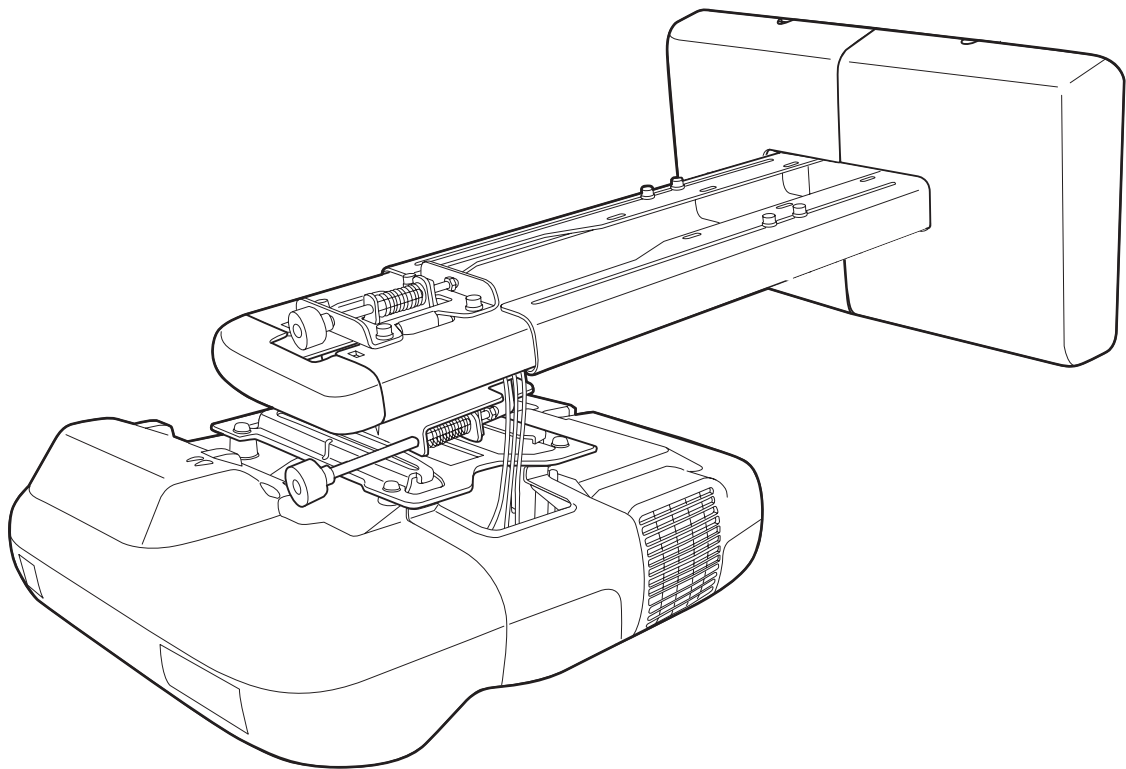


**EPSON**  
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# Installation Guide





# Safety Instructions



For your safety, read all the instructions in this guide before using the setting plate. Incorrect handling that ignores instructions in this guide could damage the setting plate or could result in personal injury or property damage. Keep this installation guide at hand for future reference.

Read the User's Guide and Safety Instructions for your projector and follow the instructions in these documents.









## Explanation of Symbols









The warning marks shown below are used throughout this installation guide to prevent personal injury or property damage. Make sure you understand these warnings when reading this installation guide.





 <b>Warning</b>	This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.
 <b>Caution</b>	This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

	Symbol indicating an action that must not be done
	Symbol indicating an action that should be done

## Safety Precautions for Installation

 <b>Warning</b>	
<p><b>The setting plate is designed specifically for mounting a projector to a wall. If anything other than a projector is mounted, the weight may result in damage.</b></p> <p>If the setting plate falls, it could cause personal injury or property damage.</p>	
<p><b>The installation work (wall mounting) should be performed by specialists who have technical knowledge and ability. Incomplete or incorrect installation could cause the setting plate to fall and cause personal injury or property damage. Contact the customer support office listed on the Epson Projector Contact List in the User's Guide for your projector when installing the setting plate.</b></p>	
<p><b>Follow the instructions in this guide when installing the setting plate.</b></p> <p>If the instructions are not followed, the setting plate may fall, resulting in personal injury or an accident.</p>	
<p><b>Handle the power cable carefully.</b></p> <p>Incorrect handling may cause fire or electric shock. Observe the following precautions when handling:</p> <ul style="list-style-type: none"> <li>• Do not handle the power plug with wet hands.</li> <li>• Do not use a power cable that is damaged or modified.</li> <li>• Do not pull the power cable with too much force when routing the cable through the setting plate.</li> </ul>	
<p><b>When you mount the projector on the wall with the setting plate, the wall requires enough strength to hold the projector and the setting plate. Confirm the mass of the projector and the setting plate before installation, and maintain the strength of the wall. If the wall is not strong enough, reinforce the wall before installation.</b></p>	
<p><b>Do not install the setting plate in a place where it might be subjected to vibration or shock.</b></p> <p>Vibration or shock could cause damage to the projector or mounting surface. It could also cause the setting plate or projector to fall and cause personal injury or property damage.</p>	
<p><b>Install the setting plate so that it can sufficiently support the mass of the projector and setting plate, and resist any horizontal vibration. Use M8 nuts and bolts.</b></p> <p>Nuts and bolts smaller than M8 could cause the setting plate to fall. Epson takes no responsibility for any damage or injury caused by incorrect installation.</p>	

 <b>Warning</b>	
<p><b>The installation work should be performed by at least two qualified service personnel. If you need to loosen any screws during installation, be careful not to drop the setting plate.</b></p> <p>If the setting plate or projector falls, it could cause personal injury or property damage.</p>	
<p><b>Inspect the setting plate on a regular basis to ensure there are no broken parts or loose screws.</b></p> <p>If there are any broken parts, stop using the setting plate immediately. If the setting plate or projector falls, it could cause personal injury or property damage.</p>	
<p><b>Never modify the setting plate.</b></p>	
<p><b>Do not hang on the setting plate or hang a heavy object on the setting plate.</b></p> <p>If the projector or setting plate falls, it could cause personal injury or property damage.</p>	
<p><b>If you use adhesives to prevent the screws from loosening or things such as lubricants or oils on the slide plate fixing part of the projector, the case may crack and cause the projector to fall, resulting in personal injury or property damage. Do not use adhesives, lubricants, or oils to install or adjust the setting plate.</b></p>	
<p><b>Tighten all screws firmly after adjustment.</b></p> <p>If the screws are not tightened firmly, the projector or setting plate may fall and cause personal injury or property damage.</p>	
<p><b>Never loosen the bolts and nuts after installation.</b></p> <p>Confirm that the screws have not become loose on a regular basis. If you find any loose screws, tighten them firmly. If the screws are not tightened firmly, the projector or setting plate may fall and cause personal injury or property damage.</p>	

 <b>Caution</b>	
<p><b>Do not install the setting plate in a location where the operating temperature for your projector model may be exceeded.</b></p> <p>Such an environment may damage the projector.</p>	
<p><b>Install the setting plate in a place free from excessive dust and humidity to prevent the lens or optical components from becoming dirty.</b></p>	
<p><b>Do not use excessive force when adjusting the setting plate.</b></p> <p>The setting plate may break, resulting in personal injury.</p>	

## Place to Install the Setting Plate

- Carry out the power supply wiring work for the installation location of the setting plate in advance.
- Install the projector away from other electric devices such as fluorescent lights or air conditioners. Some kinds of fluorescent lights could interfere with the remote control of the projector.
- It is recommended to keep connection cable length less than 20 meters to reduce external noise.
- Install the setting plate in a place free from excessive dust and humidity to prevent the lens or optical components from becoming dirty.

## About This Installation Guide

This guide describes how to mount the short-throw projector EB-460i/460/450Wi/450W/440W to a wall using the exclusive setting plate.

