion in 0.5 pixel increments by moving the selected point of intersection in any direction.
- **Start Auto Adjustment:** You can automatically adjust the projected image using the camera assist functions. The projector for which you perform this feature becomes a master projector, and the adjustment is performed based on the projector's image position and shape.



- Connect two projectors using a LAN cable.
- Make sure you do the following before adjusting:
 - Set the **DHCP** setting to **On** in the projector's **Network** menu for two projectors.
 - Adjust the image position, shape, and focus on the master projector. If you adjust the image shape of the master projector, select **Point Correction** and select **Quick Corner** to correct the shape.
 - The required time for simple stacking varies depending on the projector layout. It takes up to approximately 4 minutes.

» Related Links

- "Conditions for Simple Stacking" [p.15](#)

Conditions for Simple Stacking

You can use the simple stacking feature under the following conditions:

- An optional external camera or a built-in camera is installed on each projector.
- Wait for 2 minutes after turning on two projectors before starting the simple stacking process.
- You are projecting on a matte white diffusion screen that is flat and even.
- The projector is placed so it squarely faces the screen, not at an angle.
- Nothing is blocking the optional external camera and the projected image.
- The illuminance ratio on the screen surface when projecting an all-white screen and when projecting an all-black screen is 8:1 or more. (When the screen illuminance is 40 lux or less, the projection size within the following range is recommended.)
 - Up to 9.9 Klm: 50 to 200 inches
 - 10 Klm to 14.9 Klm: 60 to 300 inches
 - 15 Klm to 19.9 Klm: 70 to 350 inches
 - 20 Klm to 24.9 Klm: 80 to 400 inches
 - 25 Klm to 29.9 Klm: 90 to 450 inches
 - 30 Klm or more: 100 to 500 inches
- The original resolution of all the projector is same.
- **Projection** in the projector's **Extended** menu is set to **Front** or **Front/Ceiling** for all projectors.

Refer to these sections for details about projector menu changes.

» Related Links

- "Command Communication, Web API Settings and PJLink" [p.17](#)
- "Reset All (User Default) and User Default Setting" [p.18](#)

Command Communication, Web API Settings and PJLink

The settings for the **Command Communication**, **Web API Settings** and **PJLink** are added to the **Network** menu > **Others**.

Previous Network Menu (Version 4.00)

Top menu	Sub menu	Items or setting values
Network	Others	Secure HTTP
		Web Server Cert.
		Priority Gateway
		AMX Device Discovery
		Crestron RoomView
		Control4 SDDP
		Art-Net
		Message Broadcasting

New Network Menu (Version 4.10)

Top menu	Sub menu	Items or setting values
Network	Others	Command Communication
		Secure HTTP
		Web Server Cert.
		Web API Settings
		Priority Gateway
		PJLink
		AMX Device Discovery
		Crestron RoomView
		Control4 SDDP
		Art-Net
		Message Broadcasting

Command Communication

You can select the authentication method for command communication.

Protected

Select when performing a digest authentication using **Web Control Password**. You need to install the latest version of the Epson Projector Management software.

Compatible

Select when performing plain text authentication using the Monitor Password (up to 16 alphanumeric characters long).



Select **Compatible** when monitoring projectors with a switcher and a system controller or using Epson Projector Management ver.5.30 or earlier.

Web API Settings

You can select the Web API settings when using Web API communications.

Web API

Set to **On** to enable to the Web API function.

Authentication

You can set the security for your projector to use during Web API communications.

- **Open**
Security is not set.
- **Digest**
Communication is performed using API authentication (Digest authentication).



See the *Web API Specifications for Projectors* for details.

PJLink

Set to **On** to monitor the projector using PJLink.

Reset All (User Default) and User Default Setting

The **Reset All (User Default)** setting and the setting for the **User Default Setting** are added to the **Reset** menu > **Reset All (Factory Default)**.

