Wall Mount Bracket YM-80

中文（简）	Polski
用户说明书	Instrukcja Obsługi

日本語	Suomi
取扱説明書	Käyttäjän opas

English	Česky
User's Guide	Návod k použití

Deutsch	Norsk
Bedienungsanleitung	Bruksanvisning

Français	Lietuvių
Mode d'emploi	Naudotojo vadovas

Español	ไทย
Guía del usuario	คู่มือผู้ใช้

Italiano	Bahasa Indonésia
Guida dell'utilizzatore	Pedoman Pemakaian

Svenska	Bahasa Melayu
Instruktionshäfte	Panduan Pengguna

Русский	Tiếng Việt
Инструкция по эксплуатации	Hướng Dẫn Người Sử Dụng

Português	中文(繁)
Guia do Usuário	用戶說明書

Türkçe	한국어
Kullanım Kılavuzu	사용설명서

Nederlands	العربية
Gebruiksaanwijzing	دليل المستخدم

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日本印刷

CASIO®

Wall Mount Bracket

YM-80

User's Guide

- Be sure to keep all user documentation handy for future reference.
- To obtain the latest version of this manual visit the website at the URL below.
  http://world.casio.com/manual/projector/

Contents

This product provides wall mount bracket for CASIO Data Projectors.
- CASIO COMPUTER CO., LTD. shall not be held liable for any loss or lost profits due to any accidents or damages due to improper installation, defective assembly, or improper handling of this product.
- The illustrations shown in this manual are for demonstration purposes only and their contents may be different from the actual appearance of the product.
- The contents of this manual are subject to change without notice.

Safety Precautions

Thank you for selecting this CASIO product. Be sure to read these "Safety Precautions" before trying to use it. After reading this User's Guide, keep it in a safe place for future reference.

About safety symbols

Various symbols are used in this User's Guide and on the product itself to ensure safe use, and to protect you and others against the risk of injury and against material damage. The meaning of each of the symbols is explained below.

⚠ Danger	This symbol indicates information that, if ignored or applied incorrectly, creates the risk of death or serious personal injury.
⚠ Warning	This symbol indicates information that, if ignored or applied incorrectly, could possibly create the risk of death or serious personal injury.
⚠ Caution	This symbol indicates information that, if ignored or applied incorrectly, could possibly create the risk of personal injury or material damage.

Icon Examples

A triangle indicates a situation against which you need to exercise caution. The example shown here indicates you should take precaution against electric shock.

A circle with a line through it indicates information about an action that you should not perform. The specific action is indicated by the figure inside the circle. The example shown here means disassembly is prohibited.

A black circle indicates information about an action that you must perform. The specific action is indicated by the figure inside the circle. The example shown here indicates you must unplug the power cord from the power outlet.

⚠ Warning

This Projector System is sold under the assumption that installation will be performed by specialists who possess an adequate level of technological experiences and knowledge. This product must be installed by trained specialists. Installation by non-specialists creates the risk of the bracket and projector falling down and other problems.

Improper assembly creates the risk of the bracket and projector falling down and other problems. Make sure that you always observe the precautions below.

• Be sure to check that the installation provides sufficient strength and make sure everything is assembled correctly.
• Be sure to tighten all screws fully and securely.

This product and the projector it supports weigh approximately 11 kilograms (24.3 lbs). During installation, be sure to take the actions described below.

• Calculate the allowable load of all anchors and bolts being used for installation.
• Avoid subjecting the projector to undue force when installing it.

Make sure that the projector is grounded during use.

Operating Precautions

⚠ Warning

🚫 ● This product does not have rotary angle adjustment. After adjusting the elevation and angle, never rotate the projector while the screws are tightened. After installation is complete, leave all elevation and angle adjustments up to qualified specialists. Adjustment by non-specialists creates the risk of the bracket and projector falling down.

● After the Projector System is installed, never loosen any of its bolts, screws, or nuts. Adjustment by non-specialists creates the risk of the bracket and projector falling down.

● Should you ever notice any part or component has fallen from the bracket/projector, immediately check the installation.

● Never allow anything to be hung from the bracket. Doing so creates the risk of the bracket and projector falling down and other problems.

● After installation is complete, leave all maintenance work up to qualified specialists.

● For information about projector maintenance, see the projector user's guide.

● Do not place heavy objects on the projector or wall mount bracket, and do not allow anyone to climb onto them.

● Make sure that the installation does not result in blocking of the projector's intake and exhaust vents. Periodically check the projector to ensure that its intake and exhaust vents are note clogged by dust build-up. Should dust build up, clean the vents before using the projector.

● When installing up and adjusting the wall mount bracket, take care to avoid pinching your hands between metal parts.

● Never use any type of screws except for those that are specified. Use of non-specified screws creates the risk of the projector falling down and other problems.

