EPSON

EXCEED YOUR VISION

EB-1430Wi
EB-1420Wi

Specifications

Contents

■ Product Overview

This product is an ultra-short throw projector that allows people to stand close to the projector without casting shadows or being dazzled by the lamp. Also, projector's with a built-in interactive function allow you to write notes and draw on the screens with solid colors such as whiteboards using an interactive pen or your finger (EB-1430Wi only). You can print or save the annotations and share them with other projectors or tablet computers. By sharing the whiteboard screen, you can hold smooth lessons or meetings remotely.

■ Product Specifications

Product name			EB-1430Wi/1420Wi
Projection system			RGB liquid crystal shutter
Brightness*1 (Power Consumption: Normal/ECO)			3300 lm/1900 lm
Contrast ratio			10000:1 (Auto Iris: On)
Supported RGB signal resolutions			UXGA, WSXGA+, SXGA+, SXGA, WXGA++, WXGA+, WXGA, XGA, SVGA, VGA
Supported video signals			Video: NTSC/PAL/SECAM Component: 480i to 720p
Supported digital signals			UXGA, WSXGA+, SXGA+, SXGA, WXGA++, WXGA+, WXGA, XGA, SVGA, VGA, SDTV (480i/480p), SDTV (576i/576p), HDTV (720p), HDTV (1080i/1080p)
Pixel Number (Width × Height × Number of LCDs)			1280 x 800 x 3
LCD panel size (diagonal)			0.59" Wide
Projection distance ratio (Throw Ratio)			0.27 (maximum zoom)
Color reproducibility			Approximately 1,070 million colors
Scanning frequency	Analog		Horizontal: 15 to 92 (KHz) Vertical: 50 to 85 (Hz)
	HDMI		Horizontal: 15 to 75 (KHz) Vertical: 24, 30, 50, and 60 (Hz)
Projection lens			F value: 1.8/f (mm): 3.71
Zoom	System		Digital/Manual
	Zoom ratio		1.0 to 1.35
Focus	System		Manual
Dimensions (W × H × D) mm			367 × 155 × 375 (not including raised section)
Mass (without metal fittings)			Approx. 5.6kg
Lamp			245 W UHE (ELPLP80)
Operating temperature			+5 to +35°C No condensation (Altitude 0 to 2,286 m) +5 to +30°C No condensation (Altitude 2,287 to 3,000 m)
Power supply			AC 100 to 120 V/200 to 240 V ±10%, 50/60 Hz
Power consumption	100 to 120 V area	Operating	384 W
		Standing by	2.4 W (Communication On), 0.31 W (Communication Off)
	220 to 240 V area	Operating	365 W
		Standing by	2.5 W (Communication On), 0.42 W (Communication Off)

Product name	EB-1430Wi/1420Wi
Noise value*1 (Power Consumption: Normal/ECO)	35 dB/28 dB
Dissipation BTU (max.)	100 - 120 V Area: 1306 BTU/h 220 - 240 V Area: 1241 BTU/h
Air flow (max.)	59.7 CFM
Image input ports	Mini D-Sub15-pin, HDMI x2, Composite video (RCA), USB (Type-A), USB (Type-B)
Image output ports	Mini D-Sub15-pin
Audio Input port	Stereo mini × 3
Audio Out port	Stereo mini × 1
Control ports	RJ45, USB (Type-A) (for Wireless LAN unit), RS-232C Stereo mini (for multiple connections), Stereo mini (for control pad connection), Mini DIN 8pin (for touch unit connection)*2
Speaker	16 W
Function Others	Interactive function, H/V-Keystone correction (horizontal ±3°, vertical ±3°), Quick Corner, Wired LAN, Wireless LAN, Quick Wireless Connection (optional), Wireless LAN unit, USB Display, PC Free, Mail Notification, Freeze, A/V Mute, Pointer, E-Zoom, Wireless Mouse, Help, Power Consumption, Color Mode, Password Protection, Auto Source Search, User's Logo, Control Panel Lock, Direct Power On, Auto Power On, PJLink, Network Projection, Multi PC Projection
Products supplied	Power cord (4.5 m), USB cable (5 m x2, 1.8 m x1), Remote control (with 2 AA size manganese batteries), Interactive Pen x2 (with 2 AA size manganese batteries), Pen tray, Control pad (with 2 AA size manganese batteries), Touch Unit (main unit, connecting cables (approx. 2.8 m), and so on)*2, Wireless LAN unit, User's Guide, Guarantee card, Software CD-ROM

*1 Average value when the product is shipped. Based on the specifications method (appendix 1) for the JIS X6911: 2003 data projector. The measurement method and conditions are based on appendix 2.

*2 EB-1430Wi only.

Weight of metal fixtures for wall mount, ceiling mount, and table projection

Metal fixtures are necessary for wall, ceiling, and table projection. A special method of installation is required when installing the projector on a wall or ceiling. For safety reasons, do not install the projector yourself. Installation entails a separate cost.

Weight (kg)		
Wall Mount	Provided with projector	8.1 kg
Ceiling Mount	ELPMB23	3.4 kg
Interactive Table Mount	ELPMB29	7.6 kg
Ceiling Pipe (450 mm)	ELPFP13	2.1 kg
Ceiling Pipe (700 mm)	ELPFP14	2.6 kg

■ System Requirements for the Easy Interactive Function

Supported printers

When printing annotations, use a printer* that supports the following printer control commands.

Control Commands	Connection Method
ESC/P-R	USB or Network Method
ESC/Page, ESC/Page-Color	Network Method
PCL6	Network Method

* This is not guaranteed to be supported by all printers.

Supported scanners

When reading data from paper in Whiteboard mode, use a scanner* that supports the following printer control commands. Standalone scanners are not supported.

Control Commands	Connection Method
ESC/P-R	USB or Network Method

* This is not guaranteed to be supported by all printers.

Network settings

When saving annotations to a network folder, use the following shared network servers.

UNC Address Notations*	Protocol	Available Ports
IP Address	CIFS	Direct Hosting SMB Service 445/TCP, UDP
NetBIOS Name	SMB	NetBIOS Name Service 137/UDP 137/TCP NetBIOS Datagram Service 138/UDP NetBIOS Session Service 139/TCP

* Composed of the host name and shared name only. You cannot specify sub folders.

* You cannot specify the DNS name as the host name.

* [DNS Server] settings set from the projector's Network settings menu are not applied.

* When a NetBIOS name is specified as the host name and is connected to a file sharing server over a subnet, you need the WINS server settings.

Email server settings

When sending annotations by email using an Internet email server, set the email server from [Extended] - [Whiteboard Settings] - [Mail]. Connections through a proxy server are not supported.

1. Set the host name or IP address for the email server linked to the [SMTP Server].
   When setting the host name, check the [DHCP] settings in [Wireless LAN]/[Wired LAN] from the Network settings menu. When [DHCP] is set to [Off], make the [DNS Server] settings.

2. Depending on the email server you are connecting to, you need to set the [Authentication], [Port Number], [User Name], and [Password].

3. In [From], set the email address for the user name set in step 2.
   The email may not be sent correctly if this does not match the email address for the user name set in step 2.

Supported services

The following email services are supported.

Service Name	Host Name	Authentication Method	Port Number
Gmail	smtp.gmail.com	TLS	587
Yahoo! mail	smtp.mail.yahoo.com	SSL	465
	smtp.mail.yahoo.co.jp		

* Gmail is a trademark of Google Inc.

* Yahoo! is a trademark or registered trademark of Yahoo! Inc.

Operating conditions for the shared whiteboard function

When sharing the whiteboard screen with other projectors and external devices, set [Secure HTTP] to [On] from [Administrator Settings] in the projector's Network settings menu.

Port settings

When sharing the whiteboard screen with other devices, open a port for the network environment you are using.

Port	Protocol	Usage	Communication
80	TCP	Connection/Annotation Transfers	Bidirectional
443	TCP	Connection/Annotation Transfers	Bidirectional (when using SSL)

Supported browsers

When connecting to the projector's whiteboard screen from a tablet PC or computer, use the following Web browsers.

OS	Web Browser	Screen size
Windows	Internet Explorer 8*/9*/10/11	XGA or higher
OS X	Safari 5/6/7	1280 x 800 or higher
iOS	iOS 6.0/7.0 or later	1024 x 768 or higher
Android OS	Android OS 4.0 or later (Standard browsers only)	4:3 aspect 1024 x 768 or higher 16:9 aspect 1280 x 600 or higher 16:10 aspect 1280 x 720 or higher

* For connections over SSL. Some functions will be limited.

Operating systems for computer interactive mode

To use computer interactive mode, your computer needs to be running one of the following operating systems.

Windows	**Windows XP Service Pack 2 or Service Pack 3** • Professional (32 bit) • Home Edition (32 bit) • Tablet PC Edition (32 bit)
	Windows Vista Service Pack 2 • Ultimate (32 bit) • Enterprise (32 bit) • Business (32 bit) • Home Premium (32 bit) • Home Basic (32 bit)
	Windows 7 Service Pack 1 • Ultimate (32/64 bit) • Enterprise (32/64 bit) • Professional (32/64 bit) • Home Premium (32/64 bit)
	Windows 8 • Windows 8 (32/64 bit) • Windows 8 Pro (32/64 bit) • Windows 8 Enterprise (32/64 bit)
	Windows 8.1 • Windows 8.1 (32/64 bit) • Windows 8.1 Pro (32/64 bit) • Windows 8.1 Enterprise (32/64 bit)
Mac	**OS X** • Mac OS X 10.5.x • Mac OS X 10.6.x • OS X 10.7.x • OS X 10.8.x • OS X 10.9.x
Ubuntu	**Ubuntu** • 12.04 LTS • 12.10 • 13.04 • 13.10

System requirements for Easy Interactive Tools

A variety of functions become available after installing Easy Interactive Tools Ver.3.0. You can zoom annotations made on the projected image, as well as save or print the annotations.
Check the system requirements necessary to run the software.

Windows

Operating System	Windows XP Service Pack 2 or later • Professional (32 bit) • Home Edition (32 bit) • Tablet PC Edition (32 bit)
	Windows Vista • Ultimate (32 bit) • Enterprise (32 bit) • Business (32 bit) • Home Premium (32 bit) • Home Basic (32 bit)
	Windows 7 • Ultimate (32/64 bit) • Enterprise (32/64 bit) • Professional (32/64 bit) • Home Premium (32/64 bit) • Home Basic (32 bit)
	Windows 8 • Windows 8 (32/64 bit) • Windows 8 Pro (32/64 bit) • Windows 8 Enterprise (32/64 bit)
	Windows 8.1 • Windows 8.1 (32/64 bit) • Windows 8.1 Pro (32/64 bit) • Windows 8.1 Enterprise (32/64 bit)
CPU	Intel Pentium M 1.6 GHz or faster Recommended: Intel Core2 Duo 1.2 GHz or faster
Amount of Memory	512 MB or more Recommended: 1GB or more
Hard Disk Space	100 MB or more
Display	Resolution larger than XGA (1024 x 768) and smaller than WUXGA (1920 x 1200) Display color of 16-bit color or greater

OS X

To use computer interactive mode on OS X, you need to install Easy Interactive Driver Ver.3.0 on the computer being used. The following shows the system requirements for Easy Interactive Tools and Easy Interactive Driver.

