StarBoard Software [minutes]

1 / 1

The meeting room wall
easily becomes
an interactive space!

● Projected image is a simulation.

ULTIMATE 究極
SHORT THROW

Ultimate Interactive Short Throw LCD Projectors
BZ-1/BZ-1M WXGA 2,500 Lumens
● Wall mount unit: included with BZ-1M, optional with BZ-1

AMX
DEVICE DISCOVERY

3LCD

Change the way you use your meeting spaces

The BZ-1 and BZ-1M projectors use StarBoard® Software to turn meeting room walls, tabletops*, etc. into interactive spaces. They allow you to use the supplied interactive pen to write directly onto the projected image, as well as to save and print what you have written. Additionally, their Ultimate Short Throw design means they can project large images even in small meeting rooms. The BZ-1 and BZ-1M will definitely increase the effectiveness of your meetings.

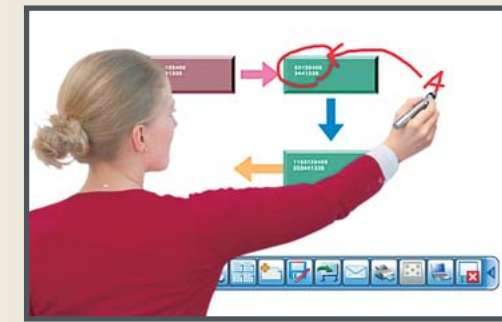* Tabletop use requires optonal tabletop use kit.

Meeting room walls become interactive spaces.

With these projectors, as in the past you can write comments on a separate whiteboard while projecting images for effective meetings, and furthermore you can also write directly over the projected image on a wall using the StarBoard Software.
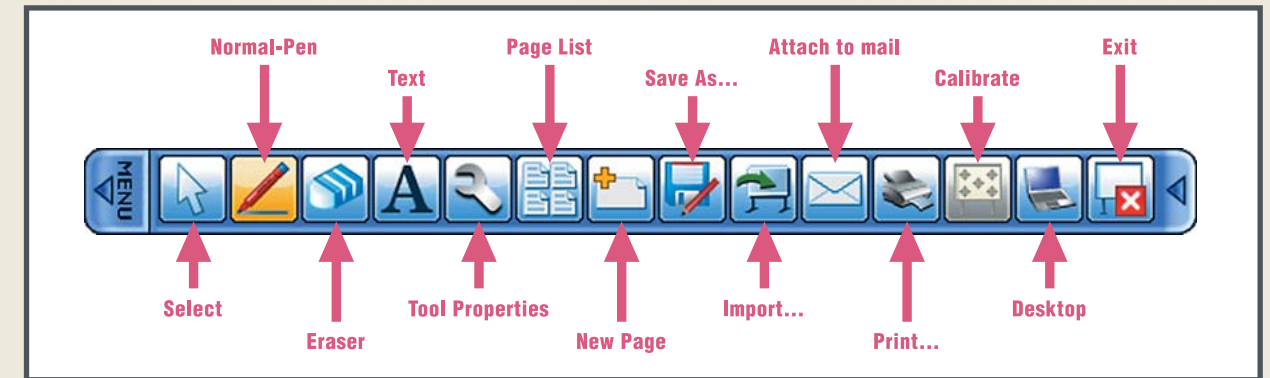
ULTIMATE 究極
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Ultimate Interactive Short Throw LCD Projectors

BZ-1/BZ-1M

WXGA 2,500 Lumens

● Wall mount unit: included with BZ-1M, optional with BZ-1

StarBoard® Software for Business Interactive Projector Included.

● StarBoard® is a registered trademark of Hitachi Solutions, Ltd. in Japan and other countries.

● Projected images are simulations.

Simple setup and operation provide interactive functionality

StarBoard Software [minutes]

1 / 1

Connect the computer and projector and start the StarBoard Software.

1

Calibration is quickly accomplished by nine-point touch operation.

2

All interactive operations are easy to use.

3

Write Directly with the StarBoard Software

You can write letters or draw shapes directly on the image with the interactive pen using the StarBoard Software and of course use it to erase what you have added. You can erase or change pen color or thickness from the floating tool bar.

Normal-Pen   Text   Page List   Save As...   Attach to mail   Calibrate   Exit

Select   Eraser   Tool Properties   New Page   Import...   Print...   Desktop

Click to Save
After using the interactive pen to write on the image, you just click the Save icon on the toolbar to save it.

Click to Print
After using the interactive pen to write on the image, you just click the Print icon on the toolbar to print it.