Previous Reset Menu (Version 4.00)

Top menu	Sub menu	Items or setting values
Reset	Reset All (Factory Default)	Reset All (Factory Default)

New Reset Menu (Version 4.10)

Top menu	Sub menu	Items or setting values
Reset	Reset All (Factory Default)	Reset All (User Default)
		Reset All (Factory Default)
		User Default Setting

Reset All (User Default)

You can apply the values you set in the **User Default Setting** menu.

User Default Setting

You can define the default value used when performing the **Reset All (User Default)** functions.

You can set the values for the following settings:

- **Light Source Mode**
- **Brightness Level**
- **Constant Brightness**
- **A/V Output**
- **Standby Mode**
- **Standby Confirmation**
- **Messages**
- **Beep**
- **Sleep Mode**
- **Shutter Timer**
- **Shutter Release**
- **Color Mode**
- **Wireless Mode**
- **DHCP** (in the **Wired LAN** menu)
- **Command Communication**

Refer to these sections for details about changes to projector status information.

» Related Links

- "Errors and Notifications Added" [p.19](#)

Errors and Notifications Added

Errors and notifications for status items are described in more detail.

Previous Projector Status Information (System) (Version 2.00)

Category	Item	Status
Status Information	System	OK
		Warm-Up
		Standby
		Cool Down
		Temp Error
		Fan Error
		Sensor Error
		Power Error
		Internal Error
		Airflow Error
		Temp Warning
		Internal Warning
		Airflow Decline
		Power Warning
		Clean Filter
		Lens Error
		Laser Error
		Laser Warning

Category	Item	Status
		Temp Error FE
		Temp Warning FE

New Projector Status Information (System) (Version 3.00)

Category	Item	Status
Status Information	System	OK
		Warm-Up
		Standby
		Cool Down
		Temp Error 09
		Temp Error 0C
		Temp Error 1D
		Temp Error 23
		Temp Error 31
		Temp Error 32
		Temp Error 33
		Temp Error 34
		Temp Error 35
		Temp Error 36
		Temp Error 37
		Temp Error 45
		Temp Error 46
		Temp Error 47
		Temp Error 48
		Temp Error 49
		Temp Error 12
		Temp Error 3E

Category	Item	Status
		Temp Error 3F
		Temp Error 40
		Temp Error 41
		Temp Error 44
		Temp Error 54
		Temp Error 2A
		Temp Error 2B
		Temp Error 2C
		Temp Error 39
		Temp Error 3A
		Temp Error 3C
		Temp Error 3D
		Temp Error 42
		Temp Error 43
		Temp Error 4A
		Temp Error 4B
		Temp Error 4C
		Temp Error 4D
		Temp Error 4E
		Fan Error 04
		Fan Error 05
		Fan Error 18
		Fan Error 2D
		Fan Error 14
		Fan Error 17
		Fan Error 22
		Fan Error 23

Category	Item	Status
		Fan Error 2E
		Fan Error 2F
		Fan Error 25
		Fan Error 26
		Fan Error 27
		Fan Error 28
		Fan Error 29
		Fan Error 2A
		Fan Error 2B
		Sensor Error 09
		Sensor Error 0C
		Sensor Error 1D
		Sensor Error 23
		Sensor Error 31
		Sensor Error 32
		Sensor Error 33
		Sensor Error 34
		Sensor Error 35
		Sensor Error 36
		Sensor Error 37
		Sensor Error 45
		Sensor Error 46
		Sensor Error 47
		Sensor Error 48
		Sensor Error 49
		Sensor Error 4A
		Sensor Error 4B

Category	Item	Status
		Sensor Error 4C
		Sensor Error 4D
		Sensor Error 4E
		Sensor Error 12
		Sensor Error 3E
		Sensor Error 3F
		Sensor Error 40
		Sensor Error 41
		Sensor Error 44
		Sensor Error 54
		Sensor Error 2A
		Sensor Error 2B
		Sensor Error 2C
		Sensor Error 39
		Sensor Error 3A
		Sensor Error 3C
		Sensor Error 3D
		Sensor Error 42
		Sensor Error 43
		Internal Error 01
		Internal Error 02
		Internal Error 03
		Internal Error 04
		Internal Error 05
		Internal Error 06
		Internal Error 07
		Internal Error 08