Operating System	Mac OS X 10.5.x Mac OS X 10.6.x OS X 10.7.x OS X 10.8.x OS X 10.9.x
CPU	Power PC G4 1 GHz or faster Recommended: Core Duo 1.83 GHz or faster
Amount of Memory	512 MB or more Recommended: 1GB or more
Hard Disk Space	100 MB or more
Display	Resolution larger than XGA (1024 x 768) and smaller than WUXGA (1920 x 1200) Display color of 16-bit color or greater (approx. 32,000 display colors)

■ System Requirements for USB Display

Connects the projector to a computer with the supplied or a commercially available USB cable, and projects the images on the computer. To project with USB Display, you need to install a driver on the computer being used. Check the system requirements necessary to run the driver.

Windows

Operating System	Windows 2000*

	Windows XP
	  • Professional (32 bit)
	  • Home Edition (32 bit)
	  • Tablet PC Edition (32 bit)

	Windows Vista
	  • Ultimate (32 bit)
	  • Enterprise (32 bit)
	  • Business (32 bit)
	  • Home Premium (32 bit)
	  • Home Basic (32 bit)

	Windows 7
	  • Ultimate (32/64 bit)
	  • Enterprise (32/64 bit)
	  • Professional (32/64 bit)
	  • Home Premium (32/64 bit)
	  • Home Basic (32 bit)
	  • Starter 32 bit

	Windows 8
	  • Windows 8 (32/64 bit)
	  • Windows 8 Pro (32/64 bit)
	  • Windows 8 Enterprise (32/64 bit)

	Windows 8.1
	  • Windows 8.1 (32/64 bit)
	  • Windows 8.1 Pro (32/64 bit)
	  • Windows 8.1 Enterprise (32/64 bit)

CPU	Mobile Pentium III 1.2 GHz or faster Recommended: Pentium M 1.6 GHz or faster
Amount of Memory	256 MB or more Recommended: 512 MB or more
Hard Disk Space	20 MB or more
Display	Resolution of no less than 640 x 480 and no higher than 1600 x 1200. Display color of 16-bit color or greater

* Service Pack 4 only.

OS X

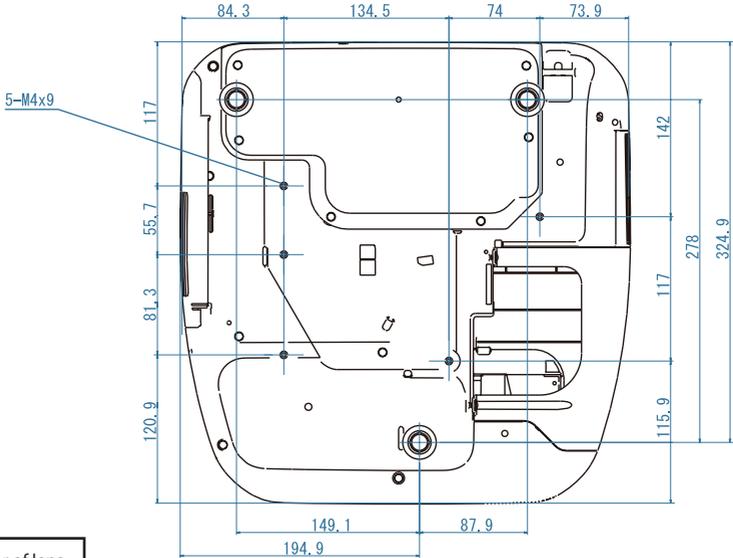|	
Operating System	Mac OS X 10.5.x 32 bit Mac OS X 10.6.x 32/64 bit OS X 10.7.x 32/64bit OS X 10.8.x OS X 10.9.x
CPU	Power PC G4 1 GHz or faster Recommended: Core Duo 1.83 GHz or faster
Amount of Memory	512 MB or more
Hard Disk Space	20 MB or more
Display	Resolution of no less than 640 x 480 and no higher than 1680 x 1200. Display color of 16-bit color or greater

■ Dimensions

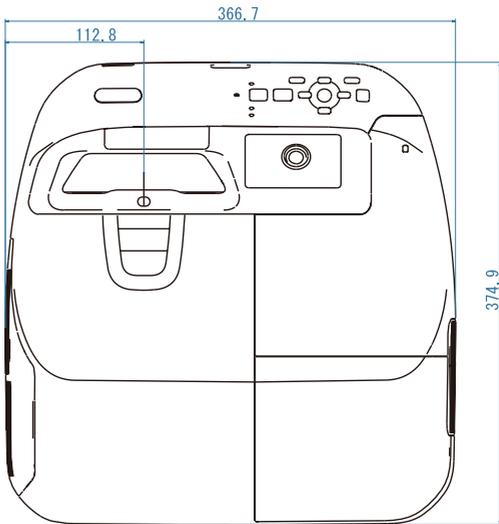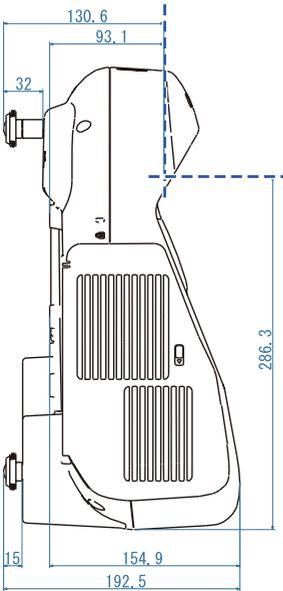[Units: mm]

- - - - Center of lens

■ Dimensions with Wall Mount

[Units: mm]
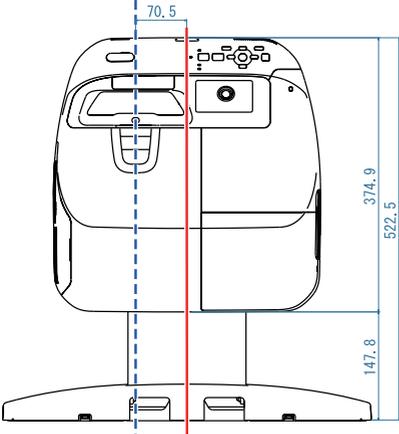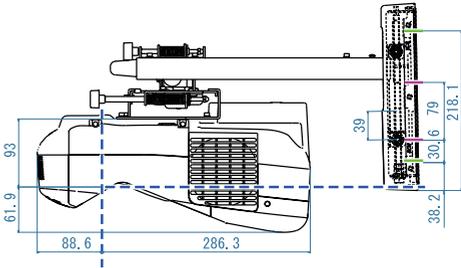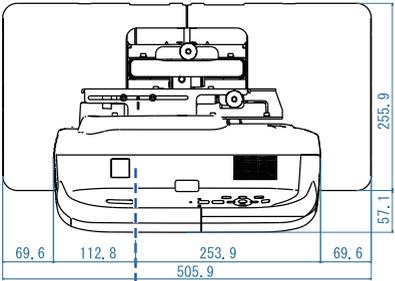
-----	Center of lens
――――	Wall bolt position
――――	Center of mount
――――	Wall mount cable routing hole

■ Wall Plate Dimensions

[Units: mm]
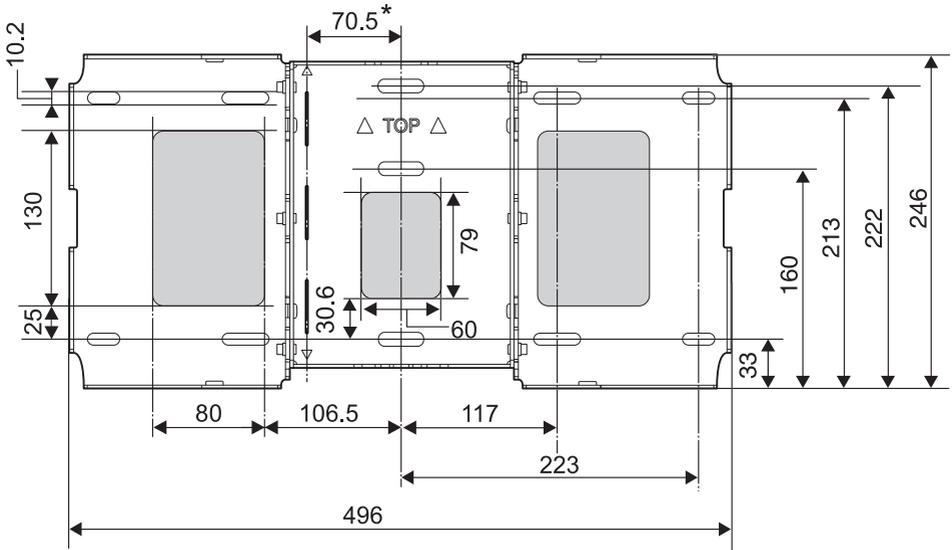
* Offset value of center of projected screen and center of wall plate

When the cables connected to the projector pass through a wall, cables can be passed through the shaded sections in the diagram above.

- Horizontal slide adjustable range
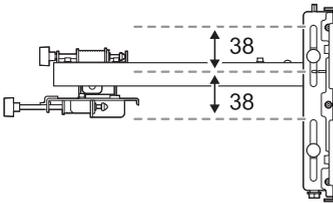
- Vertical slide adjustable range

■ Dimensions with Ceiling Mount (ELPMB23)

[Units: mm]

81

159

– – – – –	Center of lens
―――	Wall bolt position
―――	Center of mount

162.7
81.7　40.5　40.5
160
150
18°　　18°
154.9
112.8　　120　　133.9
232.8

177.5
200
18.5　79.5　79.5
43.2
243
18°　　18°
93
61.9
88.6　　98.4
286.3
187　　187.9

Notes for Ceiling Mount (ELPMB23)

The values in the figure are taken when the adjustable screw A is set to 5.0 cm on the scale sticker. You can adjust the projector's position by sliding horizontally up to a maximum of 5.0 cm.