Click to E-mail
After using the interactive pen to write on the image, you just click the E-mail icon on the toolbar to e-mail it.

■ **StarBoard Software for Business Interactive Projector Requirement Specifications**

CPU: Intel® Pentium® 4 1.8GHz or faster
Free Hard Drive Space: 600 MB or more
RAM: 1GB or more
Display Colors: High Color (16 bit) or higher
Operating System (OS): Windows® XP 32bit/Windows Vista® 32bit/Windows 7 32/64bit (the latest service pack must be applied) (Tablet PC Edition and Server Edition are not supported)
Software Required: Internet Explorer® 6.0/7.0/8.0 (for viewing Online Help and using Internet search functions) PowerPoint 2002/2003/2007/2010 (for viewing PowerPoint documents) Microsoft DirectX® 9.0c/Windows Media® Player 9 or above (for using movie features) Adobe Flash Player 10 (for using Flash object)
Others: DVD drive; Video card with hardware overlay feature (for using movie features) (for Webcam playback and capturing feature); DV (Digital video, DV cameras, D-VHS, etc.); Capture devices which support DirectShow (with WDM drivers)

For Conference host feature
CPU: Intel® Core™ 2 Duo 2.0GHz or faster
Free Hard Drive Space: 2GB or more
RAM: 2GB or more
Others: TCP/IP 54Mbps or above

■ **For using the interactive function, the recommended computer specification is shown below**

CPU: Intel Core 2 Duo 2.0GHz or faster
Memory: 1GB or more (Windows Vista or Windows 7: 2GB or more
Free Hard Drive Space: 600MB or more
Display Colors: High Color (16bit) or higher
Web Browser: Internet Explorer 6.0/7.0/8.0
Others: For movie playback, hardware overlay is necessary for the video card. For web camera playback and capture, a DV capture device (digital video, DVD camera, etc.) that supports DirectShow with WDM device is necessary.
•Actual operating environment depends on the computer.

Ultimate Short Throw and Network functions, as well as a wide variety of practical functions for business use

Tabletop Use

The optional tapletop use kit allows the projector to be used vertically. You can project a 1.5m (60") image down onto a table.

ULTIMATE 究極
SHORT THROW
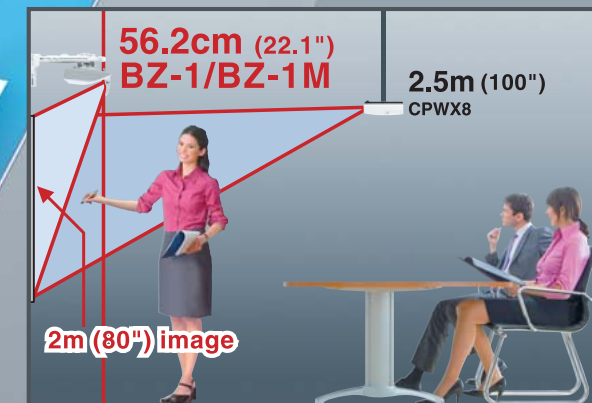
Ultimate Interactive Short Throw LCD Projectors

BZ-1/BZ-1M

WXGA 2,500 Lumens
● Wall mount unit: included with BZ-1M, optional with BZ-1

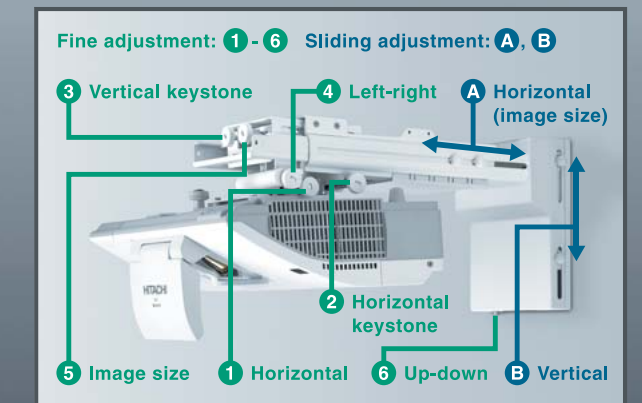## Ultimate Short Throw

■ Reduced Glare and Shadows

These projectors feature Ultimate Short Throw, for projecting a 2m (80 inches) image from only 56.2cm (22.1 inches) onto a wall or whiteboard. Ultimate Short Throw greatly reduces glare from the projector's light source, making it easier for the teacher or presenter to see the audience.

56.2cm (22.1")
BZ-1/BZ-1M

2.5m (100")
CPWX8

2m (80") image

■ Precision Control Wall Mount Unit*.