**1 Package Contents**  **Page 5**



**2 Specifications**  **Page 6**



**3 Connecting Devices**  **Page 7**



**4 Projection Distance Table**  **Page 8**



**5 Installation Procedure**  **Page 11**

- (1) Install the wall plate on the wall
- (2) Determine the projection distance and pull out the slider
- (3) Attach the setting plate to the wall plate
- (4) Secure the projector to the setting plate
- (5) Connect the power cable and other cables to the projector



**6 Adjusting the Projection Screen**  **Page 15**

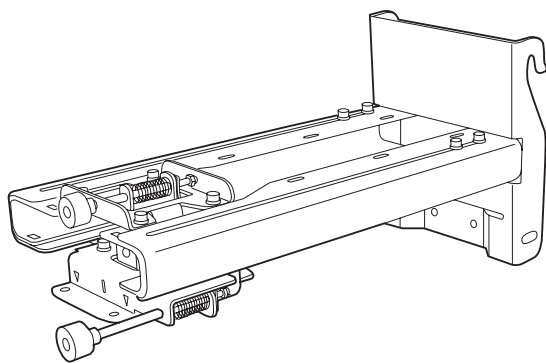
- (1) Turn on the projector
- (2) Change the aspect ratio
- (3) Display the test pattern
- (4) Adjust the focus
- (5) Use the top adjustment dial to adjust the vertical tilt
- (6) Use the right adjustment dial to adjust the horizontal rotation
- (7) Use the left adjustment dial to adjust the horizontal roll
- (8) Adjust the vertical slide
- (9) Adjust the forward/backward slide
- (10) Turn off the display of the test pattern



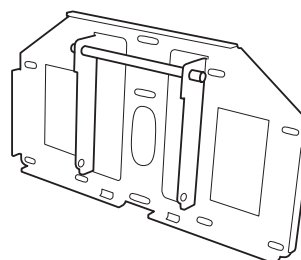
**7 Attaching the Covers**  **Page 19**

- (1) Attach the wall plate cover and end cap
- (2) Attach the cable cover to the projector

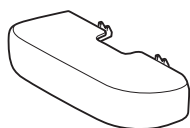
# 1. Package Contents



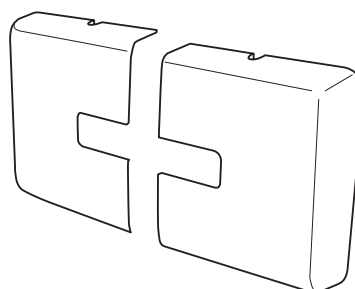
**Setting plate**



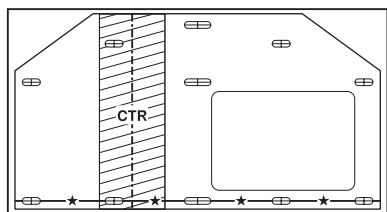
**Wall plate**



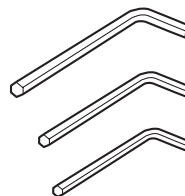
**End cap**



**Wall plate cover**



**Template sheet  
(for installing the wall plate)**







**Hexagon wrenches (for M4, M5, and M8)**

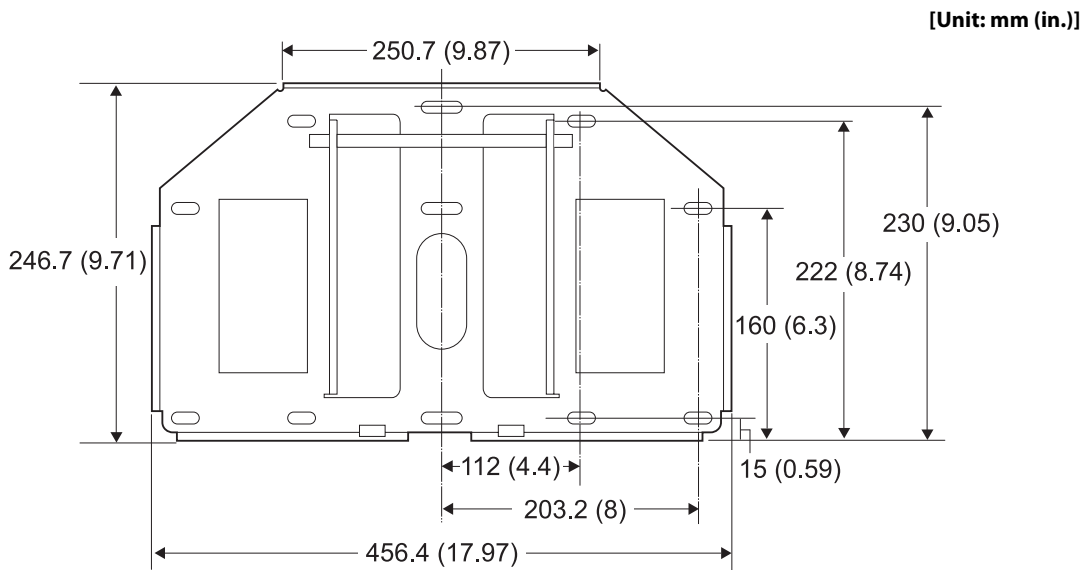
Shape	Name	Quantity	Application
	M8 x 15 mm hexagon socket head cap bolt with washer	2	For installing setting plate
	M5 x 12 mm hexagon socket head cap bolt with washer	2	For securing projector
	M4 x 12 mm hexagon socket head cap bolt without washer	2	For installing wall plate cover

- Use the bolts supplied with the setting plate to install it, as directed in this guide. Do not substitute these bolts with any other types.
- Use commercially available M8 x 50 mm anchors (at least 3) or 8 x 80 mm lag bolts (at least 3) to attach the wall plate to the wall.
- Gather the tools and parts you need before you begin installation.

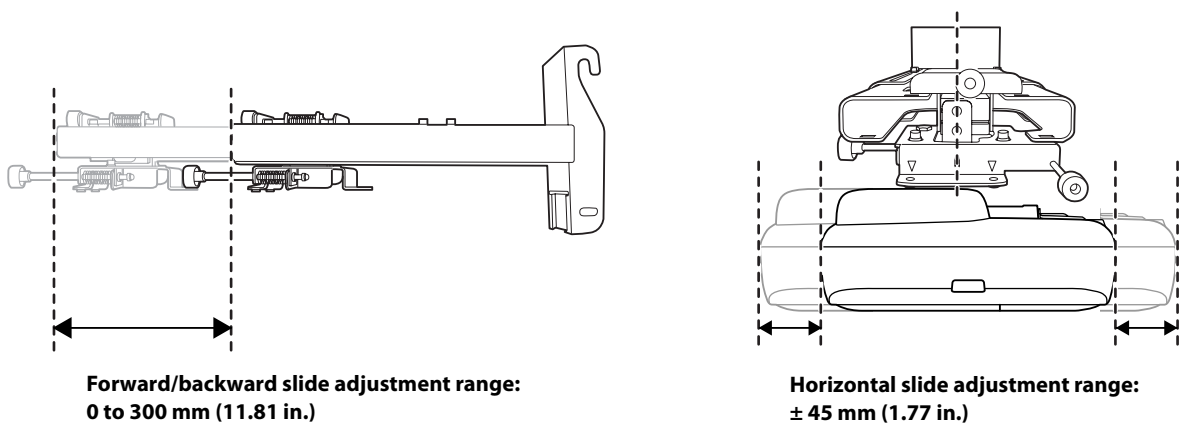
## 2. Specifications

Item	Specification	Remark	Reference Page
Setting plate mass	Approx. 6.3 kg (13.89 lb.)	Wall plate (2.2 kg [4.85 lb.]) Covers and cap (0.47 kg [1.04 lb.])	
Forward/backward slide adjustment range	0 to 300 mm (11.81 in.)		Refer to the figure below
Vertical slide adjustment range	$\pm 4^\circ$	Minimum: 28 mm (1.10 in.) Maximum: 42.5 mm (1.67 in.)	 p. 18
Vertical tilt adjustment range	$\pm 5^\circ$	Fine adjustments possible with adjustment dial	 p. 16
Horizontal rotation adjustment range	$\pm 5^\circ$	Fine adjustments possible with adjustment dial	 p. 17
Horizontal roll adjustment range	$\pm 3^\circ$	Fine adjustments possible with adjustment dial	 p. 17
Horizontal slide adjustment range	$\pm 45$ mm (1.77 in.)		Refer to the figure below

