

Dual Projection System**XJ-SK650****English****Setup Guide**

- Be sure to read the precautions in the “YA-S10 Setup Guide” that comes with the Dual Projection System.
- 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/>

Français**Guide d'installation**

- Veuillez lire les précautions dans le « Guide d'installation de la YA-S10 » fourni avec le Système de projection double.
- Conservez la documentation à portée de main pour toute référence future.
- Pour obtenir la toute dernière version de ce manuel, consultez le site à l'adresse suivante.
<http://world.casio.com/manual/projector/>

Español**Guía de configuración**

- Asegúrese de leer las precauciones en la “Guía de configuración de YA-S10” suministrada con el Sistema de proyección dual.
- Asegúrese de tener a mano toda la documentación del usuario para futuras consultas.
- Para obtener la versión más reciente de este manual, visite nuestro sitio web en la siguiente URL.
<http://world.casio.com/manual/projector/>

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Terms and Conventions

In this manual, the entire XJ-SK650 Dual Projection System (the two projectors, Geometric Correction Box, and the cabinet in which everything is contained) is referred to as the “Projector System”.

User Documentation

This manual explains how to set up the XJ-SK650 Dual Projection System, and shows how to configure the initial settings of the two projectors.

After completing the setup procedures described in this manual, use the YA-S10 Geometric Correction Box (referred to as “Control Box” in this manual) to shape and adjust the projection images of the two projectors. For information about how to do this, see the YA-S10 Setup Guide.

- For information about operating the Projector System after setting it up, refer to the YA-S10 User’s Guide, which you can download from the website below.
<http://world.casio.com/manual/projector/>
- For information about individual projector operations, refer to the manuals below.
 - DATA PROJECTOR Quick Start Guide (Booklet)
 - “User’s Guide” (Download from the website above.)

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- Other company and product names may be registered trademarks or trademarks of their respective owners.

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- The sample screens shown in this manual are for illustrative purposes only, and may not be exactly the same as the screens actually produced by the product.

XJ-SK650 Overview

The XJ-SK650 Projector System uses a Control Box to sync two projectors so their output looks and acts as if it is coming from a single projector. A powerful collection of projected image shaping functions, enables clear image projection not only onto a flat screen, but also onto curved and irregular surfaces.

Important!

- **After the Projector System has been installed and adjusted, do not alter the cabinet position or positions of the projectors inside the cabinet, the projector zoom ring settings, or the screen position.**
Any changes to the above will require re-adjustment of the Projector System.
- **When installing the Projector System or when adjusting the cabinet, take care to avoid getting your hands pinched under the cabinet or by door in the back of the cabinet.**

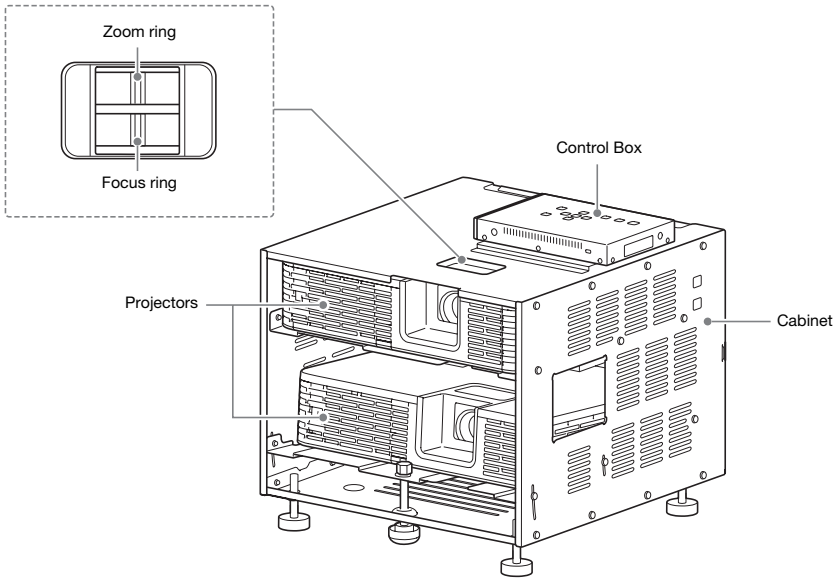
Unpacking

Before getting into setup of the Projector System, take a few moments to make sure that all of the items listed below are included.