A

■ Dimensions with Ceiling Mount (ELPMB23) and Extension Pipe (ELPFP13/14)

[Units: mm]

Center of lens
Wall bolt position
Center of mount

81

159

162.7
81.7 40.5 40.5
67.2
60
25

ELPFP13：668–918mm
ELPFP14：918–1168mm

702.5

85

25

169.3

18° 18°

37

154.9

134.5
307
112.8 120
232.8 133.9

185
200
26 79.5 79.5

160.7

50
50
50
50

292

ELPMB23

18° 18°

93

61.9

117
137
245
88.6 105.9
194.5 180.4
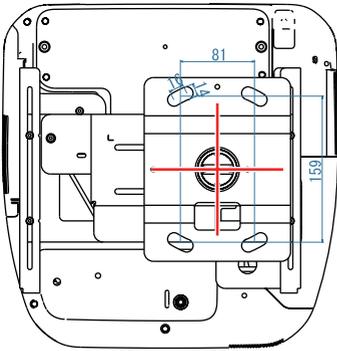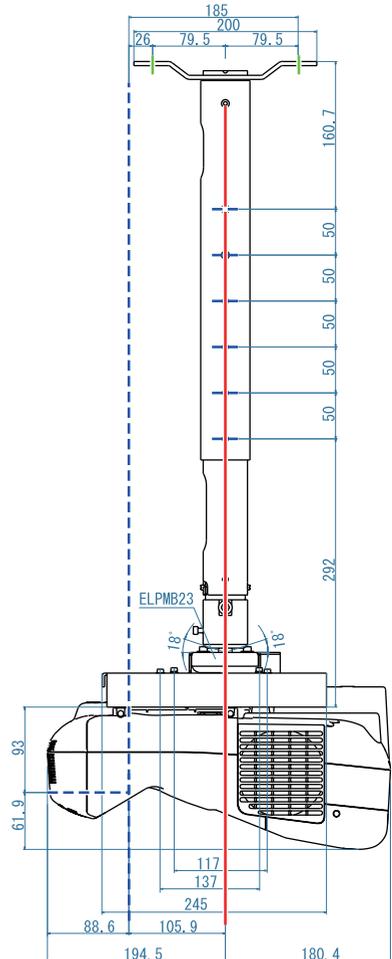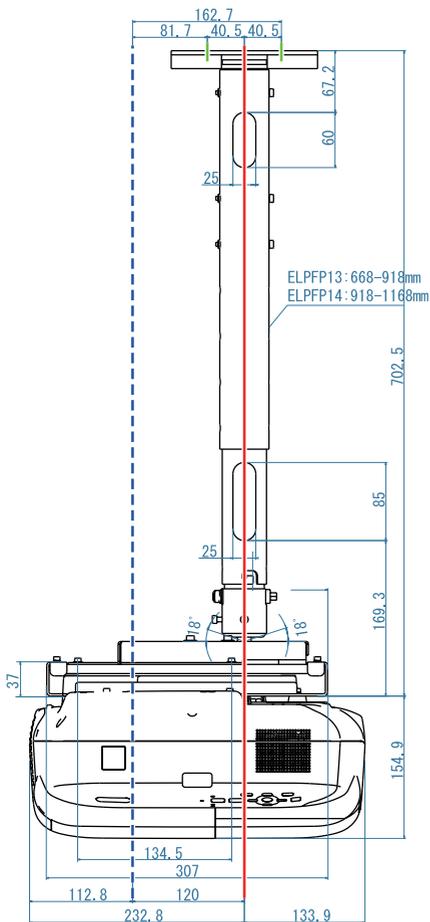
■ Dimensions with Interactive Table Mount (ELPMB29)

[Units: mm]

-----	Center of lens
———	Center of mount

605. 9

200. 9

405

70. 5

374. 9

444

69. 1

175. 5

52

212

209. 9

51. 4

15～80

0～80
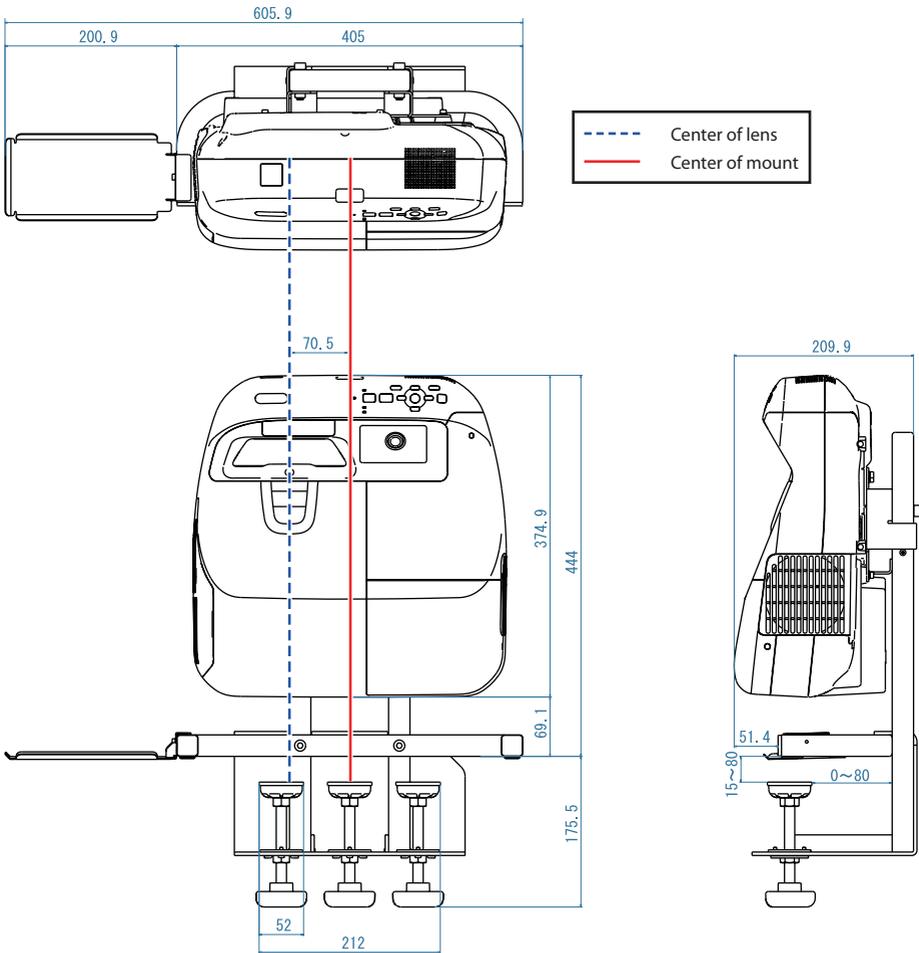
■ Control Pad Dimensions

[Units: mm]

135.9

EPSON

| Whiteboard | Source Search |
| Capture | Print | Save |

149
153.5

111
109.5
11.5   3.5

107
104
15.47

29
30.9
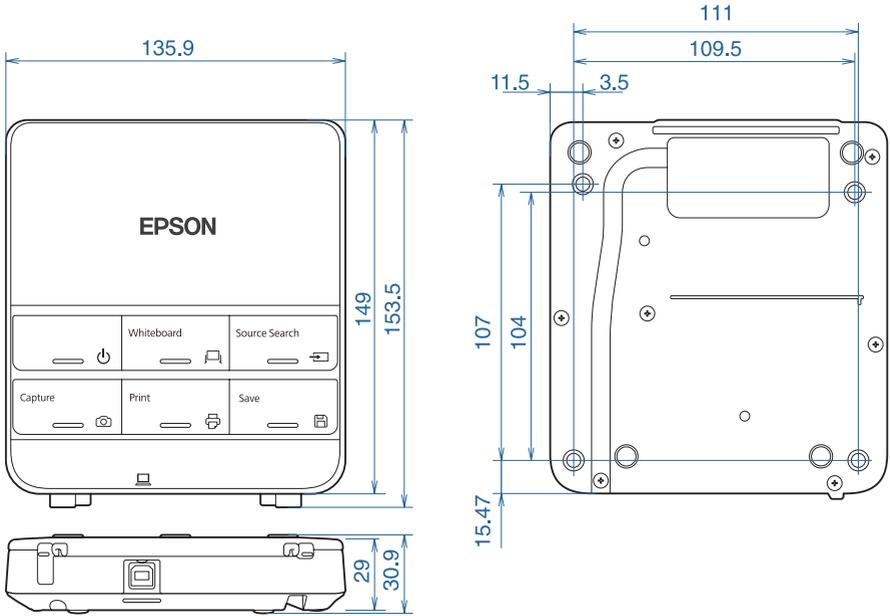
■ Touch Unit Dimensions (EB-1430Wi only)

[Units: mm]

95
210
51

58.5   58.5
55.4
10.4   105
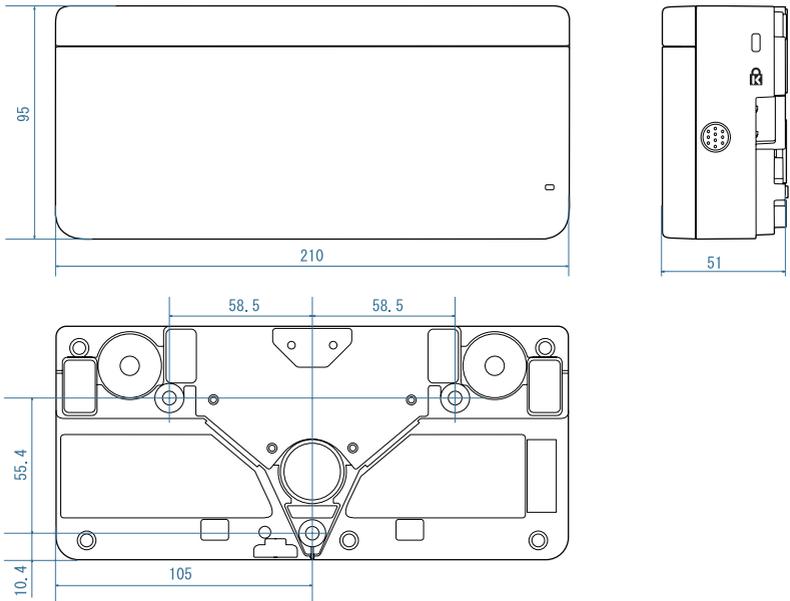
The Touch Unit weighs approximately 450 g.

■ Interface

Position of interface on projector
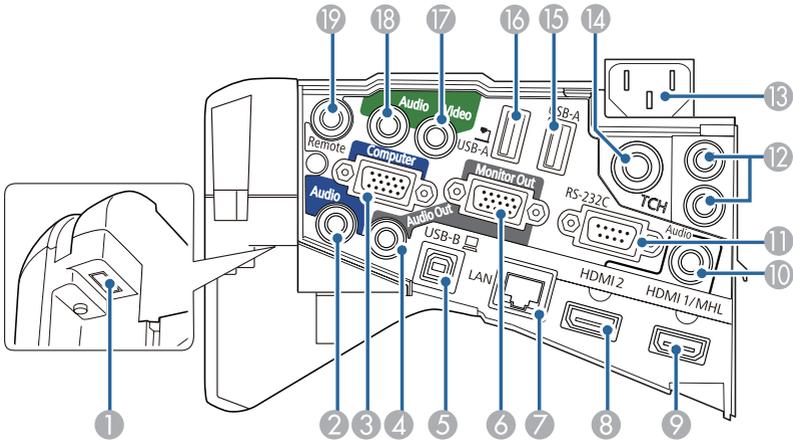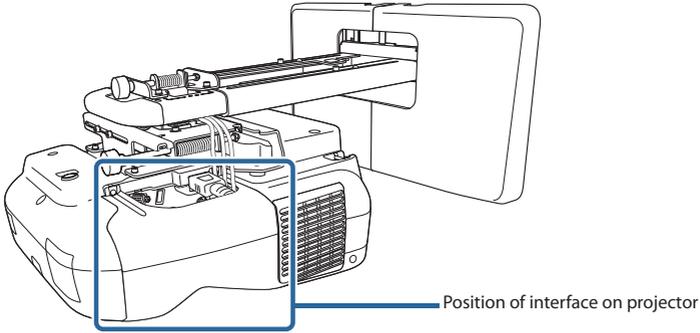
No	Name	No	Name
❶	Wireless LAN unit installation section (USB Type-A)	⓫	RS-232C port (mini D-Sub 9pin)
❷	Audio1 port (stereo mini)	⓬	SYNC IN/OUT port (stereo mini)
❸	Computer port (mini Sub15-pin)	⓭	Power inlet
❹	Audio Out port (stereo mini)	⓮	TCH port for connecting the Touch Unit[2]
❺	USB-B port (USB Type-B)	⓯	USB-A port (USB Type-A)
❻	Monitor Out (Mini-Sub 15 pin)[1]	⓰	USB-A port for connecting document camera (USB Type-A)
❼	LAN port (RJ-45: 100Base-TX)	⓱	Video port (composite RCA)
❽	HDMI2 port (HDMI)	⓲	Audio2 port (stereo mini)
❾	HDMI1/MHL input port (HDMI)	⓳	Remote port (stereo mini)
❿	Audio3 port (stereo mini)		

*1 Only analog RGB signals can be output from the Computer port.