● Never try to modify the wall mount bracket in any way. (The strength of modified bracket cannot be guaranteed.)

Installation Location Precautions

● Never install this product in any of the types of locations below.
  • Areas subject to high or low temperatures
  • Outdoors
  • Areas subject to strong vibration
  • Food preparation areas and other locations where there is the chance of contact with oil smoke, and areas where there are large amounts of tobacco smoke present.
  • Areas subject to high moisture
  • Bathrooms and other areas where the projector may become wet
  • On an unstable and/or slanted surface
  • In the vicinity of the entrance to a retail location (Where there is the risk of exposure to rain.)

● When installing a projector, keep it away from fluorescent lighting, air conditioning, and other electrical devices. Some fluorescent lighting can interfere with operation of the projector's remote control system.

● Make sure that the projector's power key is located in a position where it can be used to turn off the projector in order recover from projector operation errors, to protect internal circuitry, and to save energy.

● In order to ensure noise-free projection images, use of a cable no more than 10 meters long is recommended when connecting a computer or other device. Also, keep the connecting cable away from the AC cord.

● In order to avoid soiling of the lens and internal light source, install the projector in a location where there is little chance of exposure to dust and moisture.

● When direct sunlight is shining into the room, the projection image can be made easier to see by drawing curtains over windows.

● Light and heat emitted by the projector may cause discoloration of its surroundings.

● Avoid mounting at a height that allows the projector to be touched by people. If a relatively low installation position is unavoidable, take care to install in a way that avoids head and other injury.

● Make sure that the projection side of the projector is at least 6 cm (2.4 inches) from the projection surface (wall), and all other sides are at least 30 cm (11.8 inches) from surrounding surfaces. There should be no other objects within the above distances from the projector.

Operating Precautions

Concrete

🚫 ● When mounting on a concrete wall, use appropriate components (M10 nuts, bolts, etc.) to support the weight of the projector and bracket, and to prevent lateral sway. Adjustment by non-specialists creates the risk of the bracket and projector falling down.

● CASIO COMPUTER CO., LTD. shall be held in no way liable for any losses due to the bracket and/or projector falling down due to the use of installation components of insufficient strength.

Plaster and Similar Material

● When anchoring the bracket on a wall made of plaster or other low-strength material, drive anchor bolts into the concrete under the wall.
● Install using anchor bolts in at least eight locations.

Recommendations for Wall Installation

In order to ensure a high level of safety for wall installation, the CASIO Data Projector wall mount bracket comes with wire to prevent dropping. When installing the projector, be sure to have the wire attached to the projector and bracket.

Unpacking

As you unpack the product, check to make sure that all of the items listed below are present.
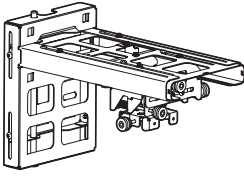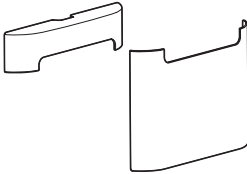

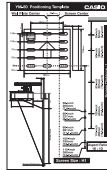Wall anchor plate and bracket
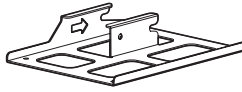
Projector anchor plate

Arm cover

Upper/lower wall anchor plate covers

Positioning sheet

- M4 × 10 Double sems screw – 4
  (For projector installation)
- M5 × 10 Double sems screw – 3
  (Two for installing the projector anchor plate to the main wall mount bracket, one for installing the safety wire.)
- Safety wire
- User's Guide

Items that need to be prepared by you
- Anchor bolts (M10 – at least 8)
- Tools – Screwdriver, wrench (for adjustment)

Important!

- **The wall mount bracket is packed with screws temporarily in place. Be sure to tighten screws sufficiently before finalizing installation. Installation by non-specialists creates the risk of the bracket and projector falling down and other problems.**

Installing the Wall Mount Bracket

Precautions During Installation

● Be sure to follow the procedures in this manual to ensure that installation work is performed correctly. Make sure that screws, metal parts, and all other components are all installed securely.

● Check to make sure that the wall where the bracket is to be installed can support the weight of the bracket, and arrange for installation plans and installation work.

● Before starting installation work, make sure that the projector is turned off and that is power cord is unplugged.

● Take care to avoid dropping the projector.

● Take care when handling small components. Small components can be swallowed by children or pets. Should this happen, contact a physician immediately.

● Improperly tightened screws can cause the case to crack and the projector to fall, creating the risk of accident and personal injury. Do not use any thread locking adhesive, lubricant, oil, or other similar agents on the screws that anchor the projector to the wall.

● After installation and adjustment are complete, check all screws to ensure that they are properly tightened. Take care that screws are not loose and also avoid over-tightening them.

● After installation is complete, store this manual and other items that come with the bracket in a safe place.