The six-axis wall mount design ensures that the projector can be installed in exactly the right position. The entire unit slides horizontally and vertically, and fine adjustments can be made to each axis independently.
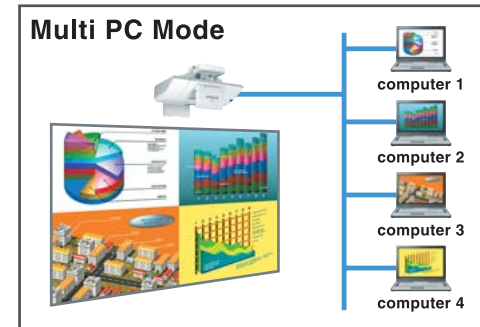
* Included with BZ-1M, optional with BZ-1. Do not attempt to install the projector yourself. Have your dealer or service center handle all installation work.

Fine adjustment: ❶ - ❻   Sliding adjustment: Ⓐ, Ⓑ

❸ Vertical keystone   ❹ Left-right   Ⓐ Horizontal (image size)

❷ Horizontal keystone

❺ Image size   ❶ Horizontal   ❻ Up-down   Ⓑ Vertical

Advanced Network Functions*

■ Network Presentations

You can project still or moving images from one or more networked computers. The Single PC mode lets you select one computer on the network, while the Multi PC mode lets you use up to four computers. Displaying various images from computers makes presentations much more effective.

Multi PC Mode

computer 1
computer 2
computer 3
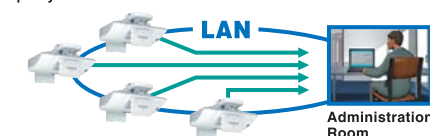computer 4

■ Messenger

The Messenger function transmits text data to the projector via a network, so the projector can display it. This is an easy and efficient way to send campus-wide announcements.

Messenger is ideal for:
• Campus Notifications • School Activities
• Daily Schedules • Community/Local News

* This function is not intended or guaranteed for the distribution of warning messages created by security systems.

■ Centralized Reporting

With just one computer in an administration room, you can collect reports from all projectors connected to the network.

LAN

Administration Room

* Video transfer through network may not be supported depending on combination of computer hardware and software. For projecting video sources, video/computer cable is preferable.

Superior Convenient Features

■ WXGA (1280 x 800) and 720p Capability

Featuring WXGA (1280 x 800) resolution, these projectors are capable of displaying wide and large images.

■ Approximately 4.1kg (9.0 lbs.) Light Weight

Even with their many functions, these projectors are light, with a weight of only 4.1kg (9.0 lbs).

■ 5m USB Cable

The supplied USB cable is 5m long, expanding the area where the projector can be placed.

■ Perfect Fit

Perfect Fit enables quick adjustment of the projected image by moving its four corners one at a time. In addition, barrel or pincushion distortion, which occur on rounded surfaces, can easily be corrected.

* Perfect Fit may decrease picture quality as a result of the compensation and resizing processes.

■ 10W Internal Speaker

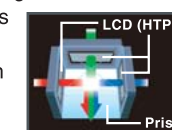The projectors have a built-in 10W high power speaker.

■ HDMI Input

Signals are transferred digitally, for highest image quality.

E B   HDMI

■ 3 LCD Panels with Inorganic Alignment Layers

These projectors incorporate three LCD panels with inorganic alignment layers that are extremely light resistant, increasing brightness and contrast ratio. They ensure smooth images and high reliability.

LCD (HTPS)

Prism

■ Easy Maintenance

The lamp door is on the top and the filter cover on the back, so maintenance and replacement of these parts can be done easily.

Lamp Door on the top

Filter Cover on the back

■ Hybrid Filter

The Hybrid Filter has an electrostatic design, protecting the optics from dust, dirt and chalk particles. It also has a longer life than previous filters.

■ Versatile Security Functions

The projectors are equipped with a security bar, PIN Lock, MyScreen Lock and Transition Detector functions.