### Wall plate



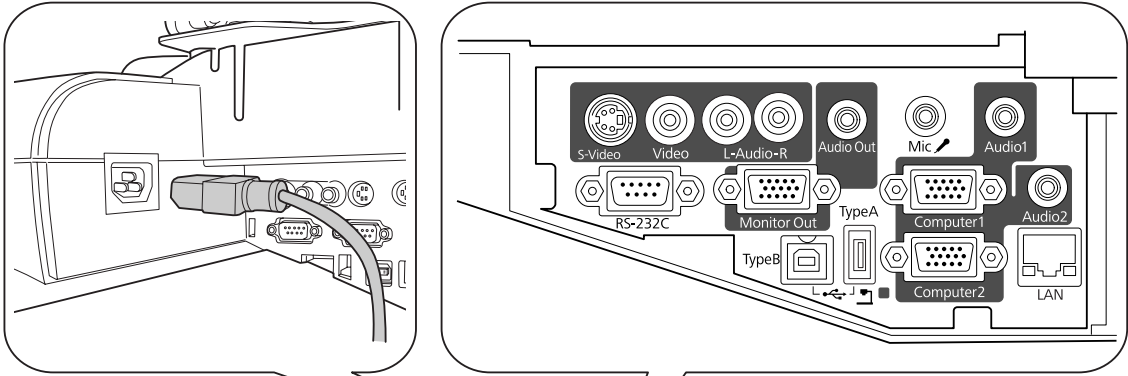
### Setting plate adjustment range



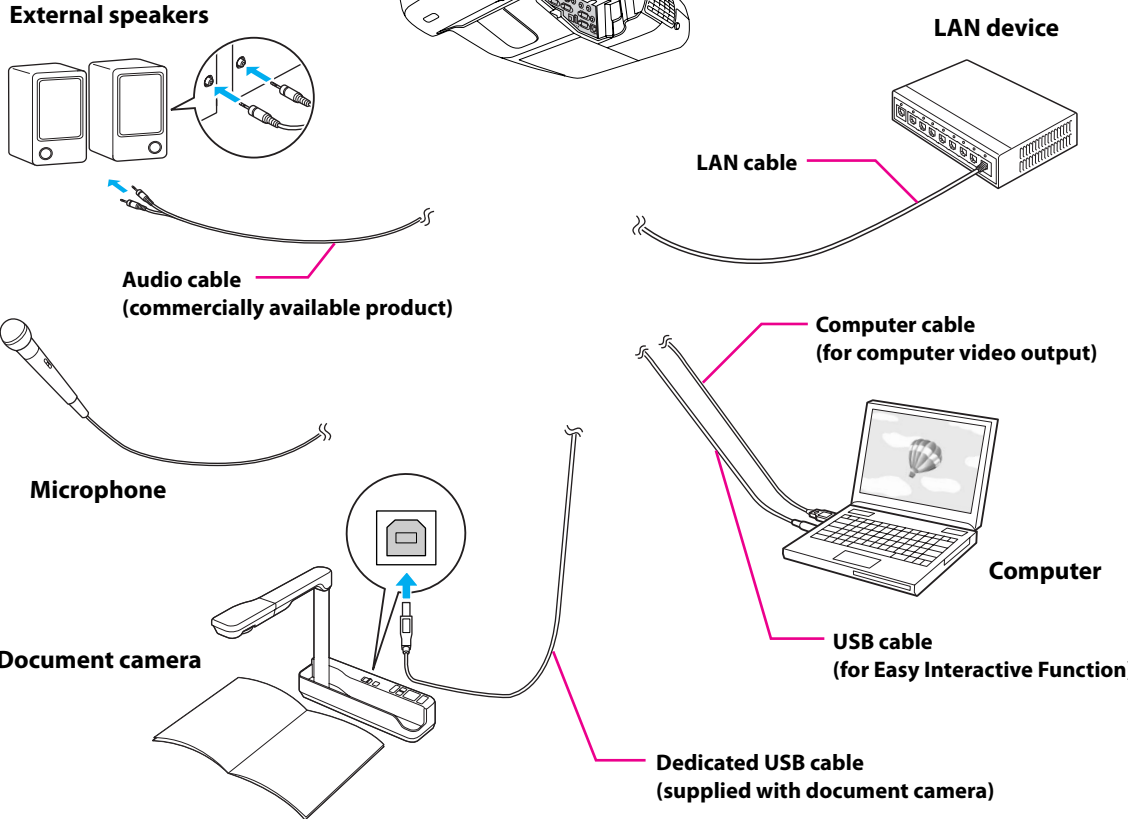
# 3.Connecting Devices

Prepare a power cable, computer cable, USB cable, and so on at the location where the setting plate is to be installed.

Prepare all necessary cables for devices, such as a document camera or microphone, that you will connect to the projector.



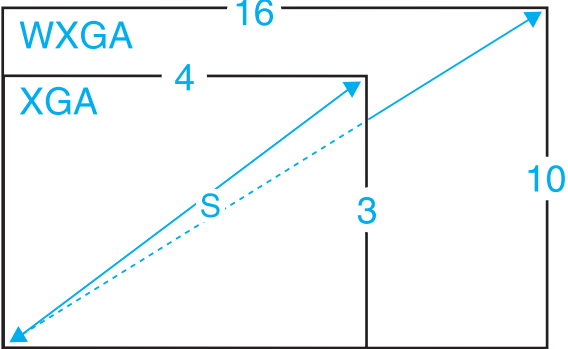
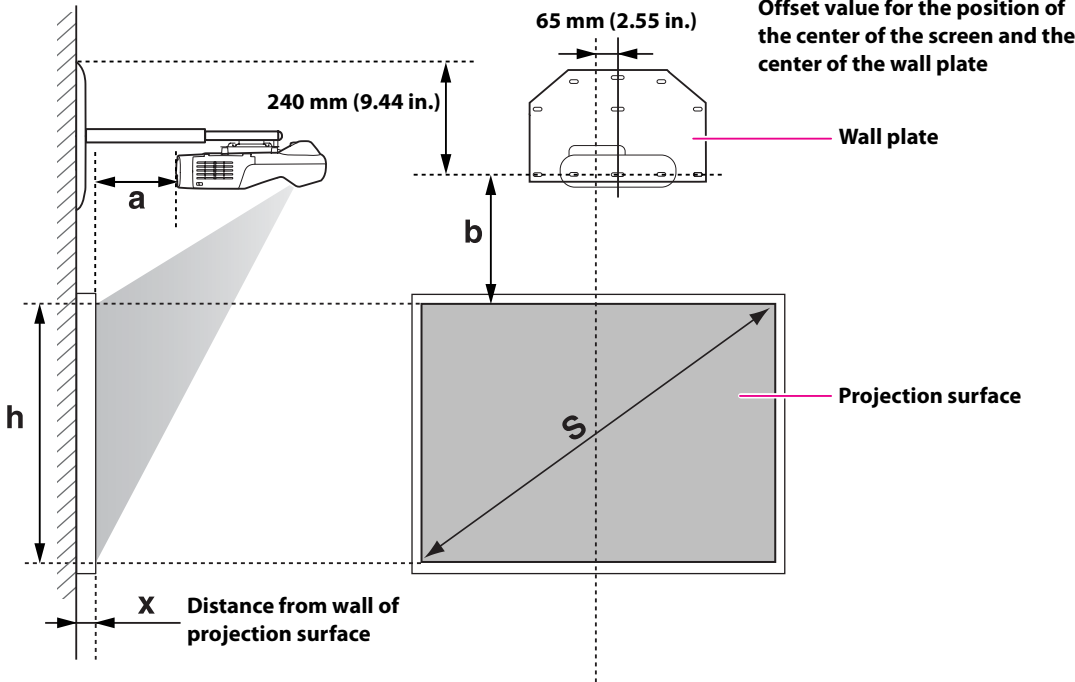
## Connection Example



# 4. Projection Distance Table

Refer to the table below and install the setting plate and projector to project images at an appropriate size on the projection surface. The values are only rough estimates.