- XJ-SK650 Setup Guide (This manual)
- Cabinet*
- Feet x4 (for placement on a flat surface)
- Control Box (YA-S10)*
- Projectors (XJ-H2600) x2*
- Control Box remote controller (YT-200)
- Control Box AC adapter and power cord
- Projector remote controller (YT-120)
- Projector power cords x2
- Remote controller batteries (AAA-size, test use) x4
- HDMI cables x2
- RS-232C cables x2
- Mini D-Sub Cable
- DATA PROJECTOR Quick Start Guide
- DATA PROJECTOR "Read this first" Sheet
- Projector (XJ-H2600) Warranty Certificates x2
- Control Box (YA-S10) Warranty Certificate

* The Control Box and two projectors are installed in the cabinet at the factory.

General Guide



Getting Ready

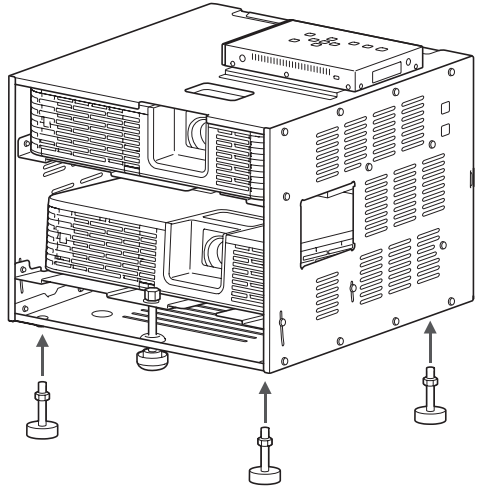
Installation Location

The Projector System can be placed on a flat surface or it can be ceiling mounted.

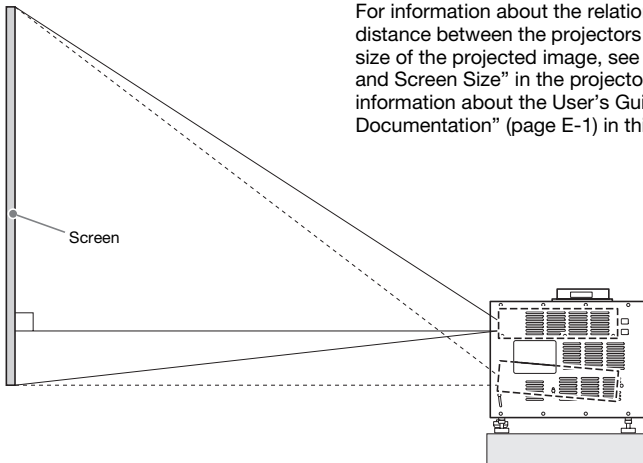
Placing the Projector System on a Flat Surface

When placing the Projector System on a flat surface, you need to install the four feet on the bottom of the cabinet.

Screw each of the feet into the holes at the corners on the bottom of the cabinet.



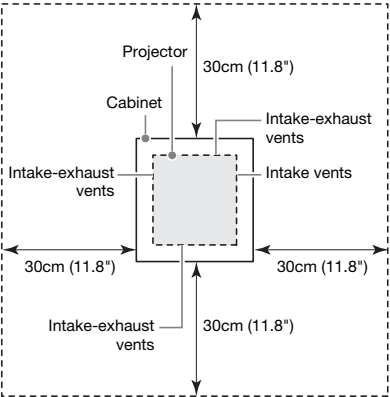
After attaching the feet to the cabinet, place the cabinet onto a table, desk, or stand or other level and firm surface, making sure you allow enough space around it. The nearby illustration shows how the Projector System should be oriented relative to the screen to achieve optimum projection.