1. Remove the wall anchor plate from the bracket unit.

Remove the four screws and then remove the wall anchor plate.

Anchor plate

Screw with spring washer (M5 × 10)

Shoulder bolts × 3
(Bolts with spacers)
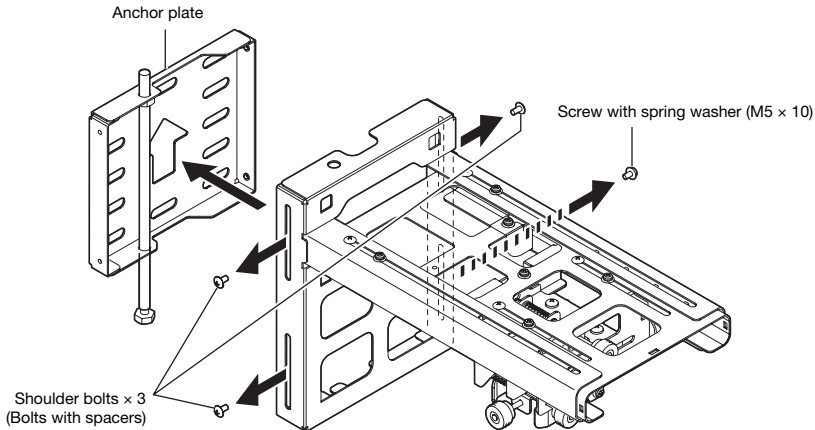
2. Install the wall anchor plate.

1. Referring to "Screen Size and Wall Anchor Plate Mounting Dimension Diagram" (page EN-8), determine the installation position.

2. Referring to "Positioning the Installation Holes of the Wall Anchor Plate" (page EN-9), drill holes in the wall.

3. Use the anchor bolts to install the wall anchor plate.
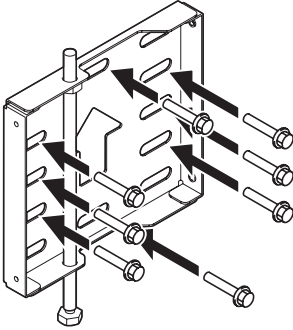
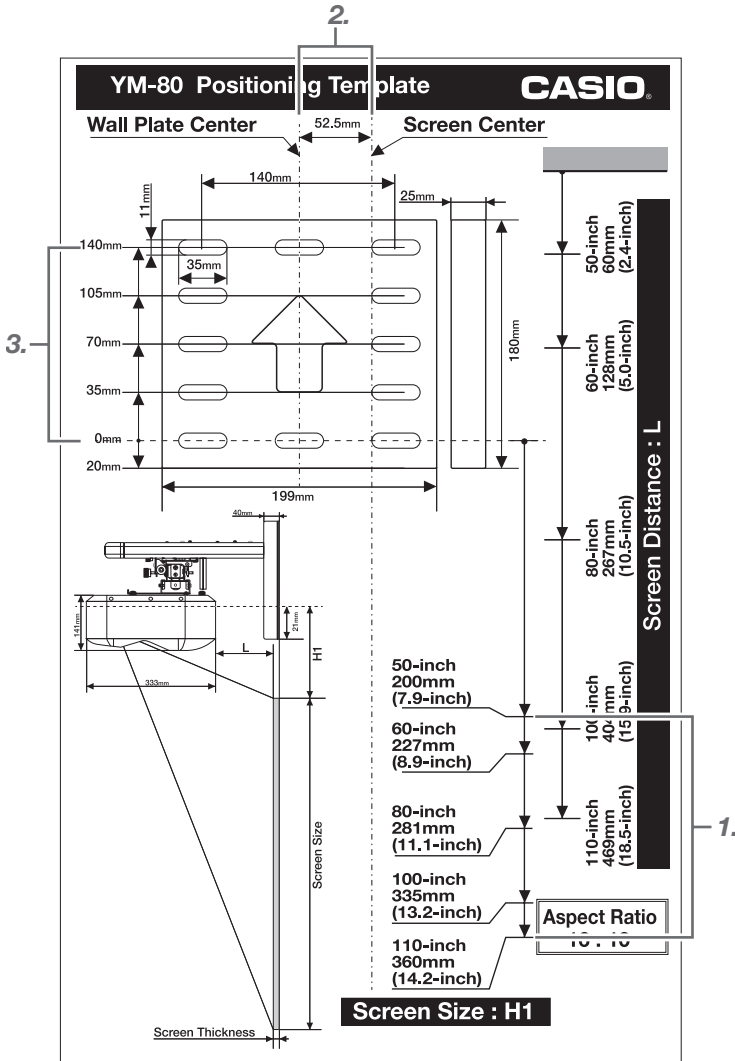### Screen Size and Wall Anchor Plate Mounting Dimension Diagram