*2 EB-1430Wi only.

■ Connection Image for Projector and Control Pad

When the supplied control pad is connected, you can easily perform operations such as turning the power on or off, or changing the source. You can also connect USB memory sticks or a printer's USB cable.

Connecting to a Computer

USB‑B

5 m cable

USB-A

Remote   USB-A   USB-B   Printer

Whiteboard   Source Search

Capture   Print   Save

USB-A   USB‑B   1.8 m cable   USB-A
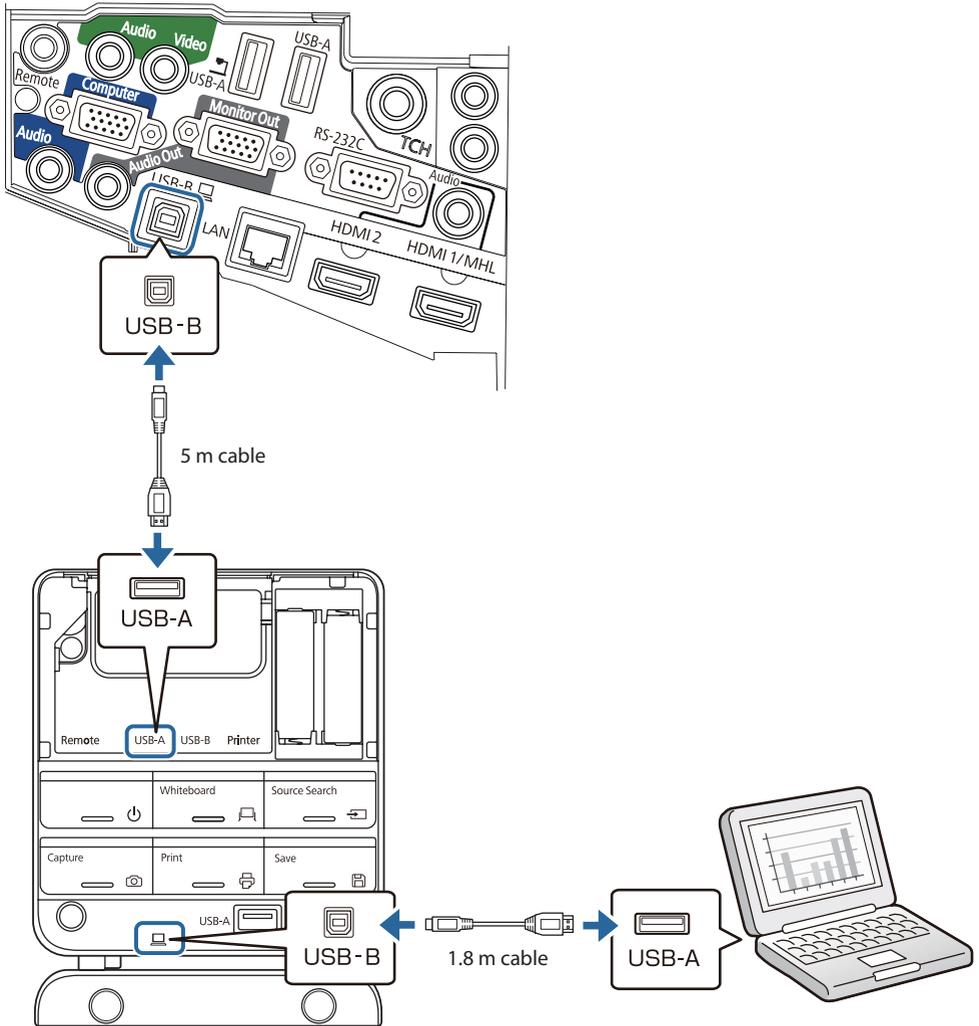
Connecting a Printer or USB Storage Device

USB-A

5 m cable

USB-B

Remote   USB-A   USB-B   Printer

USB-A

5 m cable

Whiteboard   Source

Capture   Print   Save

USB-

USB-A
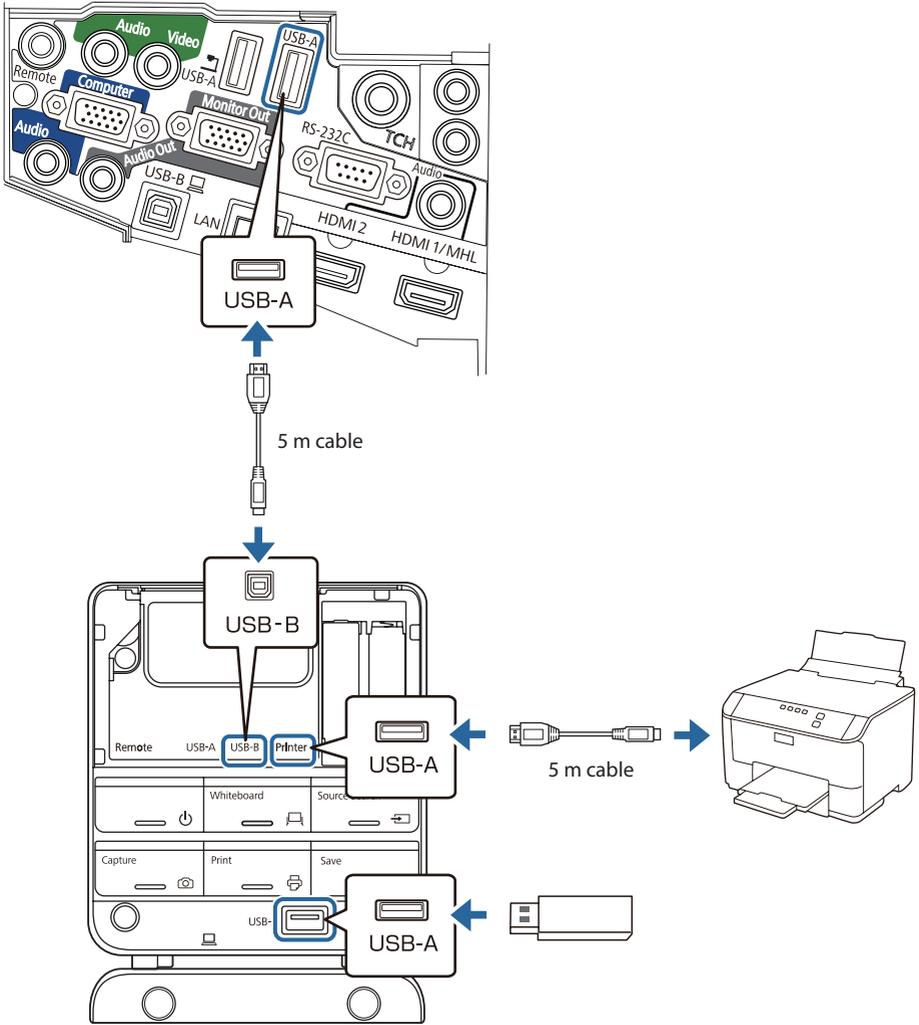
■ Remote Control Operating Range

The following shows the operation range for the remote control supplied with the projector.

30°
30°
55°
55°
6m
6m

60°
15°
75°
6m
6m
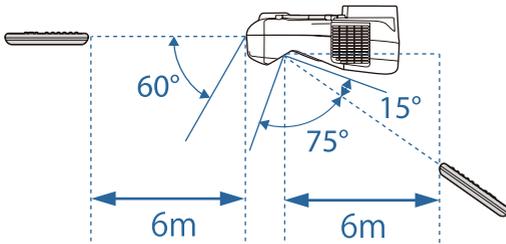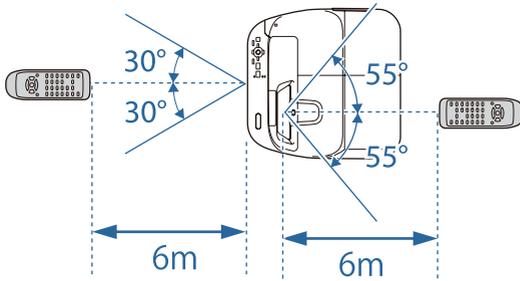
■ Screen Size and Projection Distance (Wall Mount)

When mounting the projector on a wall, see the following data to determine the optimum installation location. When installing on a wall, you need the supported wall mount for the projector. Since the wall may need to be reinforced before installation, contact a specialist in advance. Also, take particular care when installing at a high location. Installation entails a separate cost.

See page 14 for the distances from the wall mount to each part of the projector.

Height from template line to top of screen (H)

28.6 cm

A
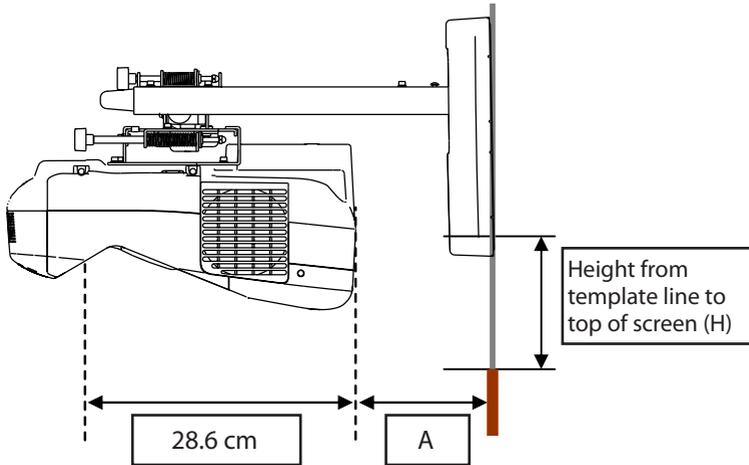
Wall mount installation weight

Gross weight when wall mount installed: Approx. 13.7kg = Projector: approx. 5.6kg + Wall mount: approx. 8.1 kg

■ Projection Distance (Wall Mount)

The projection distances are the approximate distances when the projection size is wide (maximum zoom).

You can see a more detailed projection simulation on our Web site.

(http://www.epson.com/alf_upload/landing/distance-calculator/)

<For screens with an aspect ratio of 16:10>   [Unit: cm]

Screen Size		Projection Distance (A)		Height from the line on the template sheet to the top of the screen (H)
Inches (Diagonally)	Width × Height	Minimum	Maximum	
60	129.2 x 80.8	6.2	19.3	17.4
65	140.0 x 87.5	9.3	23.5	18.7
70	150.8 x 94.2	12.4	27.6	20.1
75	161.5 x 101.0	15.5	31.1	21.4
80	172.3 x 107.7	18.7	31.1	22.7
85	183.1 x 114.4	21.8	31.1	24.1
90	193.9 x 121.2	24.9	31.1	25.4
95	204.6 x 127.9	28.0	31.1	26.8
100	215.4 x 134.6	31.1		28.1

Images cannot be projected correctly onto screens smaller than 60 inches or larger than 100 inches.