For information about the relationship between the distance between the projectors and the screen and the size of the projected image, see "Projection Distance and Screen Size" in the projector User's Guide. For information about the User's Guide, see "User Documentation" (page E-1) in this manual.

Location Precautions

- Use a conveniently located power outlet that you can reach easily when you need to unplug the power cord.
- Make sure there is nothing inside the area (within 30 cm (11.8 inches) of the Projector System) indicated by the nearby illustration. Take particular care to ensure that there is nothing blocking the flow of air from the projector intake-exhaust vents.
- Airflow from air conditioning equipment redirecting heat being exhausted from the area around a projector lens can cause heat ripples to appear in the projected image. If this happens, adjust the airflow of the air conditioning equipment or move the Projector System.



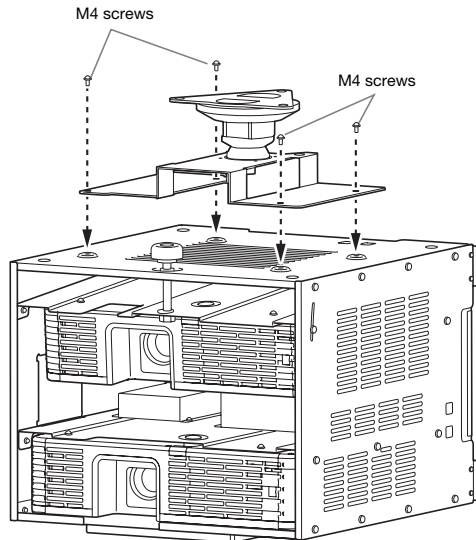
Ceiling Installation

The Projector System can be hung from a ceiling. When doing so, mount it in an inverse (upside down) configuration.

Important!

- To protect against sudden accidental dropping of the Projector System from a ceiling mount configuration, be sure to secure the cabinet to ceiling fixtures with wires or some other adequate means.

Use four M4 screws to attach the cabinet to the ceiling mount bracket. Contact your original retailer for full details about ceiling mounting.



Important!

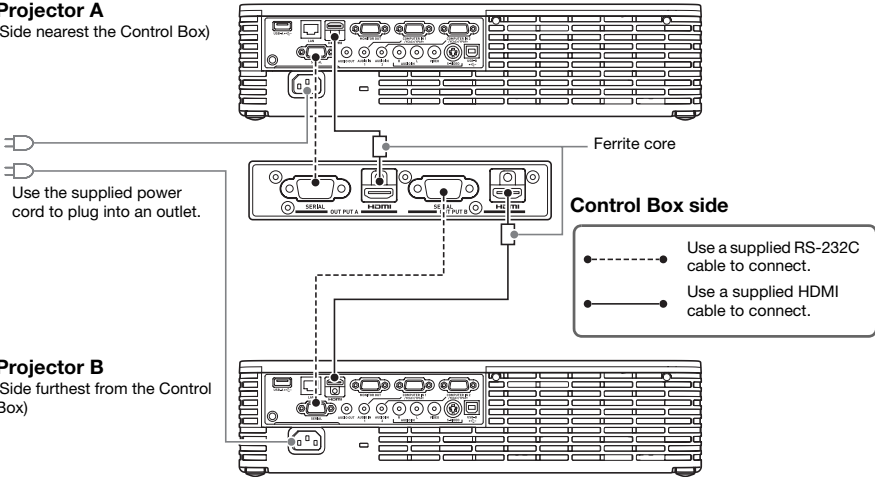
- When hanging the Projector System from a ceiling, make sure that it is at least one meter away from fire detectors, fire alarms, and other fire protection devices. Locating the Projector System too close to a fire protection device creates the risk of mis-operation of the device due to warm air exhausted from the Projector System. Also, avoid locating the Projector System close to fluorescent lights or other strong light sources. Bright light can shorten the operating range of the remote controller or even make remote control impossible. When selecting a location for the Projector System, be sure to test for proper operation of the remote controller.
- The vertical and horizontal orientation of the projected image is reversed from the normal configuration when projecting from a Projector System hung from the ceiling. You need to change the setup of the Projector System in order to correct for this. For more information, see "Configuring the Initial Settings of the Two Projectors" (page E-8) in this manual.