Security bar

■ More Convenient Features

• 2,000 : 1 High Contrast Ratio (Presentation Mode) • Low Noise of 28dB*¹ (Eco Mode) • Display via USB • Audio Pass Through*² • Power Saving Mode • Template Function*³ • Daytime Mode • My Button • My Memory • Input Source Naming • 4-Second Quick Start • Direct Power On/Off • Closed Caption • Compatible with AMX Device Discovery

*1 Typical. Tested in 23°C environmental conditions.
*2 When in Normal mode at standby setting. It does not function in Saving mode. *3 Patent pending
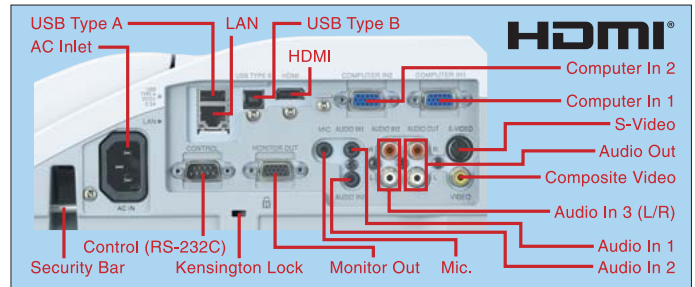
SPECIFICATIONS

Model name	BZ-1/BZ-1M
Liquid crystal panel	0.59 type (inch), 1.5cm polysilicon active-matrix TFT x 3
Number of pixels	1,024,000 pixels (H1280 x V800)
Resolution	1280 x 800 color pixels (WXGA)
Digital zoom	x1.35
Lamp	210W UHP
Light output (brightness)	2,500 Lumens
Contrast ratio	2,000:1 (Presentation mode)
Audio	10W
Keystone correction	Manual Horizontal/Vertical Keystone
Power supply	AC100-120V/AC220-240V
Operating temperature	5-35°C/41-95°F (For interactive function: 16-35°C/61-95°F)*1
Input signals	Computer input	VGA, SVGA, XGA, WXGA, WXGA+, SXGA, WSXGA+, UXGA, MAC16"
	Video input	NTSC, NTSC4.43, PAL, SECAM, PAL-M, PAL-N, PAL (60Hz) 480i@60, 480p@60, 576i@50, 576p@50, 720p@50/60, 1080i@50/60, 1080p@50/60
Input/output terminals	Video input	S-Video: Mini Din 4-pin x 1, Composite video: RCA jack x 1, Component video: via Mini-Dsub x 2
	Audio input	Stereo Mini jack x 2, RCA jack x 2 (L/R)
	Computer input	Analog RGB: 15-pin Mini-Dsub x 2
	HDMI input	HDMI x 1 (HDCP compliant)
	Audio output	RCA jack x 2 (L/R)
	Monitor output	Analog RGB: 15-pin Mini-Dsub x 1
	USB	USB type A x 1 (for PC-less presentation), USB type B x 1 (for USB display or USB mouse control, and interactive function)
	Control	9-pin Dsub x 1 for RS232C
	Wired network (LAN)	RJ-45 x 1
	Mic. input	Mono Mini jack x 1 (compatible with dynamic microphones and unbalanced signal lines)
Agency certifications	UL/cUL, FCC Part15 class A, AS/NZS CISPR22 class A, CE, RoHS, GOST-R
Dimensions (WxHxD)	345 x 102 x 303mm (13.6" x 4.0" x 11.9") [excluding protruding part, when mirror is closed.]
Weight	Approximately 4.1kg (9.0 lbs.)
Standard accessories	Remote control (Part#: HL02772) with two AA batteries, Power cord, Computer cable, USB cable, Interactive Pen*2, two AAA batteries and the tip of the pen for exchange, Cable cover, User's manuals, Security label, Software applications (CD x 1, DVD x 1), Wall mount unit and user's manual*3, Sensor cover **Cable cover** **Wall mount unit (HAS-K250)*3**
Optional accessories	Lamp: DT01251, Filter set: UX37191, Laser remote control: HL02651 (RC-R008), Tabletop use kit: TT-251 **Tabletop use kit (TT-251)** **Fixing clamp** • Can be used for tables 25-50mm (1"-2") thick.