Category	Item	Status
		Internal Error 09
		Internal Error 0A
		Internal Error 0B
		Internal Error 0C
		Internal Error 0D
		Internal Error 0E
		Internal Error 0F
		Internal Error 10
		Internal Error 11
		Airflow Error
		Shutter Error
		Pump Error
		Temp Warning
		Internal Warning
		Shutter Warning
		Airflow Decline
		Clean Filter
		Lens Shift Err
		Lens Error
		Power Error
		Laser Error 01
		Laser Error 02
		Laser Error 03
		Laser Error 04
		Laser Error 05
		Laser Error 16
		Laser Error 17

Category	Item	Status
		Retardation Err
		Laser Error 0B
		Laser Error 0C
		Laser Error 0D
		Laser Error 0E
		Laser Error 0F
		Laser Error 15
		Laser Warning
		Temp Error FE
		Temp Warning FE

The new status items display the following status information.

- Temp Error 09: Temperature error due to overheating of the air intake.
- Temp Error 0C, 1D, 23, 31-37, 45-49: Temperature error due to overheating of the power supply.
- Temp Error 12, 3E, 3F, 40, 41, 44, 54: Temperature error due to overheating of the light source.
- Temp Error 2A-2C: Temperature error due to overheating of the LCD panel.
- Temp Error 39, 3A, 3C, 3D: Temperature error due to overheating of the pump.
- Temp Error 42, 43: Temperature error due to overheating of the air exhaust.
- Temp Error 4A-4E: Temperature error due to overheating of the light source power supply.
- Fan Error 04: Fan error due to the optical unit.
- Fan Error 05, 18, 2D: Fan error due to the air exhaust.
- Fan Error 14, 17: Fan error due to the power supply.
- Fan Error 22, 23, 2E, 2F: Fan error due to the light source.
- Fan Error 25-28: Fan error due to the pump.

- Fan Error 29, 2A, 2B: Fan error due to the LCD panel.
- Sensor Error 09: Sensor error due to the air intake.
- Sensor Error 0C, 1D, 23, 31-37, 45-49, 4A-4E: Sensor error due to the power supply.
- Sensor Error 12, 3E, 3F, 40, 41, 44, 54: Sensor error due to the light source.
- Sensor Error 2A-2C: Sensor error due to the optical unit.
- Sensor Error 39, 3A, 3C, 3D: Sensor error due to the pump.
- Sensor Error 42, 43: Sensor error due to the air exhaust.
- Internal Error 01-09, 0A-0C: Internal error due to the circuit board.
- Internal Error 0D, 0E: Internal error due to the built-in camera.
- Internal Error 0F, 10, 11: Internal error due to the optical unit.
- Pump Error: Error due to the cooling system's pump.
- Clean Filter: Notification for the air filter.
- Lens Shift Err: Lens shift error.
- Power Error: Power error due to the supply voltage.
- Laser Error 01-05, 16, 17: Laser Error due to the light source.
- Retardation Err: Laser Error due to the light source.
- Laser Error 0B-0F, 15: Laser Error due to the light source driver.

See these tables for details about changes to the Art-Net channels.

Previous Art-Net Channel Definitions (Version 2.10)

Chanel	Function	Operation		Parameter s	Default	Operation Content
1	Adjusting light (Dimming)	0% - 100%		0 - 255	0	Sets the image brightness .
2	Shutter control	Shutter	Open	0 - 63	128	Opens /closes the Shutter.
		Non-operational		64 - 191		
		Shutter	Closed	192 - 255		
3	Switch source	Non-operational		0 - 7	0	Changes to the specified source.
		HDMI		8 - 15		
		Non-operational		16 - 23		
		HDBaseT		24 - 31		
		DVI-D		32 - 39		
		Non-operational		40 - 47		
		SDI		48 - 55		
		Computer		56 - 63		
		Non-operational		64 - 71		
		BNC		72 - 79		
		LAN		80 - 87		
		Non-operational		88 - 95		
		Non-operational		96 - 255		
4	Lens position	Non-operational		0 - 31	0	Moves the lens shift to the home position.
		Move to home position		32 - 63		
		Non-operational		64 - 255		