<For screens with an aspect ratio of 16:9>   [Unit: cm]

Screen Size		Projection Distance (A)		Height from the line on the template sheet to the top of the screen (H)
Inches (Diagonally)	Width × Height	Minimum	Maximum	
60	132.8 x 74.7	7.3	20.7	22.0
65	143.9 x 80.9	10.5	25.0	23.7
70	155.0 x 87.2	13.7	29.3	25.4
75	166.0 x 93.4	16.8	31.1	27.2
80	177.1 x 99.6	20.0	31.1	28.9
85	188.2 x 105.8	23.2	31.1	30.6
90	199.2 x 112.1	26.4	31.1	32.3
95	210.3 x 118.3	29.6	31.1	34.0

Images cannot be projected correctly onto screens smaller than 59 inches or larger than 97 inches.

<For screens with an aspect ratio of 4:3>   [Unit: cm]

Screen Size		Projection Distance (A)		Height from the line on the template sheet to the top of the screen (H)
Inches (Diagonally)	Width × Height	Minimum	Maximum	
55	111.8 x 83.8	7.6	21.2	18.0
60	121.9 x 91.4	11.2	25.9	19.5
65	132.1 x 99.1	14.7	30.7	21.0
70	142.2 x 106.7	18.2	31.1	22.5
75	152.4 x 114.3	21.7	31.1	24.1
80	162.6 x 121.9	25.2	31.1	25.6
85	172.7 x 129.5	28.7	31.1	27.1

Images cannot be projected correctly onto screens smaller than 53 inches or larger than 88 inches.

■ Projection Distance Formula (Wall Mount)

<For screens with an aspect ratio of 16:10>

Projection Distance Formula (A)	
Minimum	A (mm) = ((Projection screen size (inches) × 0.62052 - 2.36015) x 10) - 286.3 (mm)
Maximum	A (mm) = ((Projection screen size (inches) × 0.8377 - 2.36015) x 10) - 286.3 (mm)

Height from the line on the template sheet to the top of the screen (H)

* Minimum H (mm) = (Screen size x 0.26705 +7.433) x 10 - 60.5

<For screens with an aspect ratio of 16:9>

Projection Distance Formula (A)	
Minimum	A (mm) = ((Projection screen size (inches) × 0.63777 - 2.36015) x 10) - 286.3 (mm)
Maximum	A (mm) = ((Projection screen size (inches) × 0.86099 - 2.36015) x 10) - 286.3 (mm)

Height from the line on the template sheet to the top of the screen (H)

* Minimum H (mm) = (Screen size x 0.34366 +7.433) x 10 - 60.5

<For screens with an aspect ratio of 4:3>

Projection Distance Formula (A)	
Minimum	A (mm) = ((Projection screen size (inches) × 0.70248 - 2.36015) x 10) - 286.3 (mm)
Maximum	A (mm) = ((Projection screen size (inches) × 0.94834 - 2.36015) x 10) - 286.3 (mm)

Height from the line on the template sheet to the top of the screen (H)

* Minimum H (mm) = (Screen size x 0.30232 +7.433) x 10 - 60.5

* See: Wall mount dimensions

[Units: mm]
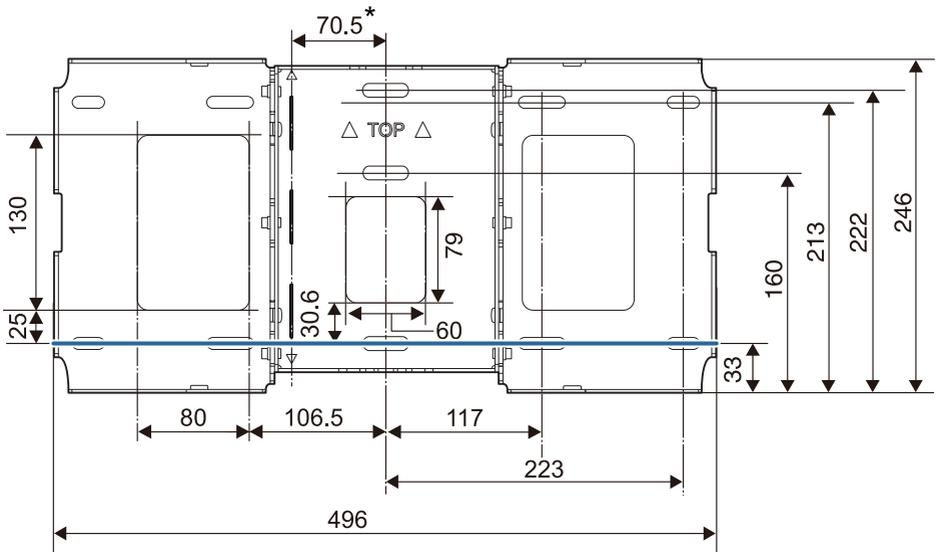
* Offset value of center of projected screen and center of wall plate

The blue line is the template sheet line.

■ Screen Size and Projection Distance (Ceiling Mount)

When suspending the projector from a ceiling, see the following data to determine the optimum installation location.

When installing on a ceiling, you need the supported ceiling mount (ELPMB23) for the projector.

Use an extension pipe (ELPFP13 or ELPFP14) if necessary.

Since the ceiling may need to be reinforced before installation, contact a specialist in advance. Also, take particular care when installing at a high location. Installation entails a separate cost. See pages 16 to 17 for the distances from the ceiling mount to each part of the projector.

28.6 cm

A

Height from the projector to the top of the screen (H) * Minimum
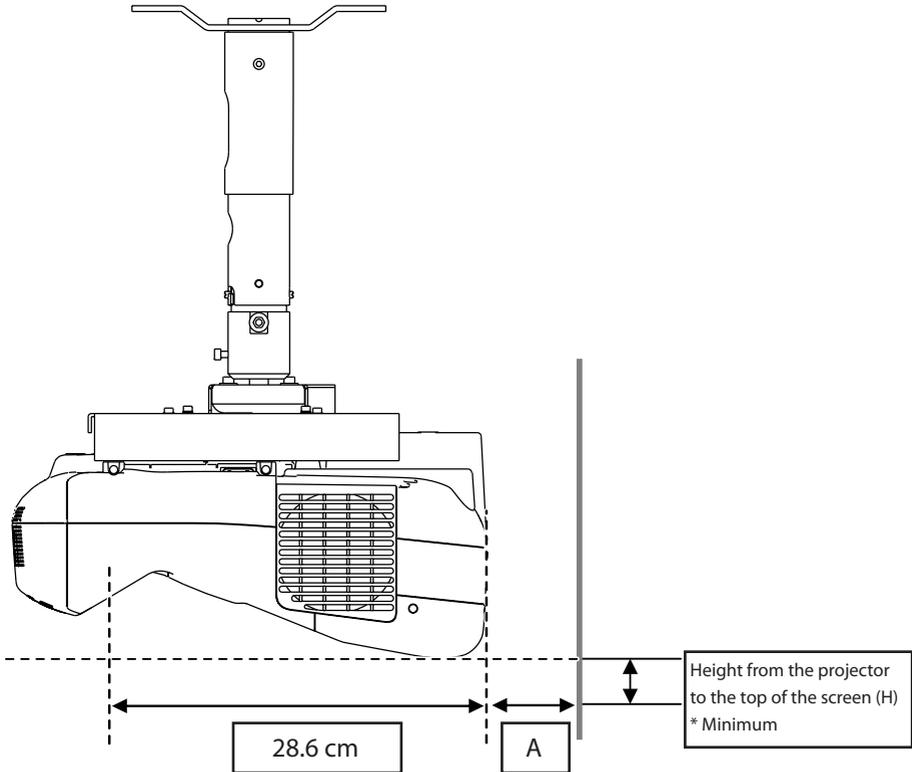
Ceiling mount installation weight

Part Number	Gross weight when mount installed	Projector	Ceiling Mount	Extension Pipe (ELPFP13)	Extension Pipe (ELPFP14)
EB-1430Wi EB-1420Wi	Approx. 10.6 kg	Approx. 5.6 kg	Approx. 3.4 kg	-	-
	Approx. 12.7 kg			Approx. 2.1 kg	-
	Approx. 13.2 kg			-	Approx. 2.6 kg

■ Projection Distance (Ceiling Mount)

The projection distances are the approximate distances when the projection size is wide (maximum zoom).

You can see a more detailed projection simulation on our Web site.

(http://www.epson.com/alf_upload/landing/distance-calculator/)

<For screens with an aspect ratio of 16:10>   [Unit: cm]

Screen Size		Projection Distance (A)		The height from the projector to the top of the screen
Inches (Diagonally)	Width × Height	Minimum	Maximum	
60	129.2 x 80.8	6.2	19.3	9.0
65	140.0 x 87.5	9.3	23.5	10.3
70	150.8 x 94.2	12.4	27.6	11.7
75	161.5 x 101.0	15.5	31.1	13.0
80	172.3 x 107.7	18.7	31.1	14.4
85	183.1 x 114.4	21.8	31.1	15.7
90	193.9 x 121.2	24.9	31.1	17.0
95	204.6 x 127.9	28.0	31.1	18.4
100	215.4 x 134.6	31.1		19.7

Images cannot be projected correctly onto screens smaller than 60 inches or larger than 100 inches.

<For screens with an aspect ratio of 16:9>   [Unit: cm]

Screen Size		Projection Distance (A)		The height from the projector to the top of the screen
Inches (Diagonally)	Width × Height	Minimum	Maximum	
60	132.8 x 74.7	7.3	20.7	13.6
65	143.9 x 80.9	10.5	25.0	15.3
70	155.0 x 87.2	13.7	29.3	17.0
75	166.0 x 93.4	16.8	31.1	18.8
80	177.1 x 99.6	20.0	31.1	20.5
85	188.2 x 105.8	23.2	31.1	22.2
90	199.2 x 112.1	26.4	31.1	23.9
95	210.3 x 118.3	29.6	31.1	25.6

Images cannot be projected correctly onto screens smaller than 59 inches or larger than 97 inches.

<For screens with an aspect ratio of 4:3>   [Unit: cm]

Screen Size		Projection Distance (A)		The height from the projector to the top of the screen
Inches (Diagonally)	Width × Height	Minimum	Maximum	
55	111.8 x 83.8	7.6	21.2	9.6
60	121.9 x 91.4	11.2	25.9	11.1
65	132.1 x 99.1	14.7	30.7	12.6
70	142.2 x 106.7	18.2	31.1	14.1
75	152.4 x 114.3	21.7	31.1	15.7
80	162.6 x 121.9	25.2	31.1	17.2
85	172.7 x 129.5	28.7	31.1	18.7

Images cannot be projected correctly onto screens smaller than 53 inches or larger than 88 inches.

■ Projection Distance (Table Projection)

Determine the installation location for the projector according to the size of the image. Select one of the following installation locations (1 or 2 in the following diagram).