Unit : mm

Center of wall anchor plate

Center of projection screen

Screen Size

Screen Thickness
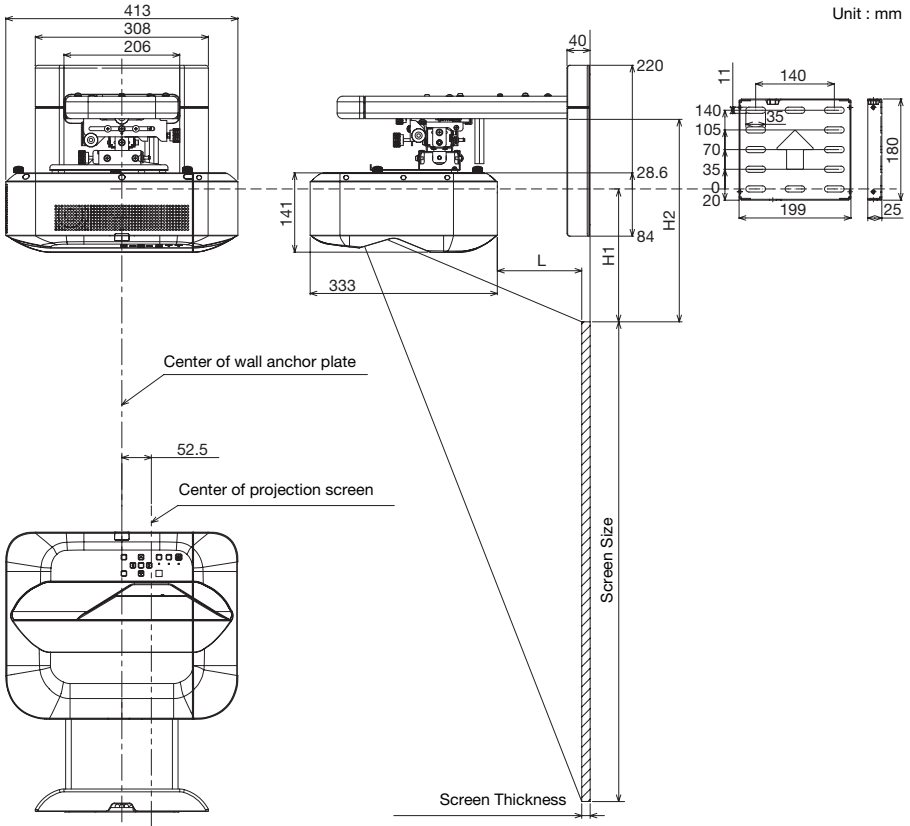
[Screen Settings] Aspect Ratio : Full (1280 × 800)

Screen Size (inch)	L (mm / inch)	H1 (mm / inch)	H2 (mm / inch)
50	60 / 2.4	200 / 7.9	325 / 12.8
60	128 / 5	227 / 8.9	352 / 13.9
80	267 / 10.5	281 / 11.1	406 / 16
100	404 / 15.9	335 / 13.2	460 / 18.1
110	469 / 18.5	360 / 14.2	485 / 19.1

● Distance values above are only for reference during installation.

Positioning the Installation Holes of the Wall Anchor Plate

1. Align the marks on the upper edges of the projection screen printed on the positioning sheet with the upper edges of the projection screen.

2. Align the positioning sheet with the center of the projection screen.
- Position the center of the wall anchor plate 52.5 mm (2.07 inches) to the right of the center of the projection screen.

3. Drill holes in the wall in accordance with the image on the positioning sheet.

YM-80 Positioning Template — CASIO

Wall Plate Center — 52.5mm — Screen Center

Screen Distance : L	
50-inch	60mm (2.4-inch)
60-inch	128mm (5.0-inch)
80-inch	267mm (10.5-inch)
100-inch	404mm (15.9-inch)
110-inch	469mm (18.5-inch)

Screen Size : H1	
50-inch	200mm (7.9-inch)
60-inch	227mm (8.9-inch)
80-inch	281mm (11.1-inch)
100-inch	335mm (13.2-inch)
110-inch	360mm (14.2-inch)

Aspect Ratio 16 : 10

3. Attach the bracket unit to the wall anchor plate.

1. Remove the screw and then remove the cable guide bracket.

2. Pass the cable through the main bracket.

3. Return the cable guide bracket to its original position and secure it with the screw.

Pass the cable through the arm.