Chanel	Function	Operation		Parameter s	Default	Operation Content
5	Horizontal lens shift	(+) lens adjustmen t	Movemen t - Large	0 - 31	128	Performs horizontal lens shift using the amount of movement specified.
			Movemen t - Medium	32 - 63		
			Movemen t - Small	64 - 95		
		Non-operational		96 - 159		
		(-) lens adjustmen t	Movemen t - Small	160 - 191		
			Movemen t - Medium	192 - 223		
			Movemen t - Large	224 - 255		
		6	Vertical lens shift	(+) lens adjustmen t		
Movemen t - Medium	32 - 63					
Movemen t - Small	64 - 95					
Non-operational				96 - 159		
(-) lens adjustmen t	Movemen t - Small			160 - 191		
	Movemen t - Medium			192 - 223		
	Movemen t - Large			224 - 255		

Chanel	Function	Operation		Parameter s	Default	Operation Content
7	Electronic zoom	(+) lens adjustment	Movement - Large	0 - 31	128	Performs electronic zoom using the amount of movement specified.
			Movement - Medium	32 - 63		
			Movement - Small	64 - 95		
		Non-operational		96 - 159		
		(-) lens adjustment	Movement - Small	160 - 191		
			Movement - Medium	192 - 223		
			Movement - Large	224 - 255		
		Non-operational		96 - 159		
8	Electronic focus	(+) lens adjustment	Movement - Large	0 - 31	128	Performs electronic focus using the amount of movement specified.
			Movement - Medium	32 - 63		
			Movement - Small	64 - 95		
		Non-operational		96 - 159		
		(-) lens adjustment	Movement - Small	160 - 191		
			Movement - Medium	192 - 223		
			Movement - Large	224 - 255		
		Non-operational		96 - 159		

Chanel	Function	Operation		Parameter s	Default	Operation Content
9	Electronic distortion	(+) lens adjustment	Movement - Large	0 - 31	128	Performs electronic distortion using the amount of movement specified.
			Movement - Medium	32 - 63		
			Movement - Small	64 - 95		
		Non-operational		96 - 159		
		(-) lens adjustment	Movement - Small	160 - 191		
			Movement - Medium	192 - 223		
			Movement - Large	224 - 255		
		Non-operational		96 - 159		
10	Load lens memory	Non-operational		0 - 15	0	Loads the specified lens memory.
		Load lens memory 1		16 - 31		
		Load lens memory 2		32 - 47		
		Load lens memory 3		48 - 63		
		Load lens memory 4		64 - 79		
		Load lens memory 5		80 - 95		
		Load lens memory 6		96 - 111		
		Load lens memory 7		112 - 127		
		Load lens memory 8		128 - 143		
		Load lens memory 9		144 - 159		
		Load lens memory 10		160 - 175		
		Non-operational		176 - 255		

Chanel	Function	Operation	Parameters	Default	Operation Content
11	Power control	Power off	0 - 63	128	Turns the projector power on or off.
		Non-operational	64 - 191		
		Power on	192 - 255		
12	Geometry correction	Off	0 - 15	255	Performs geometry correction .
		H/V-Keystone	16 - 31		
		Quick Corner	32 - 47		
		Point Correction	48 - 63		
		Curved Surface	64 - 79		
		Corner Wall	80 - 95		
		Load geometry correction memory 1	96 - 111		Loads a geometry correction memory.
		Load geometry correction memory 2	112 - 127		
		Load geometry correction memory 3	128 - 143		
		Non-operational	144 - 175		
		Non-operational	176 - 255		
13	Lock	Cannot control	0 - 127	0	Enables/disables Art-Net operations .
		Can control	128 - 255		