The relationship between the installation location and the size of the image is shown below.
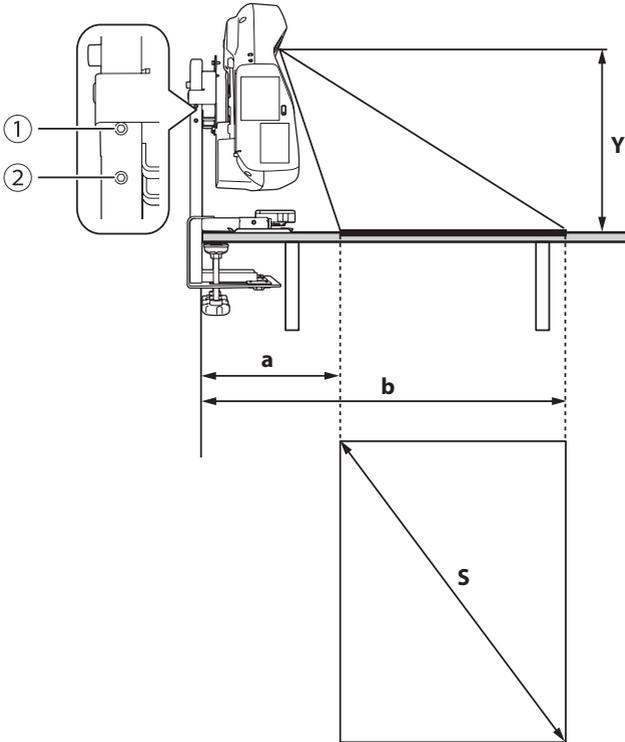
[Unit: cm]

Projection Distance (Y)		Image Size (S)						Distance from the edge of the table to the bottom of the screen (16:10) (a)		Distance from the edge of the table to the top of the screen (16:10) (b)	
		16:10 Aspect Ratio		4:3 Aspect Ratio		16:9 Aspect Ratio					
		Wide	Tele	Wide	Tele	Wide	Tele	Wide	Tele	Wide	Tele
1	38.0	165.1	121.9	144.8	109.2	160.0	119.4	28.0	39.0	115.0	104.0
2	35.0	152.4	114.3	134.6	101.6	149.9	114.3	26.0	37.0	107.0	98.0

- You can change the size of the image using the projector's [Tele] and [Wide] buttons.
- You can adjust the projection position using the projector's Image Shift.

■ Supported Resolutions

Computer Signals (Analog RGB)

Signal	Refresh Rate (Hz)	Resolution (dots)
VGA	60/72/75/85	640 x 480
SVGA	56/60/72/75/85	800 x 600
XGA	60/70/75/85	1024 x 768
WXGA	60	1280 x 768
WXGA	60	1366 x 768
WXGA	60/75/85	1280 x 800
WXGA+	60/75/85	1440 × 900
WXGA++	60	1600 × 900
SXGA	70/75/85	1152 × 864
SXGA	60/75/85	1280 × 1024
SXGA	60/75/85	1280 × 960
SXGA+	60/75	1400 × 1050
WSXGA+*	60	1680 × 1050
UXGA	60	1600 × 1200
MAC13"	67	640 × 480
MAC16"	75	832 × 624
MAC19"	75	1024 × 768
MAC19"	59	1024 × 768
MAC21"	75	1152 × 870

* Only compatible when [Wide] is selected as the [Resolution] from the Configuration menu.

Component Video

Signal	Refresh Rate (Hz)	Resolution (dots)
SDTV (480i)	60	720 × 480
SDTV (576i)	50	720 × 576
SDTV (480p)	60	720 × 480
SDTV (576p)	50	720 × 576
HDTV (720p)	50/60	1280 × 720
HDTV (1080i)	50/60	1920 × 1080

Composite Video

Signal	Refresh Rate (Hz)	Resolution (dots)
TV (NTSC)	60	720 x 480
TV (SECAM)	50	720 x 576
TV (PAL)	50/60	720 x 576

HDMI Input Signal

Signal	Refresh Rate (Hz)	Resolution (dots)
VGA	60	640 x 480
SVGA	60	800 x 600
XGA	60	1024 x 768
WXGA	60	1280 x 800
WXGA	60	1366 x 768
WXGA+	60	1440 × 900
WXGA++	60	1600 × 900
WSXGA+	60	1680 × 1050
SXGA	60	1280 × 960
SXGA	60	1280 × 1024
SXGA+	60	1400 × 1050
UXGA	60	1600 × 1200
SDTV (480i/480p)	60	720 x 480
SDTV (576i/576p)	50	720 x 576
HDTV (720p)	50/60	1280 x 720
HDTV (1080i)	50/60	1920 x 1080
HDTV (1080p)	24/30/ 50/60	1920 x 1080

MHL Input Signal

| Signal	Refresh Rate (Hz)	Resolution (dots)
VGA	60	640 x 480
SDTV (480i/480p)	60	720 x 480
SDTV (576i/576p)	50	720 x 576
HDTV (720p)	50/60	1280 x 720
HDTV (1080i)	50/60	1920 x 1080
HDTV (1080p)	24/30	1920 x 1080

▌Installation Environment

Vertical: As shown in the following diagram, you can project straight down.

Horizontal: You can tilt as far as the adjustment dial can be rotated.
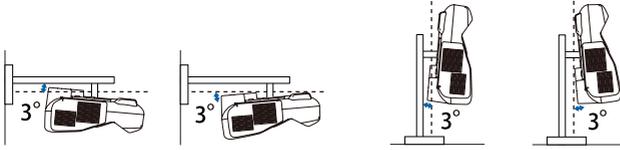
If the projector is installed at an angle that is not supported, or if the Configuration menu settings are not correct, it could lead to a malfunction or early deterioration of optical parts.

20 cm or more

20 cm or more

Intake side

Exhaust side
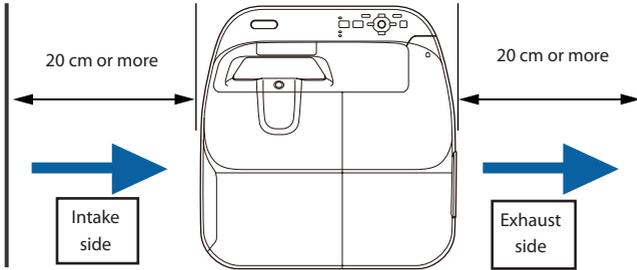
- When installing the projector, make sure there is a gap of at least 20 cm between the wall and the air exhaust vent and the air intake vent.
- Make sure that air from air conditioners and so on is not directed at the air intake vent. The temperature around the air intake vent could rise and cause a malfunction.
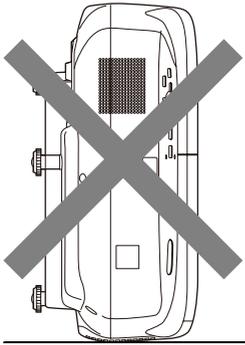
Do not project in the position shown on the left.

▌Notes on the Projection Surface

- For ultra-short throw projectors, if the projection surface is uneven, the image may appear warped. We recommend using screens that can easily be kept smooth such as a magnetic screen or a board screen.
- When powerful light of over 800 lux shines on the projection surface or around the projection surface (10 cm to the left or right, 10 cm from the bottom, or 3 cm from the top), the interactive function may not operate correctly. Close curtains to shut out direct sunlight, and turn off fluorescent lights. Or install the projector in a location that is not subject to direct sunlight or fluorescent lights.

■ Installing the Control Pad

When powering the Control Pad using batteries, make sure the installation location meets the following requirements.

- Install the Control Pad on the same surface as the projection screen.

  If the projection screen and the Control Pad installation point are uneven, install the Control Pad approximately 20 cm from the edge of the screen.
- Make sure there are no obstacles between the Control Pad and the projector (not including the Touch Unit).

In the following situations, use the optional Remote control cable set (ELPKC28) to supply power to the Control Pad from the projector.

- When the requirements mentioned above are not met.
- When the projection screen and the Control Pad installation point are uneven and the difference in height is more than 5 cm.
- When the projector is placed on a table and projecting to the screen.
- When multiple projectors are being used.

When installing the Control Pad, make sure there is enough space in the surrounding area as shown in the following figure. Because the top cover opens from the left-hand side, you need space on the left-hand side of the Control Pad.
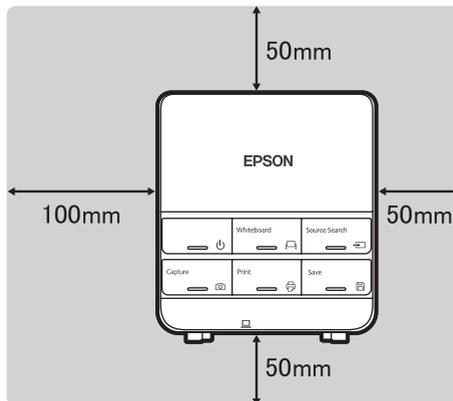
When supplying power using batteries, install the Control Pad within the shaded range shown in the following figure.

2.0m 1.75m 0.9m 0.7m 0.35m 0.25m

60inch

100inch

1m

1.5m

2.0m

EPSON

Whiteboard   Source Search

Capture   Print   Save

① : Center of screen

② : Top of projector

③ : Top of Control Pad

④ : Bottom of Control Pad

⑤ : Remote control light-emitting area
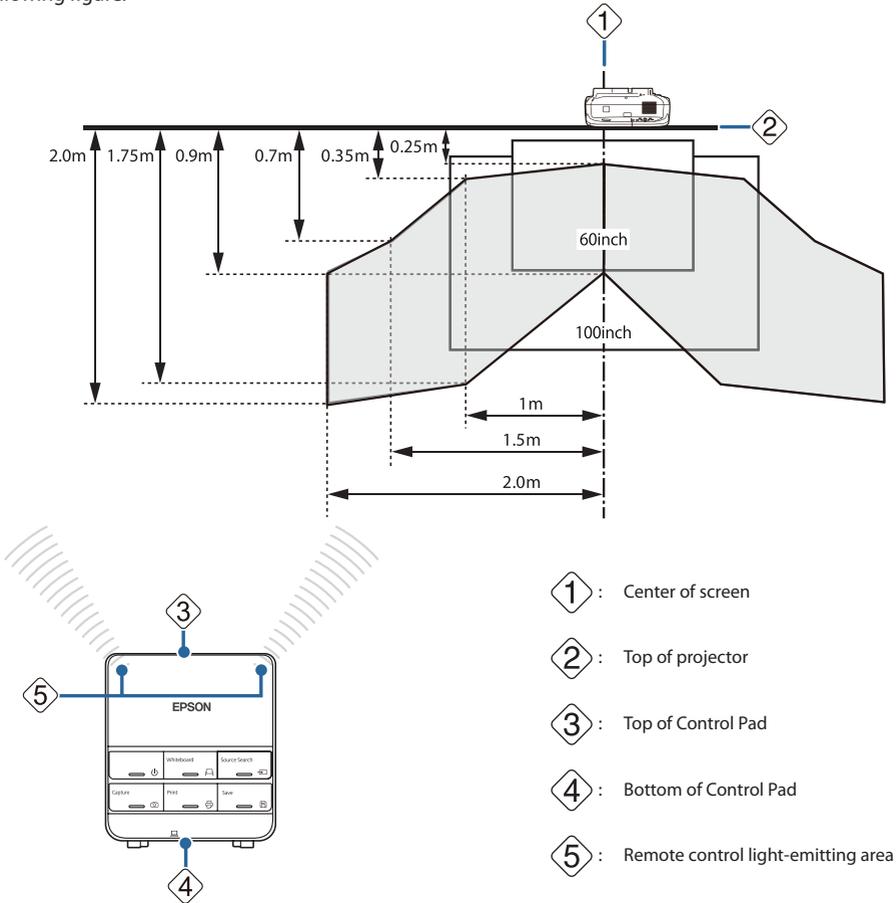
Align the top of the projector with the top of the Control Pad, and point the Control Pad's remote control light-emitting area at the projector.