Screw

Secure the cable with the cable guide brackets.
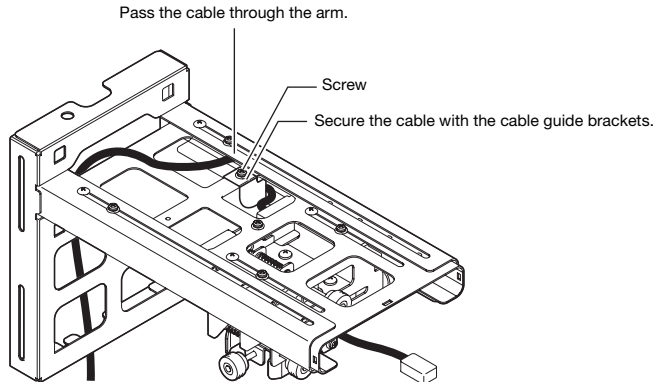
Important!

● **Route the cable as shown above, taking care not to damage it.**
● **Do not try to force the cable through the arm.**

4. Re-attach the bracket unit to its original position in the wall anchor plate and tighten the four screws to secure it in place. Securely tighten the three shoulder bolts and lightly tighten the screw with spring washer.
   ● The bracket will be able to move up and down even after the shoulder bolts are tightened.
   ● Use the screw with spring washer at the location shown in the illustration. You will use this screw when adjusting the height later, so tighten it lightly at this time.

Insert the wall anchor plate vertical adjustment screw into the holes of the bracket.

Screw with spring washer
(M5 × 10)

Slide the groove below the head of the vertical adjustment screw into the U-shaped cutout of the bracket.

Shoulder bolts x 3
(Bolts with spacers)
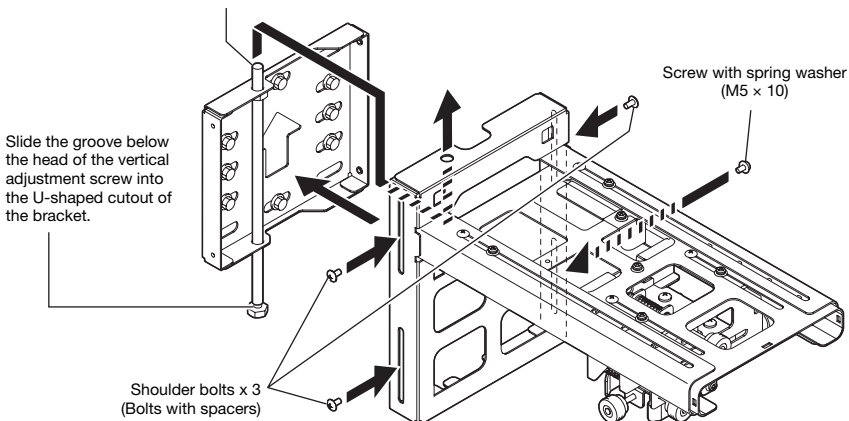
4. Install the projector.

1. Use the four M4 × 10 screws (included) to attach the projector anchor plate to the projector unit.
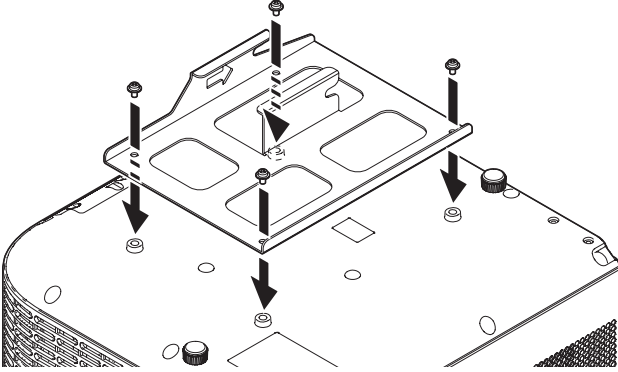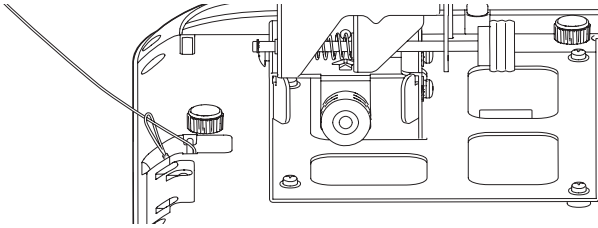
2. Slide the projector onto the bracket unit so it hooks onto the shoulder bolt.

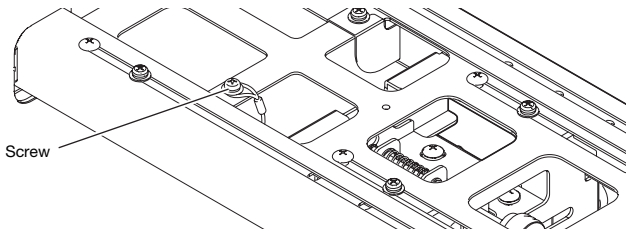**3.** Insert the two M5 × 10 fixing screws (included) and tighten them.