Wiring

Wire the Control Box and two projectors inside the Cabinet as shown in the illustration below.

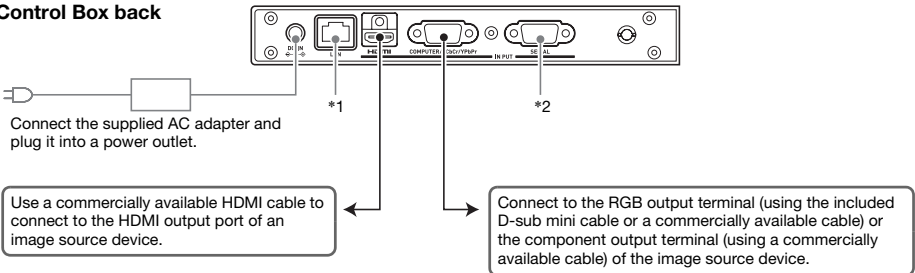
Projector A

(Side nearest the Control Box)



When connecting the Control Box to a projector using a supplied HDMI cable, connect the plug of the cable that is nearest the ferrite core to the HDMI port of the Control Box.

Control Box back



*1 To control the Projector System from an external device over a LAN, use a commercially available LAN cable to connect this terminal to the LAN terminal of the external device.

*2 To control the Projector System from an external device over an RS-232C connection, use a commercially available serial cable (cross) to connect this port to the serial port of the external device.

NOTE

- The HDMI cables and RS-232C cables that connect the Control Box to the projectors can be stored in Storage Box (A) when they are unneeded. The Control Box AC adapter can be stored in Storage Box (B). See page E-15 of this manual for an illustration that shows the locations of Storage Box (A) and Storage Box (B).

Preparing the Remote Controllers

Load two AAA-size alkaline batteries into each of the remote controllers: one YT-200 Control Box remote controller, one YT-120 projector remote controller. Batteries are provided with the Projector System.

To load batteries: Open the battery cover on the back of a remote controller. Load the batteries making sure their poles (+/–) are facing in the correct directions. Finally, replace the battery cover.

Important!

- **To avoid running down the battery, store the remote control unit so its keys are not pressed inadvertently.**
- **When batteries go dead, remove them as soon as possible and replace them with two new AAA-size alkaline batteries.**

Configuring the Initial Settings of the Two Projectors

The initial settings of each projector need to be configured individually.

- Perform the procedure below after placing the Projector System in the location where it will be used, after connecting cables, and after preparing the remote controllers.
- For information about which projector is Projector A and which one is Projector B, see “Wiring” (page E-7).

Perform the operations below using the projector remote controller (YT-120). Note that these operations cannot be performed using the Control Box remote controller (YT-200).

To configuring the initial settings of the two projectors

- 1.** Unplug the power cord of Projector B from the power outlet so only Projector A is plugged in.
- 2.** Remove the Projector A lens cover.
- 3.** On the remote controller, press the [⏻] (Power) key to turn on Projector A.
- 4.** After projection starts, use the Projector A focus ring to focus the projected image.
- 5.** On the “Language” screen that appears, select the display language you want to use.
- 6.** On the remote controller, press the [INPUT] key. On the “Input” dialog box that appears, select “HDMI” and then press the [ENTER] key.

7. On the remote controller, press the [MENU] key to display the setup menu, and then configure the settings below in the indicated sequence.

Setting Item	Setting
(1) Option Settings 1 → Auto Keystone Correction	Off
(2) Screen Settings → Keystone Correction	0
(3) Screen Settings → No Signal Screen	Black
(4) Input Settings → Signal Name Indicator	Off
(5) Option Settings 1 → Auto Power Off	Off

- If the Projector System will be used in an inverted ceiling mount configuration, select “On” for the “Screen Settings → Ceiling Mount” setting.
- If the Projector System will be used in a rear projection (projecting from behind the screen) configuration, select “Rear” for the “Screen Settings → Projection Mode” setting.
- If the Projector System will be used in a location at an elevation of 1,500 to 2,000 meters, select “On” for the “Option Settings 2 → High Altitude” setting.