When installing the Touch Unit, do not install the Control Pad on the projection screen and the surrounding area (shaded area in the following figure) (EB-1430Wi only). Otherwise, the Touch Unit will not operate correctly.

100 mm   100 mm

20 mm
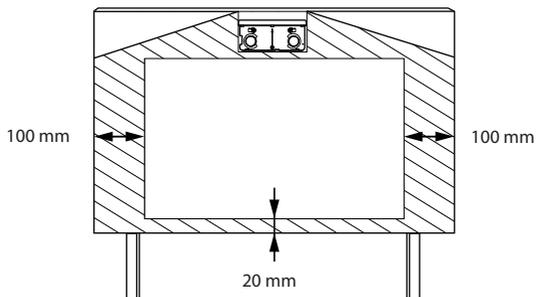
■ Installing the Touch Unit (EB-1430Wi only)

When using the Touch Unit, install the projector using one of the following methods. The Touch Unit cannot be used if another installation method is used.

- Mount on a wall or suspend it from a ceiling and project from in front of the screen.
- Install vertically on a table and project from the front of the table. When installing vertically on a table, you need the optional Interactive Table Mount (ELPMB29).

Before installing the Touch Unit, make sure the installation position meets the following conditions.

- The Touch Unit can be secured with magnets or with screws.
- A flat, smooth, unwarped surface with no unevenness on the screen surface of more than 5 mm.
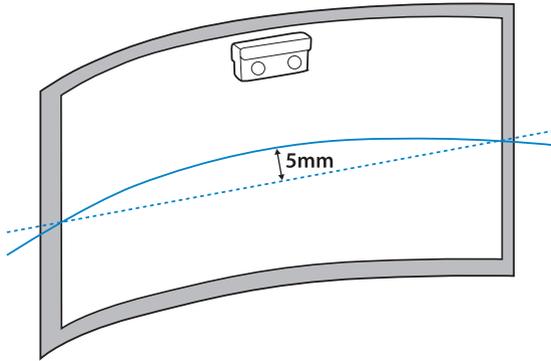
- When installing on a whiteboard, install the Touch Unit within the frame of the whiteboard.

Correct installation position	Incorrect installation position
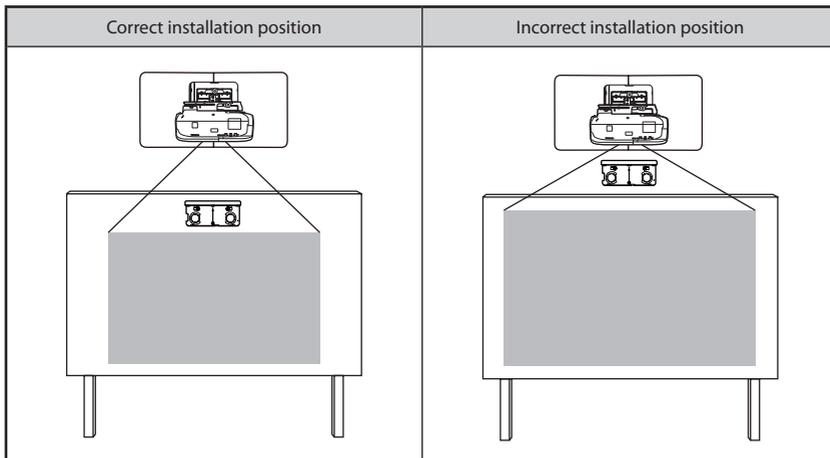
- When installing the Touch Unit, make sure there are no obstacles, such as cables, or protruding items such as whiteboard trays, holders, or thick frames in the shaded areas in the following figure. Otherwise, the Touch Unit will not operate correctly.

When installing the projector vertically on a table using the optional Interactive Table Mount (ELPMB29), make sure that the installation location meets the following conditions.

- There are no obstacles, such as cables, or protruding items such as whiteboard trays, holders, or thick frames in the shaded areas in the following figure.
- When selecting the table size, assume that the shaded area is a little larger.
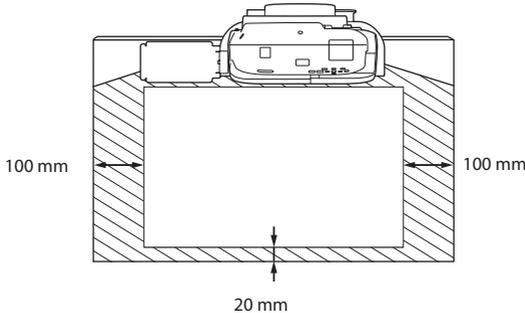
■ Installing Multiple Projectors

When installing multiple projectors and using the interactive function

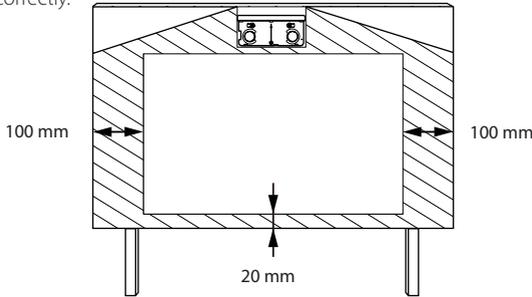When installing multiple projectors in the same room, interactive pen operations may become unstable. Interactive pen operations are stabilized by linking the projectors using cables.
Connect the optional remote control cable set (ELPKC28) to the SYNC ports on the projectors. After connecting, set [Extended] - [Easy Interactive Function] - [Advanced] - [Sync of Projectors] - [Wired] from the Configuration menu.

- The SYNC port has an IN and OUT socket. When you connect one end of the cable set to an IN socket, connect the other end to an OUT socket.
- When connecting three or more projectors, you do not need to connect the first projector to the last projector.

■ Serial Connection

<At the projector>   <At the computer>

RS-232C

⑨ ⑧ ⑦ ⑥
⑤ ④ ③ ② ①

○   ○   ○   ⑨ ⑧ ⑦ ⑥   ○
                                         ⑤ ④ ③ ② ①

Serial cable (cross)

<At the projector>   <At the computer>
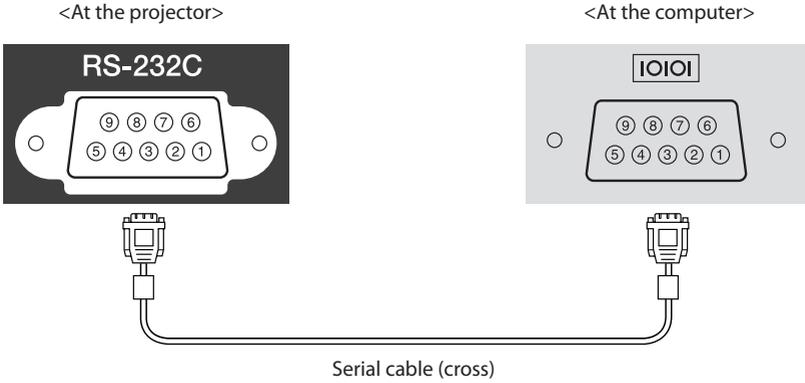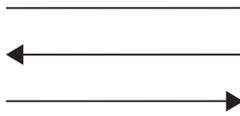
GND	5	────────────	5	GND
RD	2	◀────────────	3	TD
TD	3	────────────▶	2	RD

<Serial port specifications>
Connector shape: D-Sub 9-pin (male)
Projector input port name: RS-232C

<Communication specifications>

- Default baud rate setting: 9600 bps
- Data length: 8 bit
- Parity: None
- Stop-bit: 1 bit
- Flow control: None

■ Monitoring and Control

The projector can be monitored and controlled using the following methods. For more details, see the "User's Guide" supplied with the projector.

• ESC/VP21 commands

When the projector is connected to a computer with an RS-232C cable, you can control the projector with communication commands.

• Web control

By using the Web browser of a computer connected to the projector on a network, you can set the projector's functions and control the projector.

• PJLink commands

The projector complies with the PJLink Class1 standard established by the JBMIA. From a computer connected to the projector on a network, you can control the projector with PJLink commands.
For more details on PJLink, see the following Web site.
http://pjlink.jbmia.or.jp/english/

• EasyMP Monitor (Software provided by Epson)

Allows you to control multiple Epson projectors on a network. You can download EasyMP Monitor from the following Web site.
http://www.epson.com/

• Crestron RoomView®

This projector supports the control protocol provided by Crestron®. From a computer connected to the projector on a network, you can control the projector.

■ Standard Projector Control Commands

ESC/VP21 Command List

When the power ON command is transmitted to the projector, the power turns on and it enters warm-up mode. When the projector's power has turned on, a colon ":" (3Ah) is returned.

When a command is input, the projector executes the command and returns a ":", and then accepts the next command.

If the command being processed terminates abnormally, an error message is output and a ":" is returned.

Power on/off

Function	Command	Response Value	Content
Power on	PWR ON		
Power off	PWR OFF		
Power status query	PWR?	00	Standby status
		01	Projecting
		02	Warm-up status
		03	Cooling status
		04	Network monitoring status/communication status
		05	Error standby status
		09	Standby status (external output of images and audio is possible)

Switch input source

Function	Command	Setting Value/ Response Value	Content	
Signal selection	SOURCE SOURCE?	11	Computer	RGB
		14		Component
		1F		Auto
		30	HDMI1/MHL	
		A0	HDMI2	
		41	Video	
		51	USB Display	
		52	USB1	
		53	LAN	
		54	USB2	
		55	Whiteboard	
		F0	Switch to all input sources in order	
		F1	Switch to Computer, USB Display, USB1, LAN, USB2, and Whiteboard in order	
		F2	Switch to HDMI1, HDMI2, and Video in order	
A/V Mute ON/OFF	MUTE	ON	On	
		OFF	Off	

Capturing, Saving, and Printing the Projected Screen

Function	Command	Setting value	Content
Capture	KEY	AD	
Save		AE	
Print		AF	

Configuration menu

INC: Increase the setting value/DEC: Decrease the setting value/INIT: Return to defaults