The recommended range for the projection distance (a) is 7 to 37 cm (2.76 to 14.57 in.).





**EB-460i/460 (4:3 Aspect Ratio)**

Unit: mm (in)

<b>S</b> Screen Size		<b>a</b> Projection Distance Minimum (Wide)	<b>b</b> Distance Between Projection Surface and Wall Plate	<b>h</b> Height of Projection Surface	<b>Interactive Whiteboard</b>
63"	1280x960 (50.39x37.80)	71 (2.81)	184 (7.25)	960 (37.80)	Hitachi StarBoard FX-63
64"	1300x975 (51.18x38.40)	79 (3.11)	187 (7.34)	975 (38.40)	SMART Board 660 Promethean ActivBoard 164
70"	1422x1067 (55.98x42.00)	125 (4.92)	201 (7.92)	1067 (42.00)	
77"	1564x1173 (61.57x46.20)	178 (7.02)	218 (8.59)	1173 (46.20)	Hitachi Cambridge Board 77 Hitachi StarBoard FX-77 SMART Board 680
77.5"	1574x1181 (61.97x46.50)	182 (7.17)	219 (8.64)	1181 (46.50)	RM ClassBoard2 77.5 INTERWRITE® BOARD 1077
78"	1585x1189 (62.40x46.80)	186 (7.32)	221 (8.69)	1189 (46.80)	PolyVision TS610 Promethean ActivBoard 178 / 378
80"	1625x1219 (63.98x48.00)	201 (7.92)	226 (8.88)	1219 (48.00)	
87"	1768x1326 (69.61x52.20)	255 (10.02)	243 (9.55)	1326 (52.20)	
90"	1829x1372 (72.01x54.00)	277 (10.92)	250 (9.84)	1372 (54.00)	
100"	2032x1524 (80.00x60.00)	354 (13.93)	274 (10.80)	1524 (60.00)	
102"	2072x1554 (81.57x61.20)	369 (14.53)	279 (10.99)	1554 (61.20)	

**EB-450Wi/450W/440W (4:3 Aspect Ratio)**

Unit: mm (in)

<b>S</b> Screen Size		<b>a</b> Projection Distance Minimum (Wide)	<b>b</b> Distance Between Projection Surface and Wall Plate	<b>h</b> Height of Projection Surface	<b>Interactive Whiteboard</b>
53"	1077x808 (42.40x31.80)	76 (3.00)	266 (10.49)	808 (31.80)	
60"	1220x914 (48.03x36.00)	140 (5.52)	297 (11.71)	914 (36.00)	
63"	1280x960 (50.39x37.80)	168 (6.60)	311 (12.24)	960 (37.80)	Hitachi StarBoard FX-63
64"	1300x975 (51.18x38.40)	177 (6.96)	315 (12.41)	975 (38.40)	SMART Board 660 Promethean ActivBoard 164
70"	1422x1067 (55.98x42.00)	232 (9.12)	342 (13.46)	1067 (42.00)	
77"	1564x1173 (61.57x46.20)	296 (11.65)	373 (14.69)	1173 (46.20)	Hitachi Cambridge Board 77 Hitachi StarBoard FX-77 SMART Board 680
77.5"	1574x1181 (61.97x46.50)	300 (11.83)	375 (14.78)	1181 (46.50)	RM ClassBoard2 77.5 INTERWRITE® BOARD 1077
78"	1585x1189 (62.40x46.80)	305 (12.01)	378 (14.86)	1189 (46.80)	PolyVision TS610 Promethean ActivBoard 178 / 378
80"	1625x1219 (63.98x48.00)	323 (12.73)	386 (15.21)	1219 (48.00)	
85"	1726x1295 (67.95x51.00)	369 (14.53)	409 (16.09)	1295 (51.00)	

**EB-460i/460/450Wi/450W/440W (16:10 Aspect Ratio)**

Unit: mm (in)

<b>S</b> Screen Size		<b>a</b> Projection Distance Minimum (Wide)	<b>b</b> Distance Between Projection Surface and Wall Plate	<b>h</b> Height of Projection Surface	Interactive Whiteboard
60"	1293x808 (50.91x31.80)	76 (3.00)	266 (10.49)	808 (31.80)	
70"	1507x942 (59.33x37.10)	157 (6.18)	306 (12.03)	942 (37.10)	
78"	1680x1050 (66.14x41.34)	222 (8.73)	337 (13.27)	1050 (41.34)	PolyVision TS 600 / TS610 / TSL610
80"	1723x1077 (67.83x42.40)	238 (9.36)	345 (13.58)	1077 (42.40)	
87"	1873x1171 (73.74x46.11)	294 (11.59)	372 (14.66)	1171 (46.11)	SMART Board 685 / Promethean ActivBoard 387
90"	1939x1212 (76.34x47.70)	319 (12.55)	384 (15.13)	1212 (47.70)	
96"	2067x1292 (81.38x50.88)	367 (14.46)	408 (16.06)	1292 (50.88)	

**EB-460i/460/450Wi/450W/440W (16:9 Aspect Ratio)**

Unit: mm (in)

<b>S</b> Screen Size		<b>a</b> Projection Distance Minimum (Wide)	<b>b</b> Distance Between Projection Surface and Wall Plate	<b>h</b> Height of Projection Surface	Interactive Whiteboard
58"	1283x722 (50.51x28.44)	73 (2.87)	305 (12.00)	722 (28.44)	
60"	1328x747 (52.28x29.42)	90 (3.53)	314 (12.38)	747 (29.42)	RM ClassBoard2 60
65"	1440x809 (56.69x31.87)	131 (5.16)	338 (13.31)	809 (31.87)	
70"	1550x872 (61.02x34.32)	173 (6.80)	362 (14.24)	872 (34.32)	
71"	1571x884 (61.85x34.81)	181 (7.13)	366 (14.43)	884 (34.81)	INTERWRITE® BOARD 1071
80"	1770x996 (69.69x39.22)	256 (10.07)	409 (16.10)	996 (39.22)	
82"	1815x1021 (71.46x40.20)	272 (10.73)	418 (16.48)	1021 (40.20)	Hitachi StarBoard FX-82W
85"	1881x1058 (74.06x41.67)	297 (11.71)	433 (17.03)	1058 (41.67)	INTERWRITE® BOARD 1085
90"	1993x1121 (78.46x44.12)	339 (13.34)	456 (17.97)	1121 (44.12)	
93"	2058x1158 (81.02x45.59)	364 (14.32)	471 (18.52)	1158 (45.59)	

The value may differ depending on the location where you place the projector.

When using EB-450Wi/450W/440W to project images having 4:3 aspect ratio, the images are resized automatically and the quality of the projected images may decrease.

## 5. Installation Procedure

Make sure to follow the steps below to install the setting plate. If you ignore these steps, the setting plate could fall and cause personal injury or property damage.

**The maximum combined mass of the setting plate and the projector is approximately 15.2 kg (33.5 lb). When you install the setting plate, calculate the permissible weight, carefully check the construction, material, and strength of the wall, and perform the installation properly using the most appropriate method.**