8. Press the [⏻] (Power) key twice to turn off Projector A.
9. Unplug the power cord of Projector A from the power outlet and plug in Projector B.
10. Repeat the above steps 2 through 8 on Projector B.
11. Plug the power cord of Projector A into the power outlet.

Configuring Initial Control Box Settings

After you finish configuring the initial settings of the two projectors, perform the procedure below to configure initial Control Box settings.

Perform the operations below using the Control Box remote controller (YT-200). Note that these operations cannot be performed using the projector remote controller (YT-120).

To configure initial Control Box settings

- 1.** Press the remote controller [ALL] key (or [1] key) to turn on Control Box power.
 - This also turns on the two projectors linked to the Control Box.
- 2.** On the remote controller, press the [MENU] key to display the setup menu.
 - Under initial default settings, menus are displayed in English.
- 3.** Select “Option Settings” and then “Language”, and then use the [◀] and [▶] keys to select the language you want.
- 4.** Configure the settings below as required. For details about each setting, refer to the “YA-S10 User’s Guide”.
 - Option Settings → Eco Mode
 - Image Properties → Color Mode
 - Option Settings → Remote Power Numbers
- 5.** Next, perform the procedure under “Adjusting the Positions of the Two Projectors” (page E-11).

Control Box Power On/Off

The Control Box remote controller has five power keys. Four of them are numbered from [1] to [4], and the fifth one is marked [ALL]. This allows power on/off control of multiple Control Boxes in the same location.

- Pressing the [ALL] key turns on all of the Control Boxes.
- Keys [1] through [4] control the Control Boxes that are assigned the corresponding number with the “Option Settings → Remote Power Numbers” setting.

Adjusting the Positions of the Two Projectors

Use the procedure in this section to adjust the projected images of the two projectors so they are approximately the same size and at the same position on the target screen (the screen, wall, or other surface to be used as the projection surface after setup of the Projector System is complete).

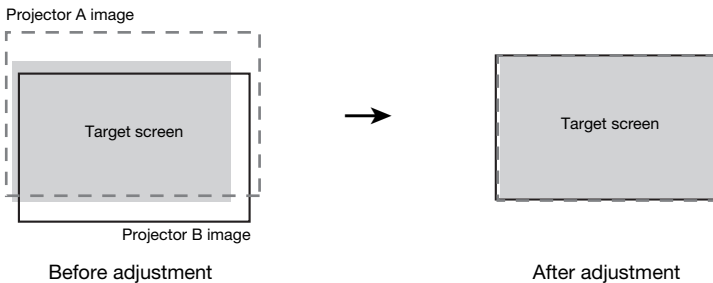
- After you finish configuring the initial settings of the Control Box, perform the procedure below.
- For information about which projector is Projector A and which one is Projector B, see “Wiring” (page E-7).

Perform the operations below using the Control Box remote controller (YT-200). Note that these operations cannot be performed using the projector remote controller (YT-120).

To adjust the positions of the two projectors

1. If you shut off power after finishing the procedure under “To configure initial Control Box settings” (page E-10), turn on Control Box power.

Adjustment 1: Rough alignment of the two projection screens



2. Attach the lens cover to the lens of Projector B only so only the Projector A image is being projected on the projection screen.
3. Perform the steps below to adjust the position and size of the Projector A image so it slightly runs off the edges of the target screen, as shown in the “After adjustment” image above.
 - (1) Move the cabinet to change its orientation.
 - (2) Adjust the zoom ring of Projector A.
4. Remove the lens cover from the lens of Projector B so its image is projected.