Slide

Fixing screw

Fixing screw (this side)
Shoulder bolt (other side)
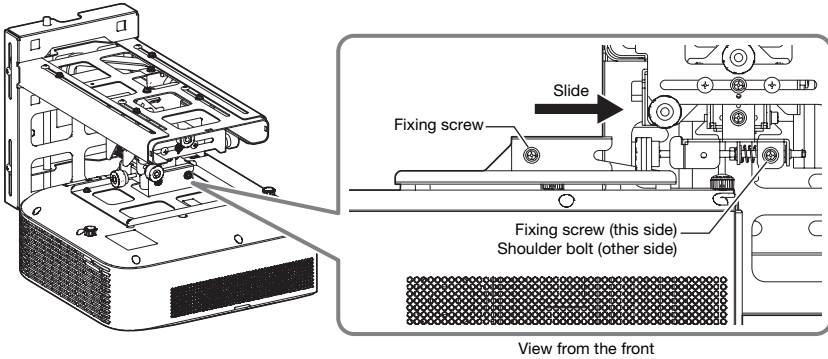
View from the front

5. Attach the safety wire.

1. Hook the wire on the projector's hook as shown in the illustration.

2. Use an M5 × 10 double sems screw to secure the wire to the main bracket.

Screw

6. Connect cables.

1. Referring to the projectors user documentation, connect the cables that you routed in step 3-1 of the procedure above.

Adjusting the Position, Elevation, and Angle

Important!

⚠ ● **Firmly support the projector from below whenever adjusting the elevation and/or angle. After adjustment is complete, re-tighten all of the screws. Installation by non-specialists creates the risk of the bracket and projector falling down and other problems.**

Precautions when Adjusting the Projection Screen

● Project onto a board type screen or other suitable flat, even surface. Projecting onto a roll type screen or other uneven surface is not recommended because doing so will cause distortion of the projected image. Use of a wide viewing angle screen (matte type) is recommended. A bead type screen is not suitable due to its high screen gain.

● First adjust focus. Next, adjust the screen position and angle. Adjusting focus changes the size of the projected image.

● The projected image position and/or focus may change slightly as operation stabilizes during the first 30 minutes after the projector is turned on, or after there is a change in the ambient temperature, humidity, or other environmental conditions. If this happens, refocus.

● To allow for any changes that may be required after the projector is set up, configure the initial setup so the projected image is a bit smaller than the size of the screen being used.

● For some time after installation, vibration of wall mount hardware and/or the mirror or other internal projector components may cause the position of the projector to shift. To allow for this, and for any fluctuation due to an uneven projection surface, set up the projector with margins around the projected image as shown in the illustration below.

Screen size (A) (inches)	Upper and lower margins (B) (D) (mm / inches)	Left and right margins (C) (E) (mm / inches)
60	20 / 0.8	25 / 1
80	25 / 1	30 / 1.2
100	30 / 1.2	35 / 1.4
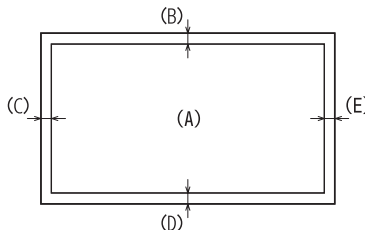
Adjusting the Position, Elevation, and Angle

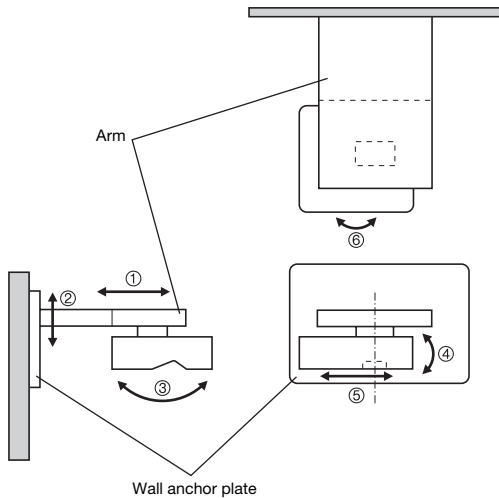Make adjustments so the projected image is positioned properly on the screen.

- The procedures in this section are explained assuming that you are starting from the projectors initial factory default settings. Note required adjustments will be different if you have changed the projector's keystone correction or other settings.
- For information about projector operation, see the projector user's guide.

1. Turn on the projector and project the blue screen.

2. Adjust focus.

3. Adjust the six locations shown below.
  ① Projection area size adjustment
  ② Projection area vertical position adjustment
  ③ Product vertical angle adjustment
  ④ Product horizontal angle adjustment
  ⑤ Projection area horizontal position adjustment
  ⑥ Projection area rotation angle adjustment

Arm

Wall anchor plate

① Projection area size adjustment

Adjustment range: 50 to 110 inches
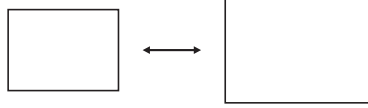
Loosen the adjustment screw, adjust the projected image size, and then re-tighten the adjustment screw.