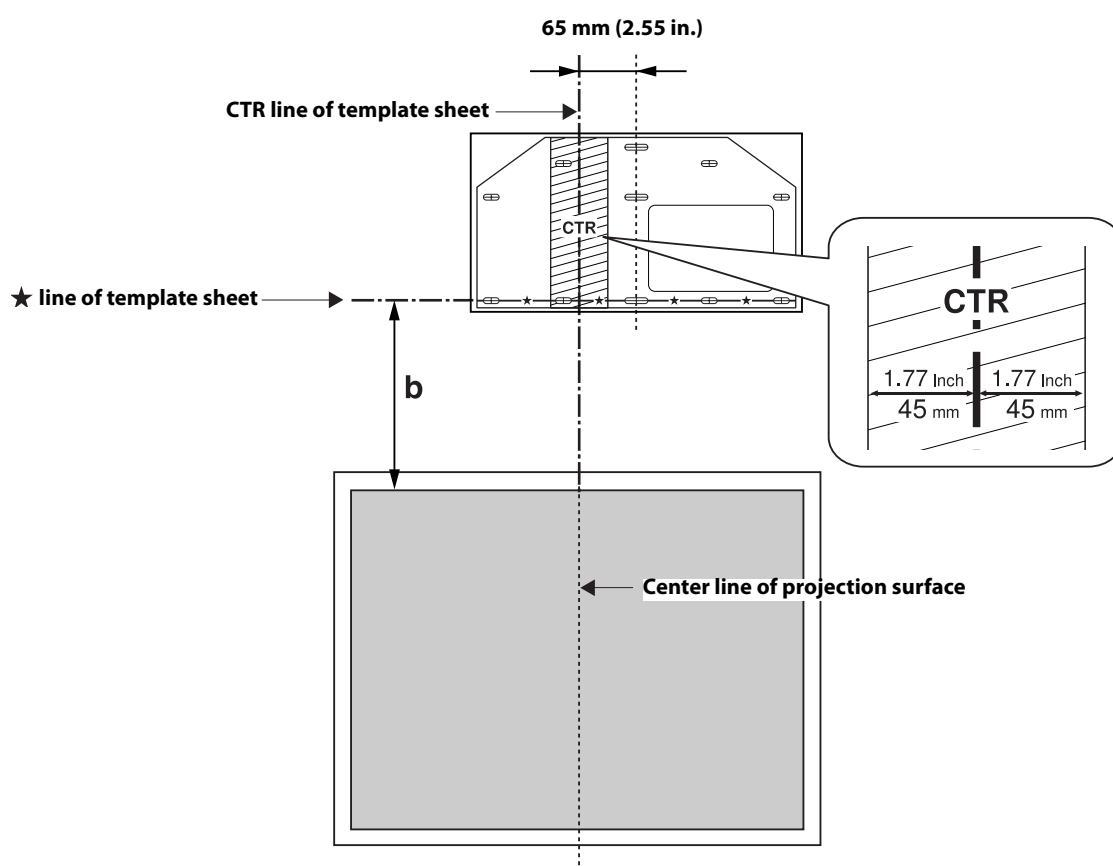
### 1 Install the wall plate on the wall

(1) Determine the template sheet position.

- From the projection distance table, confirm the screen size (S) and the distance between the projection surface and wall plate (b).
- Align the CTR line (vertical) of the template sheet with the center line (vertical) of the projection surface.

Confirm where the beams are within the wall, and shift the position left or right as necessary. (The position can be shifted horizontally left or right from the center line of the projection surface by up to 45 mm [1.77 in.])

Align the ★ line (horizontal) of the template with the height of (b).

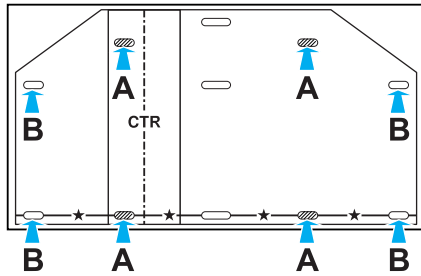


(2) Attach the template sheet to the wall.

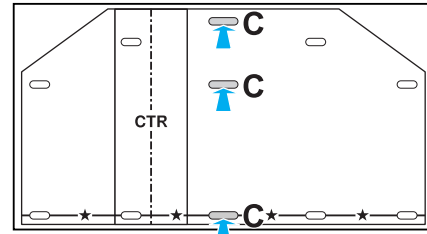
(3) Make mounting holes in the wall in the required locations.

The wall plate needs to be secured by commercially available anchors or lag bolts in the following places. It is recommended that the wall plate be secured in at least three places.

- If securing the wall plate in four places, make the holes indicated by A or B in the figure.
- If securing the wall plate in three places, make the holes indicated by C in the figure.



Four mounting holes



Three mounting holes

(4) Remove the template sheet.

(5) Mount the wall plate on the wall.

### **Warning**

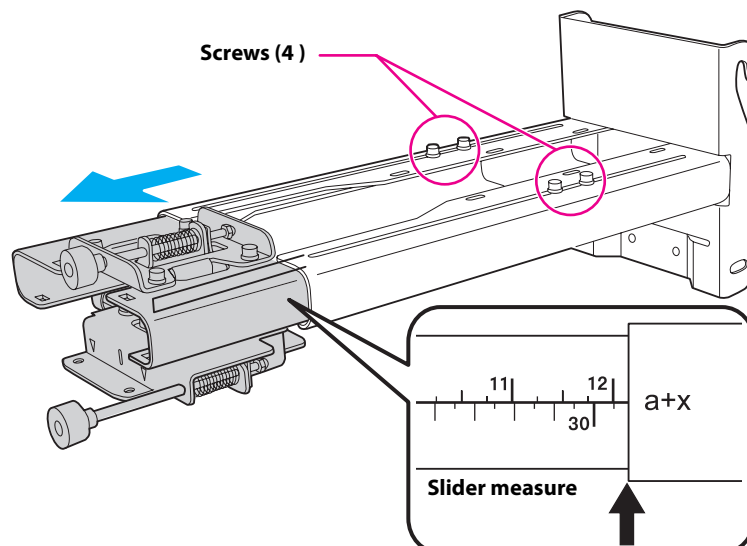
- ❑ **When you mount the projector on the wall with the setting plate, the wall needs to be strong enough to hold the projector and the setting plate. Confirm the mass of the projector and the setting plate before installation, and maintain the strength of the wall. If the wall is not strong enough, reinforce the wall before installation.**
- ❑ **Install the setting plate so that it can sufficiently support the mass of the projector and setting plate, and resist any horizontal vibration. Use M8 nuts and bolts. Nuts and bolts smaller than M8 could cause the setting plate to fall.**
- ❑ **Epson takes no responsibility for any damage or injury caused by incorrect installation.**

## **2 Determine the projection distance and pull out the slider**

(1) From the projection distance table, calculate the distance (a) from the projection surface to the front of the projector.

(2) Loosen the four screws and pull out the slider on the setting plate.

Align the slider with the mark slider measure that is a distance (a+x) equivalent to the distance (a) plus the thickness of the projection screen (x).



### 3 Attach the setting plate to the wall plate

- (1) Hang the setting plate hook onto the wall plate bar (1).
- (2) Lift up the setting plate and pass the cables through it (2).

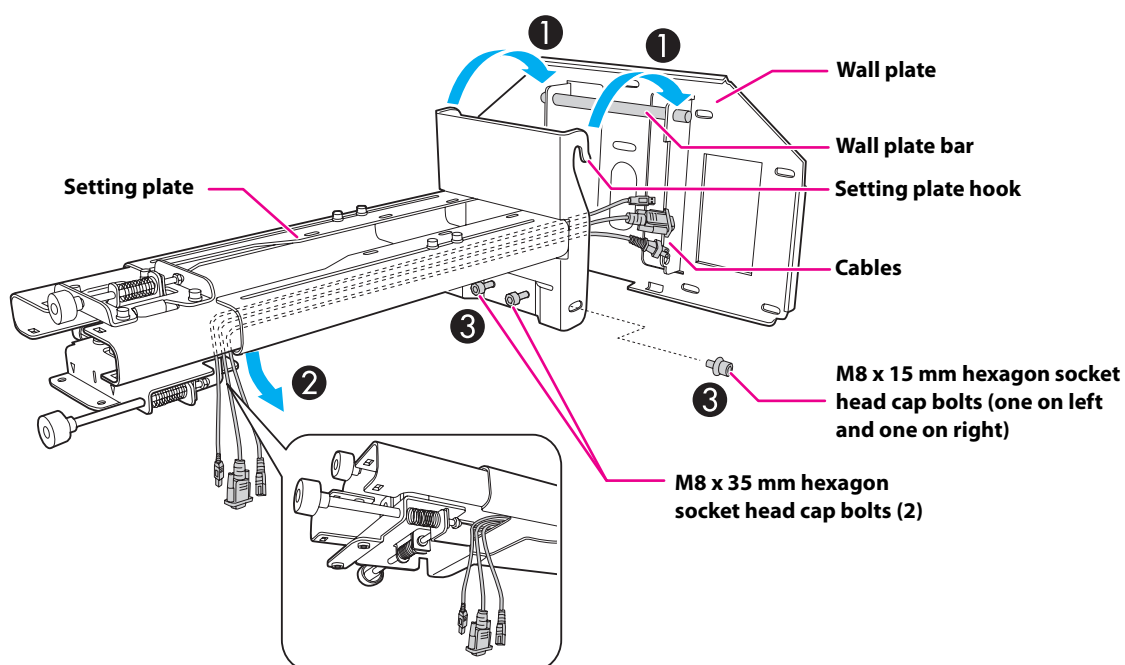
#### **⚠ Caution**

Take care not to trap the cables between the setting plate and wall plate.