Chanel	Function	Operation		Parameter s	Default	Operation Content
2	Shutter control	Shutter	Open	0 - 63	128	Opens/clo sed the Shutter.
		Non-operational		64 - 191		
		Shutter	Closed	192 - 255		
3	Switch source	Non-operational		0 - 7	0	Changes to the specified source.
		HDMI		8 - 15		
		Non-operational		16 - 23		
		HDBaseT		24 - 31		
		DVI-D		32 - 39		
		Non-operational		40 - 47		
		SDI		48 - 55		
		Computer		56 - 63		
		Non-operational		64 - 71		
		BNC		72 - 79		
		LAN		80 - 87		
		Non-operational		88 - 95		
		Non-operational		96 - 255		
4	Lens position	Non-operational		0 - 31	0	Moves the lens shift to the home position.
		Move to home position		32 - 63		
		Non-operational		64 - 255		

New Art-Net Channel Definitions (Version 3.00)

Chanel	Function	Operation	Parameters	Default	Operation Content
1	Adjusting light (Dimming)	0% - 100%	0 - 255	0	Sets the image brightness .

Chanel	Function	Operation		Parameter s	Default	Operation Content
5	Horizontal lens shift	(+) lens adjustmen t	Movemen t - Large	0 - 31	128	Performs horizontal lens shift using the amount of movement specified.
			Movemen t - Medium	32 - 63		
			Movemen t - Small	64 - 95		
		Non-operational		96 - 159		
		(-) lens adjustmen t	Movemen t - Small	160 - 191		
			Movemen t - Medium	192 - 223		
			Movemen t - Large	224 - 255		
6	Vertical lens shift	(+) lens adjustmen t	Movemen t - Large	0 - 31	128	Performs vertical lens shift using the amount of movement specified.
			Movemen t - Medium	32 - 63		
			Movemen t - Small	64 - 95		
		Non-operational		96 - 159		
		(-) lens adjustmen t	Movemen t - Small	160 - 191		
			Movemen t - Medium	192 - 223		
			Movemen t - Large	224 - 255		

Chanel	Function	Operation		Parameter s	Default	Operation Content
7	Electronic zoom	(+) lens adjustmen t	Movemen t - Large	0 - 31	128	Performs electronic zoom using the amount of movement specified.
			Movemen t - Medium	32 - 63		
			Movemen t - Small	64 - 95		
		Non-operational		96 - 159		
		(-) lens adjustmen t	Movemen t - Small	160 - 191		
			Movemen t - Medium	192 - 223		
			Movemen t - Large	224 - 255		
8	Electronic focus	(+) lens adjustmen t	Movemen t - Large	0 - 31	128	Performs electronic focus using the amount of movement specified.
			Movemen t - Medium	32 - 63		
			Movemen t - Small	64 - 95		
		Non-operational		96 - 159		
		(-) lens adjustmen t	Movemen t - Small	160 - 191		
			Movemen t - Medium	192 - 223		
			Movemen t - Large	224 - 255		

Chanel	Function	Operation		Parameter s	Default	Operation Content
9	Electronic distortion	(+) lens adjustmen t	Movemen t - Large	0 - 31	128	Performs electronic distortion using the amount of movement specified.
			Movemen t - Medium	32 - 63		
			Movemen t - Small	64 - 95		
		Non-operational		96 - 159		
		(-) lens adjustmen t	Movemen t - Small	160 - 191		
			Movemen t - Medium	192 - 223		
			Movemen t - Large	224 - 255		
		10	Load lens memory	Non-operational		
Load lens memory 1				16 - 31		
Load lens memory 2				32 - 47		
Load lens memory 3				48 - 63		
Load lens memory 4				64 - 79		
Load lens memory 5				80 - 95		
Load lens memory 6				96 - 111		
Load lens memory 7				112 - 127		
Load lens memory 8				128 - 143		
Load lens memory 9				144 - 159		
Load lens memory 10				160 - 175		
Non-operational				176 - 255		