Adjusting screw: If the screen you are using is larger than 60 inches, loosen this screw and pull out the large telescoping arm section in addition to the small arm.
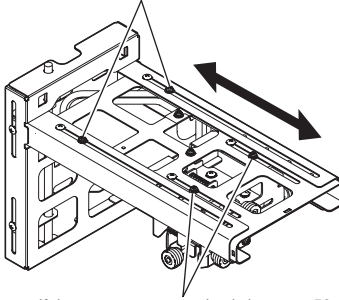
Adjusting screw: If the screen you are using is between 50 and 60 inches, loosen this screw and pull out the small telescoping arm section only.

② Projection area vertical position adjustment
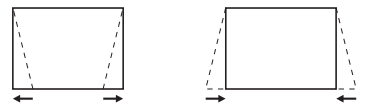
Adjustment range: ±40mm (1.6 inches)
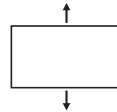
If the screw with spring washer (fixing screw) has been tightened, loosen it. After adjustments ① through ⑥ are complete, tighten the fixing screw securely.
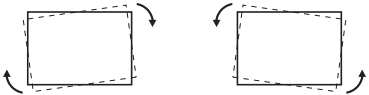
Screw with spring washer (fixing screw)
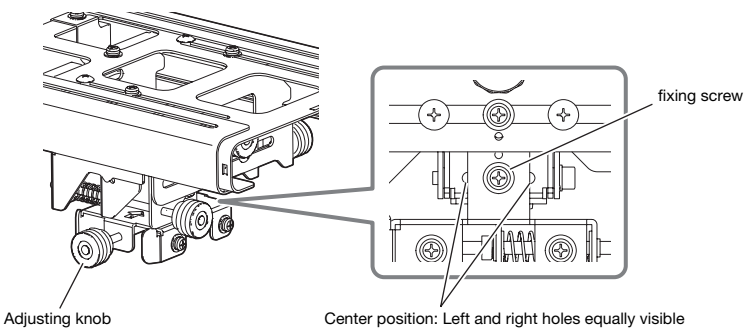
Adjusting screw
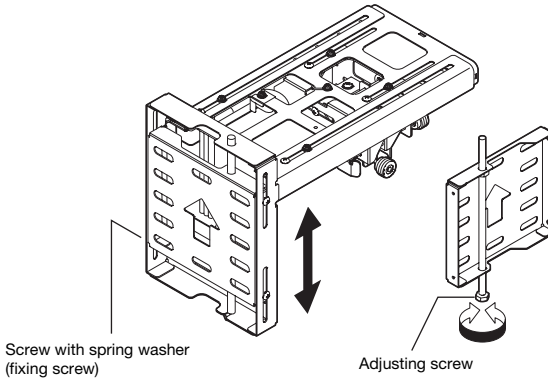
Adjusting the Position, Elevation, and Angle
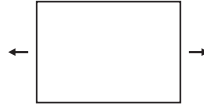
③ Product vertical angle adjustment

Adjustment range: ±3°

After loosening the fixing screw and making adjustments with the adjusting knob, tighten the fixing screw securely.

fixing screw

Adjusting knob

Center position: Left and right holes equally visible
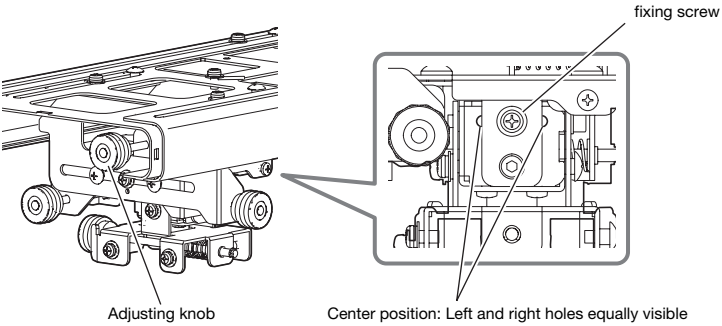
④ Product horizontal angle adjustment

Adjustment range: ±5°
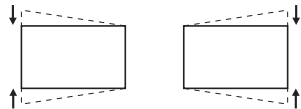
After loosening the fixing screw and making adjustments with the adjusting knob, tighten the fixing screw securely.