- (3) Tighten the two M8 x 15 mm hexagon socket head cap bolts and two M8 x 35 mm hexagon socket head cap bolts supplied with the setting plate so that the setting plate becomes vertical against the wall (3).

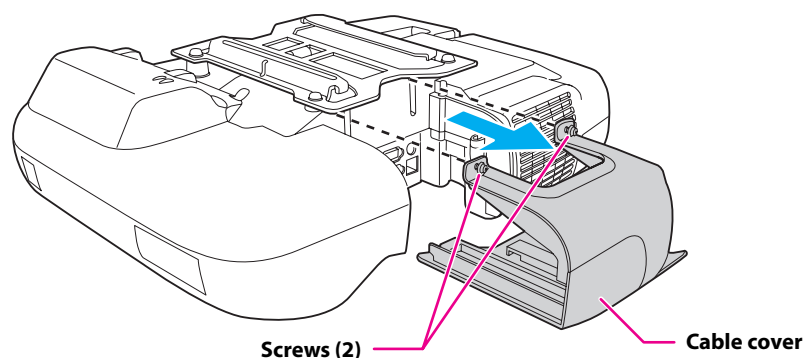
Use the two M8 x 35 mm hexagon socket head cap bolts to adjust the vertical slide.

🔧 p. 18

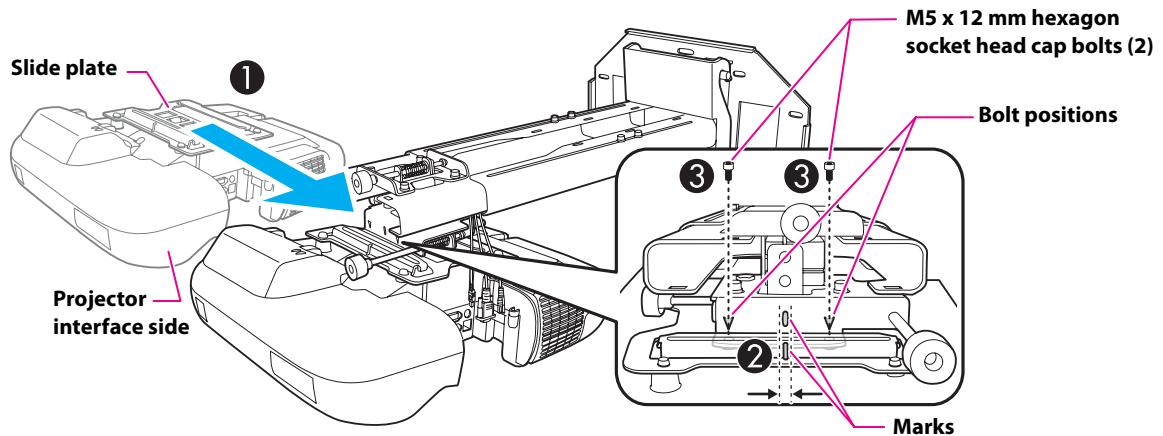


### 4 Secure the projector to the setting plate

- (1) Loosen the two screws and remove the cable cover from the projector.



- (2) Insert the slide plate into the setting plate from the interface side of the projector (❶).  
Align the marks on the projector and the setting plate (❷).



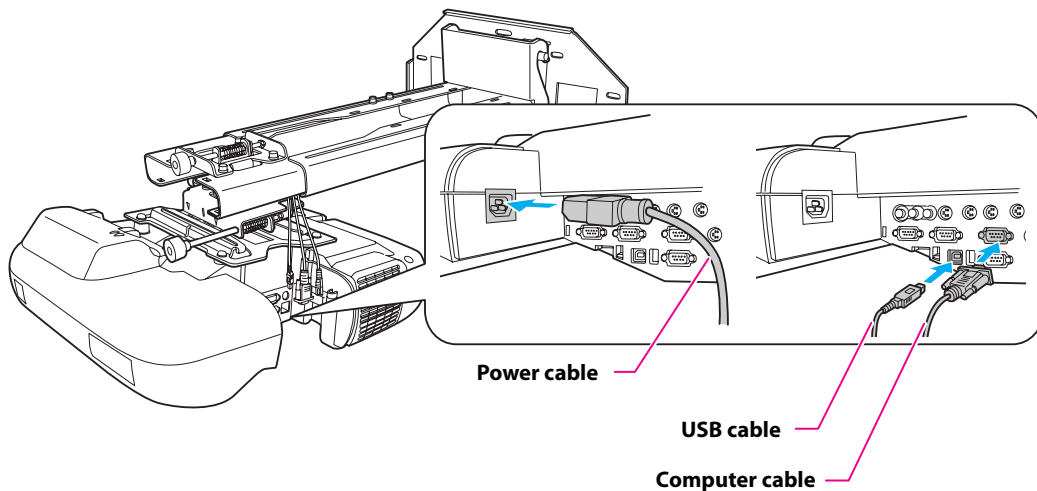
- (3) Tighten the two M5 x 12 mm hexagon socket head cap bolts (❸).

**⚠ Warning**

If you use adhesives to prevent the screws from loosening or things such as lubricants or oils on the slide plate fixing part of the projector, the case may crack and cause the projector to fall, resulting in personal injury or property damage. Do not use adhesives, lubricants, or oils to install or adjust the setting plate.

**❺ Connect the power cable and other cables to the projector**

Connect any necessary cables such as the power cable, computer cable, and USB cable to the projector.



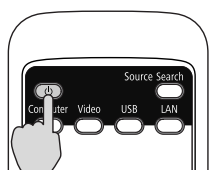
## 6. Adjusting the Projection Screen

To ensure maximum projection screen quality, follow the steps below to adjust the projection screen.

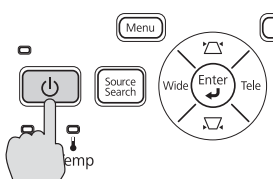
**Do not make adjustments with the Keystone function of the projector. Doing so may result in a reduction in image quality.**

### 1 Turn on the projector

Using Remote Control



Using Control Panel

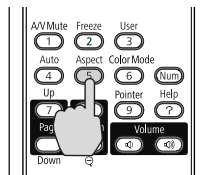


### 2 Change the aspect ratio

Each time you press the [Aspect] button on the remote control, the aspect name is displayed on the screen and the aspect ratio changes.

Change the setting according to the signal for the connected equipment.

Remote Control



Aspect Ratio



Alternatively, set the aspect ratio from the [Signal] menu - [Aspect] from the Configuration menu.

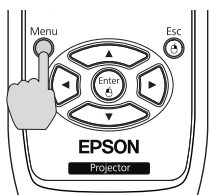
👉 **User's Guide for the projector: [Configuration] menu - [Signal] menu**

### 3 Display the test pattern

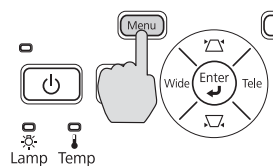
Press the [Menu] button and select the [Settings] menu - [Pattern] - [Test Pattern] from the Configuration menu.