Chanel	Function	Operation	Parameters	Default	Operation Content
11	Power control	Power off	0 - 63	128	Turns the projector power on or off.
		Non-operational	64 - 191		
		Power on	192 - 255		
12	Geometry correction	Off	0 - 15	255	Performs geometry correction .
		H/V-Keystone	16 - 31		
		Quick Corner	32 - 47		
		Point Correction	48 - 63		
		Curved Surface	64 - 79		
		Corner Wall	80 - 95		
		Load geometry correction memory 1	96 - 111		Loads a geometry correction memory.
		Load geometry correction memory 2	112 - 127		
		Load geometry correction memory 3	128 - 143		
		Non-operational	144 - 175		
13	Lock	Cannot control	0 - 127	0	Enables/disables Art-Net operations .
		Can control	128 - 255		
14	Freeze	Non-operational	0 - 31	128	Images are paused or unpaused.
		Freeze off	32 - 95		
		Non-operational	96 - 159		
		Freeze on	160 - 223		
		Non-operational	224 - 255		

Chanel	Function	Operation	Parameters	Default	Operation Content
15	Fade-in	0.0s	0 - 15	255	Fade-in time setting when the shutter is released
		0.5s	16 - 31		
		1.0s	32 - 47		
		1.5s	48 - 63		
		2.0s	64 - 79		
		2.5s	80 - 95		
		3.0s	96 - 111		
		3.5s	112 - 127		
		4.0s	128 - 143		
		5.0s	144 - 159		
		7.0s	160 - 175		
		10.0s	176 - 191		
		Non-operational	192 - 255		
16	Fade-out	0.0s	0 - 15	255	Fade-out time setting when the shutter is executed
		0.5s	16 - 31		
		1.0s	32 - 47		
		1.5s	48 - 63		
		2.0s	64 - 79		
		2.5s	80 - 95		
		3.0s	96 - 111		
		3.5s	112 - 127		
		4.0s	128 - 143		
		5.0s	144 - 159		
		7.0s	160 - 175		
		10.0s	176 - 191		
		Non-operational	192 - 255		

Chanel	Function	Operation	Parameters	Default	Operation Content
17	Light Source Control	0% - 100%	0 - 255	100	Controls the light source.

Refer to these sections for details on changes to user operations.

» **Related Links**

- "Focus Adjustment While Displaying the Lens Calibration Message" [p.29](#)

Focus Adjustment While Displaying the Lens Calibration Message

You can adjust the focus while displaying the lens calibration message.

Previous Focus Adjustment Operation (Version 1.00)

When you adjust the focus while displaying the lens calibration message, the message disappears.

Updated Focus Adjustment Operation (Version 2.10)

You can use the [▲] or [▼] buttons on the remote control or the control panel to adjust the focus without erasing the lens calibration message.

Refer to these sections for details on changes to user operations.

» Related Links

- "Point Correction Number Change" [p.30](#)
- "Operating Conditions for Light Source Calibration" [p.30](#)

(Even if you set higher values, the calibration may not start depending on the surrounding temperature.)

Point Correction Number Change

You can retain adjustment data even if you change the number of points during point correction.

Previous Point Number Change During Point Correction (Version 2.10)

If you change the number of points during point correction, you need to adjust the points again.

Updated Point Number Change During Point Correction (Version 3.00)

Even if you change the number of points during point correction, the corrected status is retained.

Operating Conditions for Light Source Calibration

Some operating conditions are added for light source calibration.

Previous Light Source Calibration Operation (Version 2.00)

See Light Source Calibration Menu updated in version 2.00.

New Light Source Calibration Operation (Version 3.00)

You cannot perform light source calibration under the following conditions.

- When the light source brightness is too low due to settings such as **Image > Light Source Control** or the A/V Mute feature.
- Within 10 minutes after the projector turns on.
- When you select **30%** or lower in **Settings > Brightness Settings > Brightness Level**.

Refer to these sections for details on changes to user operations.

» Related Links

- "Operating the Projector Using Web API" [p.31](#)
- "Maximum Point Correction Value Change" [p.31](#)
- "Remote Password Settings Change" [p.31](#)
- "Epson Web Control Operation Change" [p.31](#)
- "Epson Projector Management Operation Change" [p.31](#)

Operating the Projector Using Web API

You can use Web API to operate the projector. You can also execute some of the ESC/VP21 commands by Web API. See the *Web API Specifications for Projectors* for details.