Adjusting knob

fixing screw

Center position: Left and right holes equally visible

⑤ Projection area horizontal position adjustment	
Adjustment range: ±30mm (1.2 inches)	← →

After loosening the fixing screw and making adjustments with the adjusting knob, tighten the fixing screw securely.
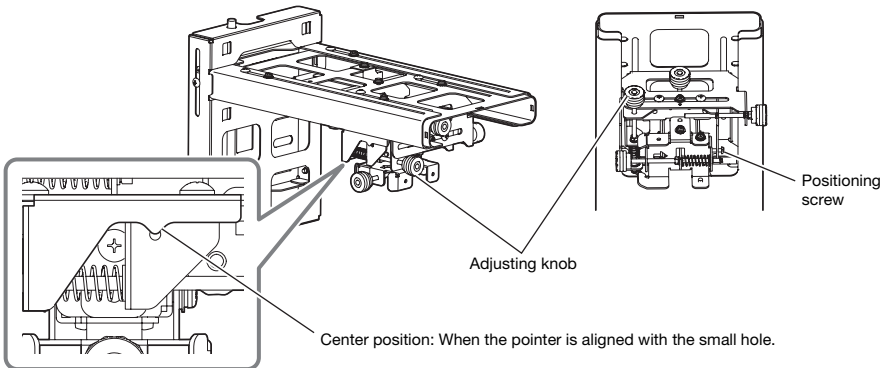
Fixing screw

Adjusting knob

Center position: The small hole under fixing screw slot indicates the center position.
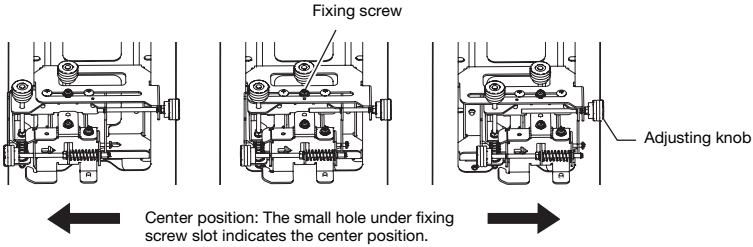
| ⑥ Projection area rotation angle adjustment	
Adjustment range: ±5°	

1. Loosen the positioning screw.

2. Use the adjusting knob to adjust the rotation angle.

3. Tighten the positioning screw until its tip comes into the contact with the interior bracket.

Positioning screw

Adjusting knob

Center position: When the pointer is aligned with the small hole.

Attaching the Covers

● After adjustments ① through ⑥ are complete, tighten the screw with spring washer (fixing screw) securely.

Screw with spring washer (fixing screw)
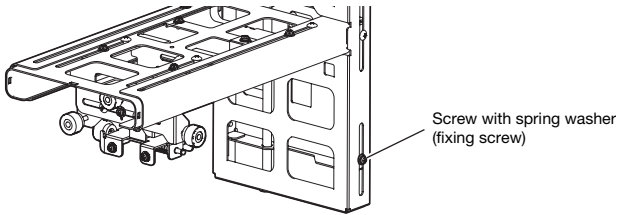
Attaching the Covers

Attach the upper and lower wall anchor plate covers and the arm cover.

Upper wall anchor plate cover

Arm cover

Lower wall anchor plate cover
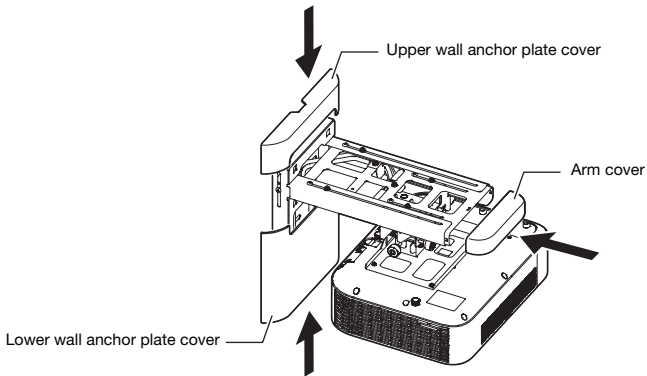
Attaching the Lower Wall Anchor Plate Cover
1. Align the four hooks on the back of the cover with the four holes of the bracket.
2. Pressing down on the cover with both hands at the locations of the hooks, slide the cover downwards.

Holes
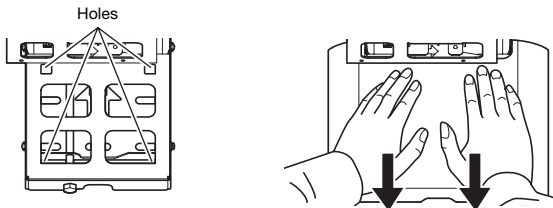
Periodic Inspection

Perform the inspections described below once a year.
1. Check to make sure that none of the wall mount bracket screws are loose.
2. Check to make sure that the wall mount bracket, the covers, the projector, and other items are not scratched, damaged, etc.

Contact

Whenever you have any questions or concerns, contact your CASIO retailer.

Product Specifications

Approximate Dimensions: 200 (W) × 410 (D) × 270 (H) mm (7.9" × 16.1" × 10.6")
(minimum depth, excluding cover)
Approximate Weight: 5 kg (11 lbs) (excluding projector)

CASIO®