*1 If the mouse cursor or drawing image does not match the actual pen tip point perfectly, please calibrate again to optimize the interactive system.
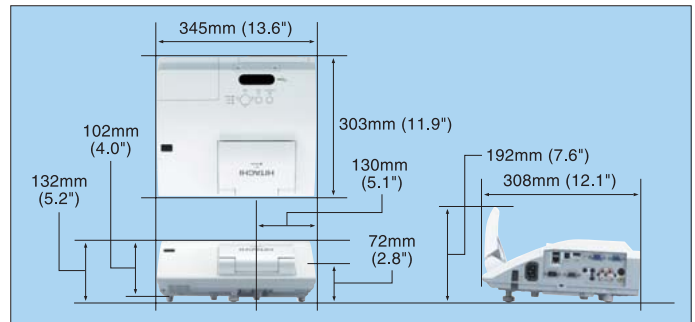*2 Depending on surface textures of screens or walls, etc. where images are projected, abrasion of the interactive pen tip may be accelerated, resulting in the need for pen tip exchange.
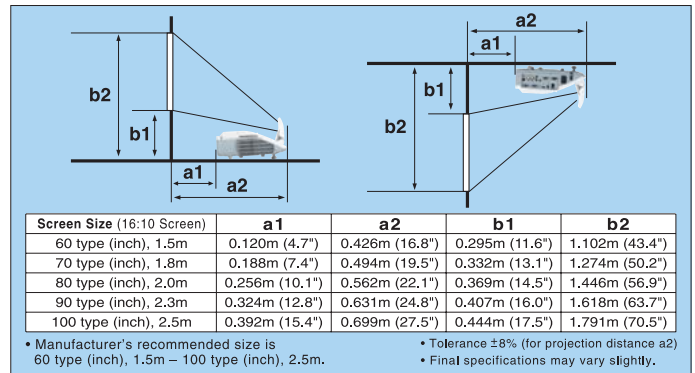*3 Optional with BZ-1

TERMINALS

USB Type A — LAN — USB Type B
AC Inlet — HDMI
Computer In 2
Computer In 1
S-Video
Audio Out
Composite Video
Audio In 3 (L/R)
Security Bar — Control (RS-232C) — Kensington Lock — Monitor Out — Mic.
Audio In 1
Audio In 2

DIMENSIONS

345mm (13.6")
102mm (4.0")
303mm (11.9")
132mm (5.2")
130mm (5.1")
192mm (7.6")
308mm (12.1")
72mm (2.8")

PROJECTION DISTANCE

Screen Size (16:10 Screen)	a1	a2	b1	b2
60 type (inch), 1.5m	0.120m (4.7")	0.426m (16.8")	0.295m (11.6")	1.102m (43.4")
70 type (inch), 1.8m	0.188m (7.4")	0.494m (19.5")	0.332m (13.1")	1.274m (50.2")
80 type (inch), 2.0m	0.256m (10.1")	0.562m (22.1")	0.369m (14.5")	1.446m (56.9")
90 type (inch), 2.3m	0.324m (12.8")	0.631m (24.8")	0.407m (16.0")	1.618m (63.7")
100 type (inch), 2.5m	0.392m (15.4")	0.699m (27.5")	0.444m (17.5")	1.791m (70.5")

• Manufacturer's recommended size is 60 type (inch), 1.5m – 100 type (inch), 2.5m.
• Tolerance ±8% (for projection distance a2)
• Final specifications may vary slightly.

Consideration for the Environment

■ Compliance with EU Directive RoHS*1

*1 RoHS is the acronym of "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment".

■ Reduction of resin usage in production

Use of hot runners in molds for making upper housing in order to reduce mill ends.

■ Reduction of CO_2 emissions

Carton volume has been cut down to 60%*2, reducing CO_2 emissions during transport.
*2 Compared to Hitachi CP-A100 ultra-short throw projector on the basis of one carton box.

■ Power saving mode engaged during standby

■ Eco mode

Eco mode provides power saving.

• Design and specifications are subject to change without notice.
• The projected images and comparison photos in this catalog are simulations.
• LCD panels, polarizers and other optical components and cooling fans may need replacement after prolonged usage. For more details, please consult a Hitachi sales representative.
• Do not use in places where there is a lot of water, dampness, steam, dust, soot or tobacco smoke. This may result in fire or malfunction.
• Optical components (lamp, LCD panel, polarizing plate, PBS [polarizer beam splitter]) have limited service lives. They must be repaired or replaced if they are used for a long period of time.
• These projectors use a mercury lamp with high internal pressure. Because of its properties, this lamp may burst with a loud noise or burn out if struck or after it has been used for a period of time. The time until it bursts or burns out varies greatly according to differences between lamps and usage conditions. Turning the lamp's power on and off frequently shortens its service life.
• Optical components other than the lamp: If the projector is used for six hours or more per day, they may need to be replaced in less than a year.
• LCD panel: If the projector is used continuously for six hours or more, its replacement cycle may be shortened.
• Do not turn projector on again for ten minutes after shutdown. Neglect can shorten the lifetime of the lamp. During use and immediately after use, do not touch anywhere near the lamp and the vents as these parts are extremely hot.
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Remote control warning: Do not look into the laser beam. Class 2 Laser product; maximum output 1mW; wavelength 650nm.

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