- You can authenticate Web API communications using API authentication (Digest authentication).
- The user name for API authentication is **EPSONWEB**; use the password that is set for **Web Control Password**.

Maximum Point Correction Value Change

The maximum point correction value is increased. You can perform the point correction up to a larger number of pixel, that allows you to project the image on the different shape of screens.

Previous Point Correction Value (Version 4.00)

You can make corrections in 0.5 pixel increments in all directions within the range of vertical and horizontal up to a maximum of 32 pixels.

New Point Correction Value (Version 4.10)

You can make corrections in 0.5 pixel increments in all directions within the following ranges:

- EB-L20002U/EB-L20000U: Vertical and horizontal up to a maximum of 600 pixels
- EB-L12002Q/EB-L12000Q: Vertical and horizontal up to a maximum of 1080 pixels

Remote Password Settings Change

The **Remote Password** settings on the projector's **Network** menu > **Network Configuration** > **Basic** change to enhance the network security.

Previous Remote Password Settings (Version 4.00)

You can enter up to 8 single-byte alphanumeric characters.

New Remote Password Settings (Version 4.10)

You can enter up to 32 single-byte alphanumeric characters.

Epson Web Control Operation Change

Epson Web Control settings change to enhance the network security.

- You can set the **Monitor Password** only with Epson Web Control only when **Command Communication** is **Compatible**.
- If you use the default password **admin** as a Web Control Password, a screen prompting you to change the password is displayed before you can view the **Advanced** screen on Epson Web Control. Follow the on-screen instructions to change the password.

We strongly recommend changing the password regularly to prevent unauthorized access to your projector.

Epson Projector Management Operation Change

When authentication errors occur in Epson Projector Management after updating the firmware to version 4.10 or later, try one of the following:

- If you know the Web Control Password , select multiple target projectors on the main screen of the Epson Projector Management, open the **Edit** menu > **Property** and then enter the **Web Control Password**.
- If you do not know the Web Control Password, open **Network** menu > **Network Configuration** > **Basic** > **Web Control Password** in your projector's menu, change the **Web Control Password** and then enter the **Web Control Password** on the Epson Projector Management.

Appendix

Refer to these sections for important notices.

» **Related Links**

- "Notices" [p.34](#)

Check these sections for important notices.

» Related Links

- "Copyright Notice" [p.34](#)
- "General Notice" [p.34](#)
- "Copyright Attribution" [p.34](#)

Copyright Notice

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Seiko Epson Corporation. No patent liability is assumed with respect to the use of the information contained herein. Neither is any liability assumed for damages resulting from the use of the information contained herein.

Neither Seiko Epson Corporation nor its affiliates shall be liable to the purchaser of this product or third parties for damages, losses, costs, or expenses incurred by the purchaser or third parties as a result of: accident, misuse, or abuse of this product or unauthorized modifications, repairs, or alterations to this product, or (excluding the U.S.) failure to strictly comply with Seiko Epson Corporation's operating and maintenance instructions.

Seiko Epson Corporation shall not be liable against any damages or problems arising from the use of any options or any consumable products other than those designated as Original Epson Products or Epson Approved Products by Seiko Epson Corporation.

The contents of this guide may be changed or updated without further notice.

Illustrations in this guide and the actual projector may differ.

Windows is a trademark or a registered trademark of Microsoft Corporation in the United States and/or other countries.

Other product names used herein are also for identification purposes only and may be trademarks of their respective owners. Epson disclaims any and all rights in those marks.

Software Copyright: This product uses free software as well as software to which this company holds the rights.

Copyright Attribution

This information is subject to change without notice.

© 2021 Seiko Epson Corporation

Rev.1.0 2021.01 414122000EN

Rev.1.1 2021.10 414122001EN

Rev.1.2 2022.01 414122002EN

Rev.1.3 2022.02 414122003EN

Rev.1.4 2022.04 414122004EN

General Notice

EPSON is a registered trademark, and EPSON Exceed Your Vision is a registered logomark of Seiko Epson Corporation.