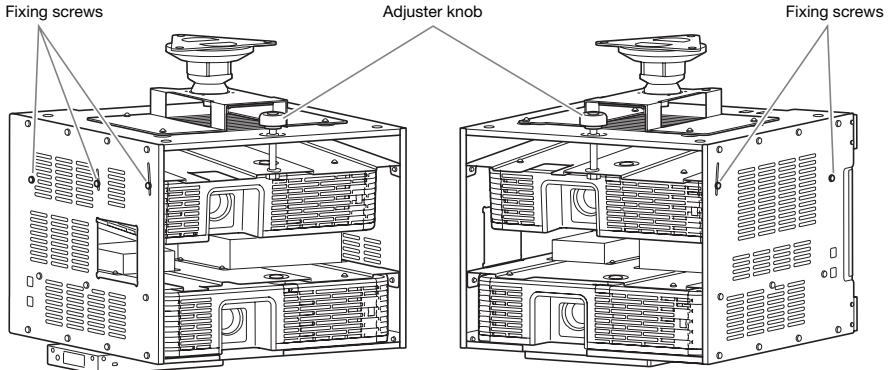
Getting Ready

5. Perform the steps below to adjust the position and size of the Projector B image so it slightly runs off the edges of the target screen, as shown in the “After adjustment” image above.

(1) Adjust the zoom ring of Projector B.

(2) Loosen the five screws that secure the cabinet side panel, and then rotate the adjuster knob to adjust the orientation.

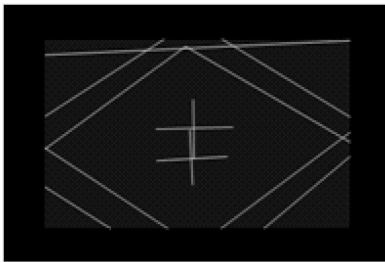
- Take care simply to loosen the five screws. Do not remove them.



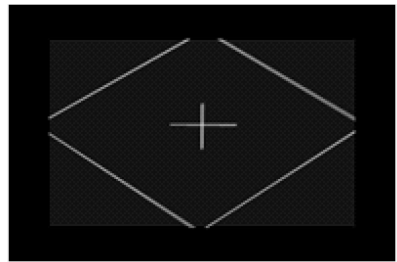
- After adjusting the position, re-tighten the fixing screws. Note that you will need to make fine adjustments later in this procedure, so do not fully tighten the fixing screws at this point.

6. With both the Projector A and Projector B images being projected, repeat steps 3 and 5 as required to minimize the difference between the shape of the Projector A and Projector B images.

Adjustment 2: Fine adjustment using the adjustment pattern



Before adjustment



After adjustment

7. On the Control Box remote controller, press the [CORRECT] key.

8. On the “Image Shaping” menu that appears, select “Adjust Image Position” and then press the [ENTER] key.
 - This will project two adjustment patterns, a yellow one for Projector A and a light blue one for Projector B.
 - Use the focus rings of Projector A and Projector B to adjust the focus of the patterns as required.

Important!

- All of the explanations in this manual assume that Projector A is connected by HDMI cable to OUTPUT A of the Control Box and that Projector B is connected to OUTPUT B, as shown under “Wiring” (page E-7). Reversing these connections will cause the adjustment pattern colors to be reversed (light blue for Projector A, yellow for Projector B).

9. Observe the adjustment patterns as you adjust Projector A and then Projector B. Try to achieve the characteristics described below as you make adjustments.

- Adjust so the horizontal crosshairs of the adjustment patterns are horizontal.
- Adjust so the vertical lines of the adjustment pattern crosshairs are in the center of the screen.

Projector A : Use the same procedure as that in step 3 to fine tune the adjustment of the Projector A adjustment pattern.

Projector B : Use the same procedure as that in step 5 to fine tune the adjustment of the Projector B adjustment pattern.

10. On the Control Box remote controller, press the [BLANK] key.
 - This will cause the Projector B adjustment pattern to disappear, leaving only the Projector A adjustment pattern (yellow).

11. While observing the Projector A adjustment pattern, perform the vertical adjustments described below.

- Adjust the vertical orientation of the cabinet.
- Adjust the zoom ring of Projector A.

The crosshairs of the adjustment pattern should be in the center of the target screen and the outer border of the adjustment pattern should be just outside of target projection area, as shown in the nearby figure.