👉 **User's Guide for the projector: [Configuration] menu - [Settings] menu**

Using Remote Control

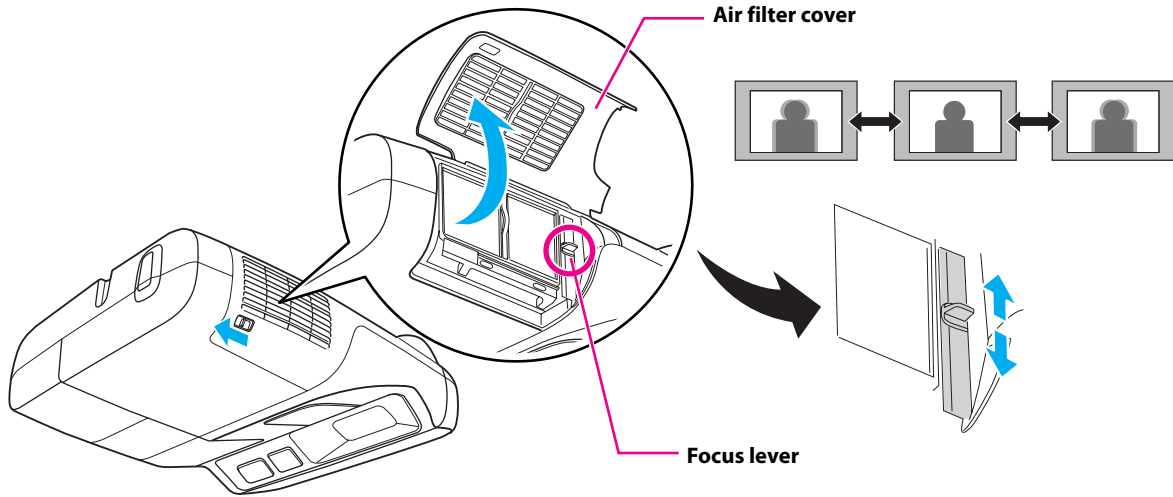


Using Control Panel



## 4 Adjust the focus

- (1) Move the air filter cover lever to open the air filter cover.
- (2) Use the focus lever to adjust the focus.

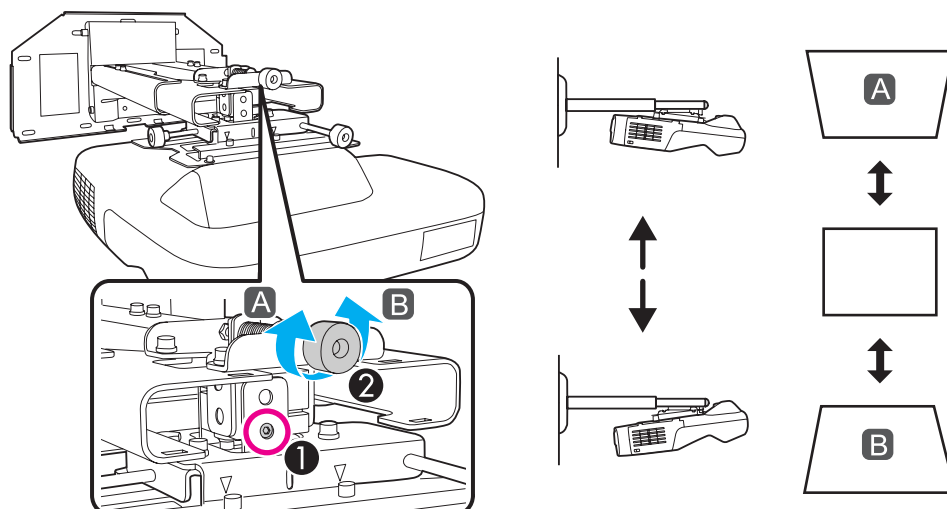


- (3) After you finish making the adjustment, close the air filter cover.

## 5 Use the top adjustment dial to adjust the vertical tilt

Repeat steps 5 to 9 as necessary.

- (1) Loosen the screw that corresponds to the top adjustment dial (1).
- (2) Turn the adjustment dial to adjust the vertical tilt (2).

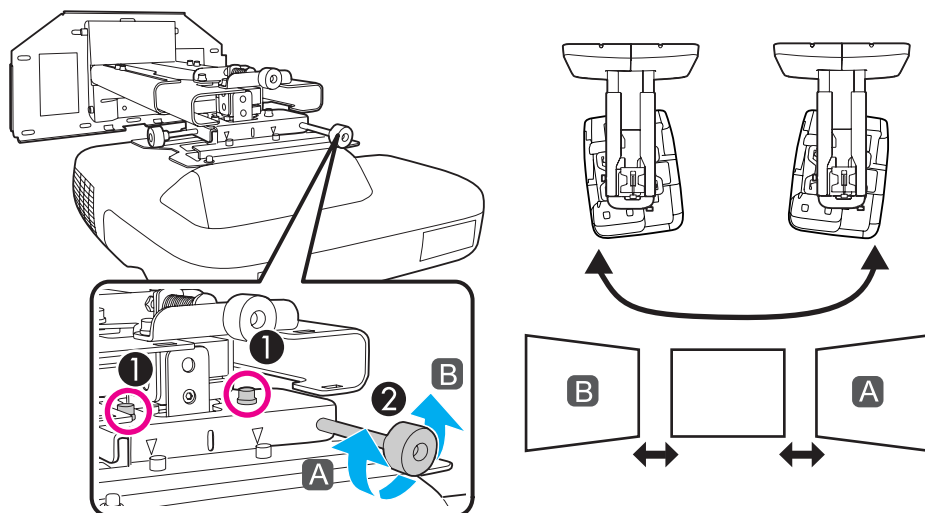


- (3) After you finish making all of the adjustments in steps 5 to 9, tighten the screw you loosened in 1.



## 6 Use the right adjustment dial to adjust the horizontal rotation

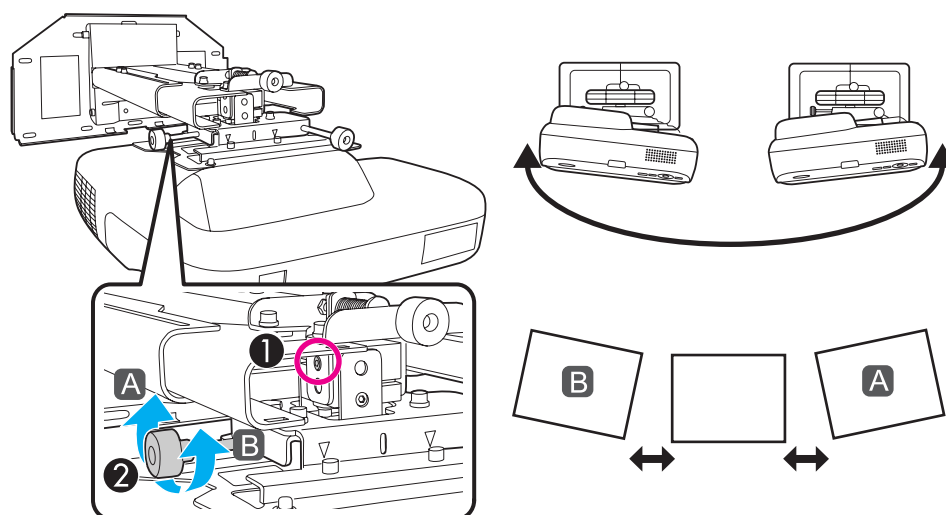
- (1) Loosen the two screws that correspond to the right adjustment dial (1).
- (2) Turn the adjustment dial to adjust the horizontal rotation (2).



- (3) After you finish making all of the adjustments in steps (5) to (9), tighten the two screws you loosened in (1).