Top Menu	Sub-menu		Web Control Setting Availability	ESC/VP21 Public Commands	
				Command	Setting Value/Response Value
Image	Color Mode		○	CMODE xx CMODE?	01: sRGB
					04: Presentation
					05: Theater
					06: Dynamic
					08: Sports
					0F: DICOM SIM
					10: Custom
					12: Whiteboard
					14: Photo
					INIT (settings only)
	Brightness		○	BRIGHT xxx BRIGHT?	0-255 INIT/INC/DEC (settings only)
	Contrast		○	CONTRAST xxx CONTRAST?	0-255 INIT/INC/DEC (settings only)
	Color Saturation		○	DENSITY xxx DENSITY?	0-255 INIT/INC/DEC (settings only)
	Tint		○	TINT xxx TINT?	0-255 INIT/INC/DEC (settings only)
	Sharpness		○	SHARP x1	x1: Adjustment value 0-255 INC/DEC/INIT
	Color Temp.		○	CTEMP xxx CTEMP?	0-255 INIT/INC/DEC (settings only)
	Advanced	Gamma	○	GAMMA xx GAMMA?	20:2
					21:1
					22:0
					23:-1
					24:-2
					INIT (settings only)
		RGB	○	RED xxx RED?	0-255 INIT/INC/DEC (settings only)
				GREEN xxx GREEN?	0-255 INIT/INC/DEC (settings only)
				BLUE xxx BLUE?	0-255 INIT/INC/DEC (settings only)
		RGBCMY	○	–	
	Auto Iris		○	–	
	Reset		○		

Top Menu	Sub-menu	Web Control Setting Availability	ESC/VP21 Public Commands	
			Command	Setting Value/Response Value
Signal	Auto Setup	○	–	
	Resolution	○		
	Tracking	○	TRACKING xxx	0-255
			TRACKING?	INIT/INC/DEC (settings only)
	Sync.	○	SYNC xxx	0-255
			SYNC?	INIT/INC/DEC (settings only)
	Position	○	HPOS xxx	0-255
			HPOS?	INIT/INC/DEC (settings only)
			VPOS xxx	
			VPOS?	
	Progressive	○	–	
	Noise Reduction	○	NRS xx	01: Off
			NRS?	02: NR1
				03: NR2
				INIT (settings only)
	HDMI Video Range	○	–	
	Input Signal	○		
	Video Signal	○		
	Aspect	○	ASPECT xx	00: Normal
			ASPECT?	20: 16:9
				30: Auto
				40: Full
				50: Zoom
				60: Native
				INIT (settings only)
				<Response value when "Auto" is selected>
				x1: Mode
				x2: Auto setting value (fixed at 30)
	Overscan	○	OVSCAN xx	00: Off
			OVSCAN?	02: 4%
				04: 8%
				A0: Auto
				INIT (settings only)
	Image Processing	○	–	
	Reset	○		

Top Menu	Sub-menu		Web Control Setting Availability	ESC/VP21 Public Commands	
				Command	Setting Value/Response Value
Settings	Keystone	H/V-Keystone	○	VKEYSTONE xxx VKEYSTONE? HKEYSTONE xxx HKEYSTONE?	0-255 INIT/INC/DEC (settings only)
		Quick Corner	○	QC x1 x2 x3 x4 x5 x6 x7 x8 (Set coordinates)	x1 - x8: 0 - 9999 Specify in the order: top left (x, y), top right (x,y), bottom right (x, y), bottom left (x, y)
				QC? (Acquire coordinate settings)	0-9999 Coordinates (x, y) for 4 points are divided into 4 lines and responded
				QCV x1 x2 x3 x4 x5 x6 x7 x8 (Vector settings)	x1 - x8: 0 - 99 Specify in the order: top left (x, y), top right (x,y), bottom right (x, y), bottom left (x, y)

	Split Screen		○	SPS x1 x2
				SPS?
					x1
					  01: Execute/Release Split Screen
					x2
					  00: Release Split Screen
					  01: Execute Split Screen

					x1
					  02: Screen Size Settings
					x2
					  00: Equal
					  01: Larger Left
					  02: Larger Right

					x1
					  03: Source (Screen Left)
					  04: Source (Screen Right)
					x2
					  See "Switch input source".

					x1 05: Swap Screens
					x1 00: Acquire all current values (information only)

					x1
					  06: Audio Source
					x2
					  00: Auto
					  01: Screen Left
					  02: Screen Right

					x1 INIT (settings only)
	Zoom		○	ZOOM xxx ZOOM?	Tele/Wide 0-255 INIT/INC/DEC (settings only)
	Image Shift		×	–	
	Control Panel Lock		○		
	Pointer Shape		×		
	Volume		○	VOL xxx VOL?	0-255 INIT/INC/DEC (settings only)
	Remote Receiver		○	–	
	User Button		×		
	Pattern		○		
	Reset		○		

Top Menu	Sub-menu		Web Control Setting Availability	ESC/VP21 Public Commands	
				Command	Setting Value/Response Value
Extended	Easy Interactive Function		×	–	
	Whiteboard Settings		○	–	
	Display	Messages	○	–	
		Display Background	○		
		Startup Screen	○		
		A/V Mute	○	MSEL xx MSEL?	00: Black 01: Blue 02: User's Logo INIT (settings only)
		Toolbars	×	–	
		Pen Mode Icon	×		
		Projector Control	×		
	User's Logo		×		
	Projection		○	VREVERSE xx VREVERSE? HREVERSE xx HREVERSE?	ON: Reversed status OFF: Normal status INIT (settings only)
	Operation	Direct Power On	○	–	
		High Altitude Mode	×		
		Startup Source Search	○	STSEARCH mode STSEARCH?	00: Off 01: On
		Auto Power On	○	–	
	A/V Settings	A/V Output	○	AVOUT x1 AVOUT?	00: Projecting 01: Always On INIT (settings only)

		Audio Settings	○	AUDIO mode [source]
				AUDIO? [source]
					Audio Output
					(Determined by omitted source setting)
					 mode: Change setting
					  00: Auto
					  01: Audio1
					  02: Audio2
					  03: Audio3
					  INIT (settings only)
					HDMI Audio Output
					 mode: Change setting
					  00: HDMI
					  01: Audio1
					  02: Audio2
					  03: Audio3
					  INIT (settings only)
					source: Target source
					  30: HDMI1
					  A0: HDMI2

	USB Type B		×	–	
	Time/Schedule Settings		○		
	Language		×		
	Reset		○		

Top Menu	Sub-menu		Web Control Setting Availability	ESC/VP21 Public Commands	
				Command	Setting Value/Response Value
ECO menu	Power Consumption		○	LUMINANCE xx LUMINANCE?	00: Normal 01: ECO 03: Auto INIT (settings only)
	Light Optimizer		○		
	Sleep Mode		○	–	
	Sleep Mode Timer		○		
	A/V Mute Timer		○		
	Standby Mode		○		
	ECO Display		○	PSDISP mode PSDISP?	00: Off 01: On
	Reset		○	–	

Top Menu	Sub-menu		Web Control Setting Availability	ESC/VP21 Public Commands	
				Command	Setting Value/Response Value
Info	Projector Information	Lamp Hours	○	LAMP?	–
		Source	○	SOURCE?	See "Switch source" for the response values.
		Input Signal	○		–
		Resolution	○	RESOL?	00: Auto F0: Wide F1: Normal INIT (settings only)
		Video Signal	○		
		Refresh Rate	○		
		Sync Info	○	–	
		Status	○		
		Serial Number	○		
		Event ID	○		
	Version		○		–

Top Menu	Sub-menu	Web Control Setting Availability	ESC/VP21 Public Commands	
			Command	Setting Value/Response Value
Reset	Reset All	×	INITALL	–
	Reset Lamp Hours	×		–

Whiteboard settings (Web Control)

Top Menu	Sub-menu	
Administrator Settings	Clock Display Settings	Display Format
		Date
		Time
	Keyboard Settings	Keyboard Layout
	Policy Settings	Capture
		Print
		Scan
		USB Memory Stick
		Network Folder
		Mail
		Shared Whiteboard
	Internal Storage	Use the Internal Storage
		Auto Delete Saved Data
		Backup Time for Saved Data
	Template Settings	Protect User Templates
		Template Number
		Template File
	Printer Settings	Default Printer
		Quality
		Paper Size
	Network Printer Settings	Job username
		IP Address
		Printer Type
	Save Settings	Default Save Location
	Network Folder Settings	UNC Address
		User Name
		Password
	Mail	SMTP Server
		Authentication
		Port Number
		User Name
		Password
		From
		Default e-mail Address
	Address Book Settings (Only available by Web Control)	Address Book File
		Delete Address Book

The following items are unavailable by Web Control.

- Administrator Password

- Delete All Internal Data

- Get printer information

Network menu (Web Control)

Top Menu	Sub-menu
Basic	Projector Name
	Web Remote Password
	Projector Keyword
Wireless LAN	Wireless LAN Power
	Connection Mode
	SSID Auto Setting
	SSID
	DHCP
	IP Address
	Subnet Mask
	Gateway Address
	DNS Server
	WINS Server
	SSID Display
	IP Address Display
Security	Security
	Passphrase
	EAP Method
	User Name
	Password
	Client Certificate
	Verify Server Certificate
	CA Certificate
	Setting RADIUS Server Name
	RADIUS Server Name
	Verify Exp. date of Server Cert.
Wired LAN	DHCP
	IP Address
	Subnet Mask
	Gateway Address
	DNS Server
	WINS Server
	IP Address Display
Administrator Setup	Network Host Name
	PJLink Password
	Web Control Password
	Monitor Password
	Email Settings (Email Notification Function)
	Manage Certificate
	SNMP
	Priority Gateway
	AMX Device Discovery
	Bonjour
	EPSON Message Broadcasting

The following items are unavailable by Web Control.

- Wi-Fi Protected Setup

- Search Access Point

- Administrator Password

- Secure HTTP

- Crestron RoomView

PJLink Command List

See the following for more information on controlling the projector from a computer using PJLink protocols.

Function	Command	Setting Value/Response Value		Content	Notes
Power control instruction	POWR	0		Power-off (Standby)	
		1		Power-on (Lamp-on)	
Power status query	POWR?	0		Power-off (Standby)	
		1		Power-on (Lamp-on)	
		2		Cooling status	
		3		Warm-up status	
Input switch instruction Input switch query	INPT INPT?	11		Computer	
		21		Video	
		32		HDMI1	
		33		HDMI2	
		41		USB1	
		42		USB2	
		52		LAN	
		53		USB Display	
		55		Whiteboard	
Input toggling list query	INST?	11		Computer	
		21		Video	
		32		HDMI1	
		33		HDMI2	
		41		USB1	
		42		USB2	
		52		LAN	
		53		USB Display	
		55		Whiteboard	
Error status query	ERST?	First character	2	Fan error	
		Second character	1	Lamp life warning	"0" is displayed when no error has occurred.
			2	Lamp error Lamp failure	
		Third character	1	Temperature warning	
			2	Temperature error	
Mute instruction Mute status query	AVMT AVMT?	30		A/V mute off	Does not support video mute off/on (10/11) or audio mute off/on (20/21).
		31		A/V mute on	
Lamp number/ lighting hour query	LAMP?	First number (1 to 5)	0 to 99999	Cumulative lighting time of the lamp	
		Second number	0	Lamp turned off	
			1	Lamp turned on	
Projector name query	NAME?	*		*	* Displays the name set in Network - Basic - Projector Name from the projector's Configuration menu.
Manufacture name information query	INF1?	EPSON		Manufacture name	
Product name information query	INF2?	EPSON 1430		EB-1430Wi	
		EPSON 1420		EB-1420Wi	
Class information query	CLSS?	1		Class information	

- The password for PJLink is set in Network - Administrator Settings - PJLink Password from the projector's Configuration menu. If you do not want to use a password, leave PJLink Password blank.
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