12. Press the remote controller's [BLANK] key.
 - This will project from Projector B again so the adjustment patterns of both Projector A and Projector B are being projected.
13. Perform the steps below to get the adjustment pattern of Projector B as closely aligned as possible with the Projector A adjustment pattern.
 - (1) Adjust the zoom ring of Projector B.
 - (2) Loosen the five screws that secure the cabinet side panel (see the illustration under step 5, above), and then rotate the adjuster knob to adjust the orientation.
 - Take care simply to loosen the five screws. Do not remove them.
 - (3) After position adjustment is complete, fully tighten the screws.
14. After the adjustment is the way you want, press the [ESC] key.
 - This will cause the Projector A and Projector B adjustment patterns to disappear, and project the “Image Shaping” menu.

Getting Ready

15. Next, perform the procedure in the separate YA-S10 Setup Guide under “Shaping the Image to Match the Projection Screen”.

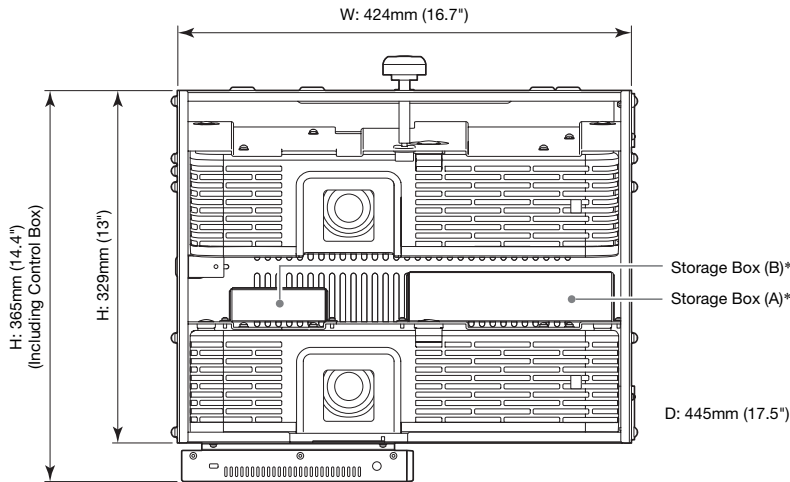
Important!

- During the adjustment procedures from this point onwards, do not alter the cabinet position or positions of the projectors inside the cabinet, the zoom ring setting, the focus ring setting, or the screen position. If any one of these is altered, return to step 2 of the procedure and perform the other steps again.

Product Specifications

Model Name	XJ-SK650
Brightness	Approximately 6500 lumens
Environment	Operating temperature: 5 to 35°C Operating humidity: 20 to 80% (non-condensation) Operating altitude: 0 to 2,000 meters above sea level
Power Requirements	XJ-H2600 Projector: 100VAC 240VAC, 50/60Hz
Power Consumption (Rated Voltage/Rated Current)	Each XJ-H2600 Projector: 330W (Eco Mode: Off (Bright))
Weight	Approximately 29.3kg (64.6lbs) (No including accessories)

Approximate Dimensions (Excluding Projections)



* See page E-7 of this manual for information about Storage Box (A) and Storage Box (B).

Specifications are subject to change without notice.

GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THIS UNIT IN THE U.S.A. (not applicable to other areas).

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Proper connectors must be used for connection to host computer and/or peripherals in order to meet FCC emission limits.

Declaration of Conformity

Model Number: XJ-SK650

Trade Name: CASIO COMPUTER CO., LTD.

Responsible party: CASIO AMERICA, INC.

Address: 570 MT. PLEASANT AVENUE, DOVER, NEW JERSEY 07801

Telephone number: 973-361-5400

This device complies with Part 15 of the FCC Rules, Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



Tested To Comply With FCC Standards
FOR HOME OR OFFICE USE

FOR CALIFORNIA USA ONLY

Perchlorate Material – special handling may apply.
See www.dtsc.ca.gov/hazardouswaste/perchlorate.

CAN ICES-3(B)/NMB-3(B)



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