## 7 Use the left adjustment dial to adjust the horizontal roll

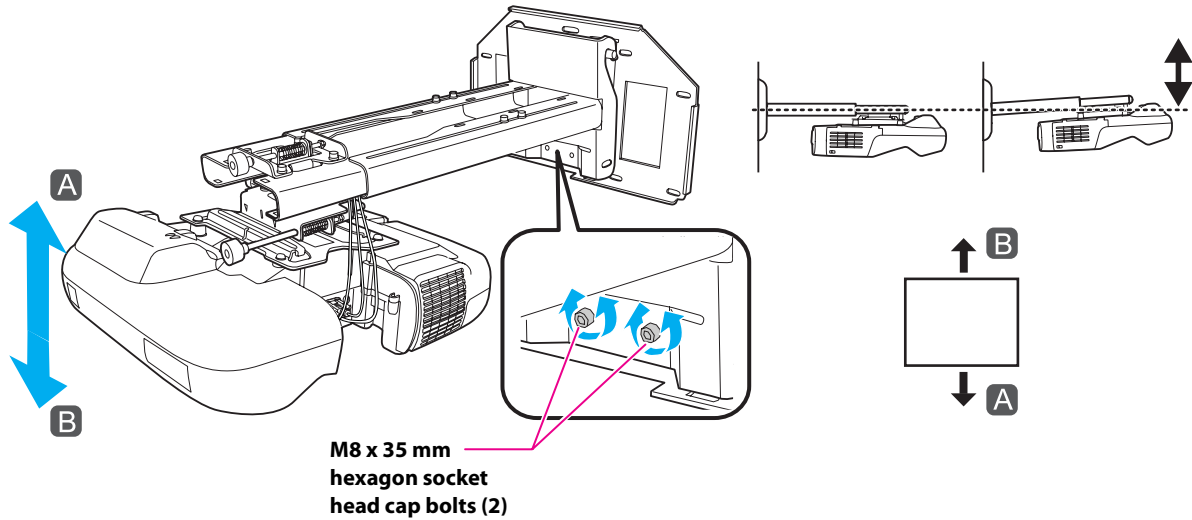
- (1) Loosen the screw that corresponds to the left adjustment dial (1).
- (2) Turn the adjustment dial to adjust the horizontal roll (2).



- (3) After you finish making all of the adjustments in steps (5) to (9), tighten the screw you loosened in (1).

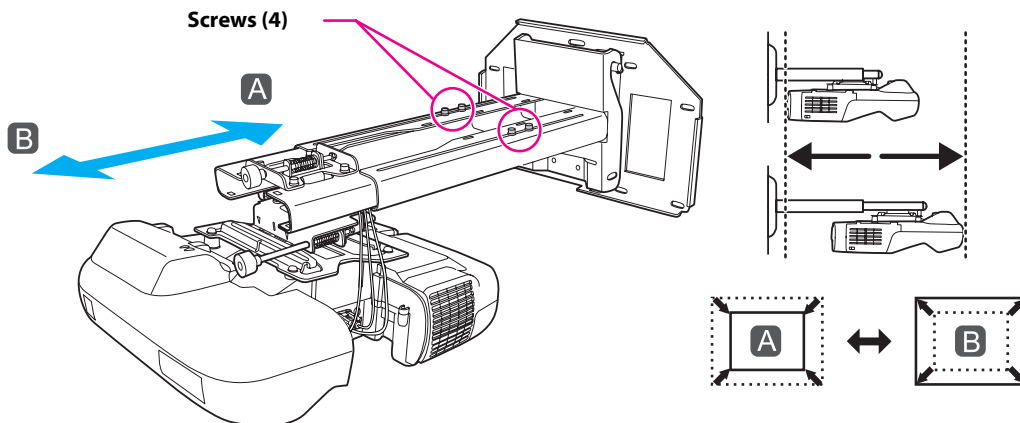
## 8 Adjust the vertical slide

Adjust the vertical slide with the two M8 x 35 mm hexagon socket head cap bolts at the bottom of the setting plate. Tightening the bolts raises the setting plate, and loosening them lowers it. The projection screen is raised or lowered accordingly.



## 9 Adjust the forward/backward slide

Loosen the four screws and adjust the slider of the setting plate.



After you finish making all of the adjustments in steps 5 to 9, tighten the screws.

## 10 Turn off the display of the test pattern

Press the [Esc] button on the remote control or control panel to turn off the test pattern.



### Warning

Tighten all screws firmly. If the screws are not tightened firmly, the projector or setting plate may fall and cause personal injury or property damage.

## 7. Attaching the Covers

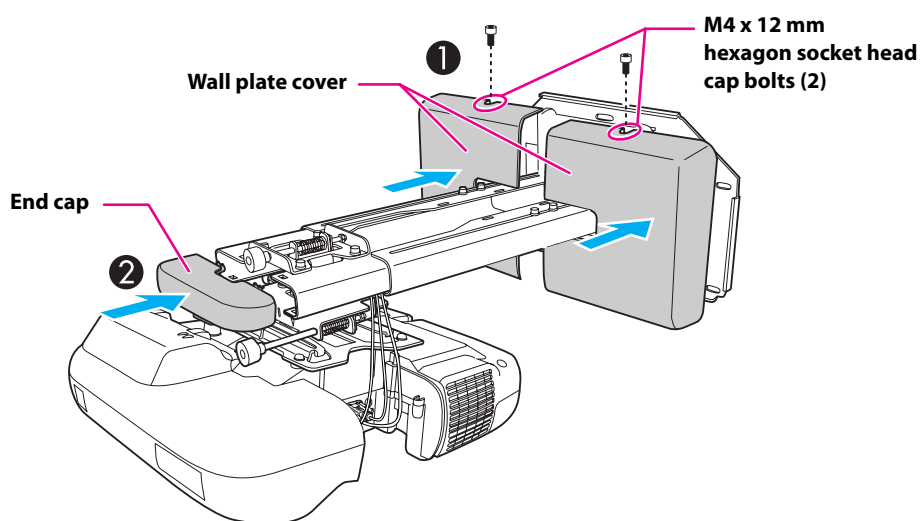
### 1 Attach the wall plate cover and end cap

- (1) Secure the wall plate cover with the two M4 x 12 mm hexagon socket head cap bolts (1).



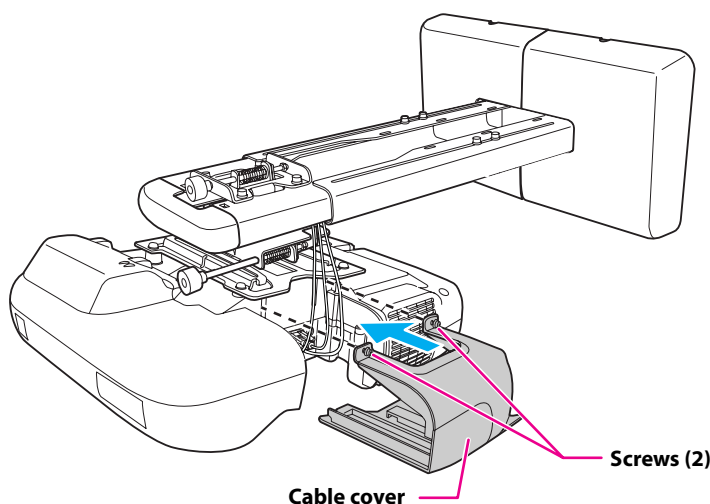
Depending on how the cables are wired, you may need to cut out parts of the wall plate cover to allow the cables to be passed through it.

- (2) Place the end cap with the concave portion facing up (2).



### 2 Attach the cable cover to the projector

Attach the cable cover and tighten the two screws to secure the cable cover.



Only a specialist should remove or reinstall the projector, including for maintenance and repairs. Refer to the User's Guide of your projector for instructions on maintenance and repairs.

### **Warning**

- ❑ **Never loosen the bolts and nuts after installation. Confirm that the screws have not become loose on a regular basis. If you find any loose screws, tighten them firmly. If the screws are not tightened firmly, the projector or setting plate may fall and cause personal injury or property damage.**
- ❑ **Do not hang on the setting plate or hang a heavy object on the setting plate. If the projector or setting plate falls, it could cause personal injury or property damage.**

## 8. Appendix

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### Using the Easy Interactive Function

After you install an Easy Interactive Function compatible model (EB-460i/450Wi), you need to install the Easy Interactive Driver and perform calibration (to align the positions of the cursor and Easy Interactive Pen).

For details, refer to the supplied Quick Start Guide or the User's Guide on the Document CD-ROM.

### Attaching a Security Cable

If the projector is to be installed in a room where it will be left unattended, you can use a commercially available theft-prevention wire lock to secure the projector to a post or other object to prevent someone from taking it.

Pass the wire of the theft-prevention wire lock through the security cable installation point.

For details on how to lock the wire lock, refer to the User's Guide supplied with the wire lock.

