Beno PB6200/ PB6100 Digital Projector User's Manual

Welcome

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Important Safety Instructions

Your BenQ projector is designed and tested to meet the lastest standards for safety of information technology equipment . However, to ensure safe use of this product, it is important that you follow the instructions mentioned in this manual and marked on the product.

Caution

 To prevent shock, do not open the cabinet. There are no userserviceable parts inside.



 Please read this user's manual before you operate your projector. Save this user's manual for future reference.



 Do not look straight at the projector lens during operation. The intense light beam may damage your eyes.



Refer servicing to qualified service personnel.



Always open the lens shutter or remove the lens cap when the projector lamp is on.



In some countries, the line voltage is NOT stable. This projector is designed to operate safely within a mains voltage of 100 to 240 volts, but could fail if power cuts or surges of ±10 volts occur. In areas where the mains voltage may fluctuate or cut out, it is recommended that you connect your projector through a power stabilizer, surge protector or uninterruptible power supply (UPS).



Safety Instructions

 The lamp becomes extremely hot during operation. Allow the projector to cool for approximately 45 minutes prior to removing the lamp assembly for replacement.



 Do not operate lamps beyond the rated lamp life. Excessive operation of lamps beyond the rated life could cause them to explode on rare occasions.



Never replace the lamp assembly or any electronic components unless the projector is unplugged.



 Do not place this product on an unstable cart, stand, or table. The product may fall, sustaining serious damage.



5. To reduce the risk of electric shock, do not disassemble this appliance. Take it to a qualified technician when service or repair is required. Incorrect reassembly can cause cause malfunction of the projector or electric shock when the appliance is subsequently used.



 This product is capable of displaying inverted images for ceiling mount installation. Please use BenQ's Ceiling Mounting Kit for mounting the unit and ensure it is securely installed.



Safety Instructions (Continued)

- Do not block the ventilation holes.
 - Do not place this unit on a blanket, bedding or any other soft surface.
 - Do not cover this unit with a cloth or any other item.
 - Do not place inflammables near the projector.



If the ventilation holes are seriously obstructed, overheating inside the unit may result in a fire.

- 8. Do not place this unit in any of the following environments.
 - Space where is poorly ventilated or confined. Allow at least 50 cm clearance from walls and free flow of air around the projector.
 - Locations where temperatures may become excessively high, such as the inside of a car with all windows rolled up.
 - Locations where excessive humidity, dust, or cigarette smoke may contaminate optical components, shortening the projector's lifespan and darkening the screen.
 - Locations near fire alarms
 - Locations with an ambient temperature above 35°C / 95°F



- Always place the unit on a level, horizontal surface during operation.
 - Do not use if tilted at an angle of more than 10 degrees left to right, nor at angle of more than 15 degrees front to back. Using the unit when it is not fully horizontal may cause a malfunction of, or damage to, the lamp.



Do not stand the unit on end vertically.



Doing so may cause the unit to fall over, causing injury or resulting in damage to the unit.

11. Do not step on this unit or place any objects upon it.



Besides probable physical damage to the unit, doing so may result in accidents and possible injury.

Introduction

Projector Features

The projector integrates high-performance optical engine projection and a user-friendly design to deliver high reliability and ease of use.

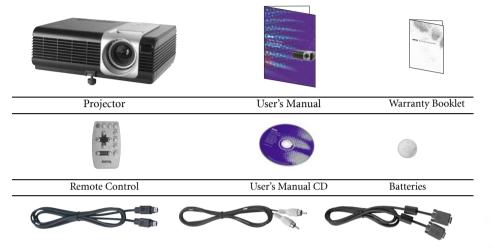
The projector offers the following features:

- Small and light for portability
- High quality manual zoom lens
- · One-key auto-adjustment to display the best picture quality
- Digital keystone correction to correct distorted images
- Adjustable color balance control for data/video display
- Ultra-high brightness projection lamp
- Ability to display 16.7 million colors
- On-screen menus in 8 languages: English, French, German, Italian, Spanish, Korean, Traditional Chinese and Simplified Chinese.
- 4 preset modes for each signal input allow the projected images optimized.
- Switchable Economic mode to adjust the power consumption
- Powerful AV function to provide high quality AV picture
- HDTV compatibility (YPbPr)

Note: The brightness of the projected image will vary depending on the ambient lighting conditions and contrast / brightness settings.

Shipping Contents

The projector is shipped with the cables required for connection to a PC and to video equipment. Carefully unpack and verify that you have all of the items shown below. If any of these items are missing, please contact your place of purchase.



Alternative Accessories

S-Video Cable

1. Power Cord: 110V for the US, 240V for UK and 220V for European countries

Video Cable

2. 3-2 converter: For the US



Optional Accessories

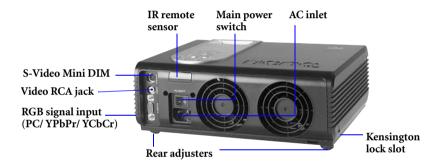
- 1. Macintosh adapter
- 2. 200W lamp module
- 3. Ceiling mount kit
- 4. HDTV cable
- 5. Soft carry case

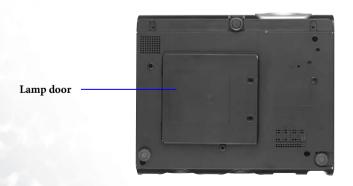
VGA Cable

Projector Description

Your Projector at a Glance







External Control Panel



Power

Press the **Power** key to turn the projector on or off.

2 Source

Selects signal sources from among PC, YPbPr, S-Video and Video.

■ Left ② Exit ⑤ Right ⑥ Menu Menu will display the menu system on screen. Press Menu again to access the submenus. Left and Right help you navigate among choices and settings in the menus and sub-menus. However, when the onscreen menu is not activated, the Left and Right buttons will function as Keystone -/+ hot keys.

Press the **Exit** button to go back to the main menu. Press **Exit** again to leave the menu system.

• Auto

Automatically determines the best picture settings for current received signals.

Blank

Use **Blank** to hide the screen image. To unseal the image, press **Blank** again to turn the image on immediately.

Power indicator

It will light up or flash when the projector is under operation.

Temp indicator

The Temp indicator will flash when the system temperature is too high, which may occur if the projector is operated improperly. See "Temp Information" on page 27 for more detailed information.

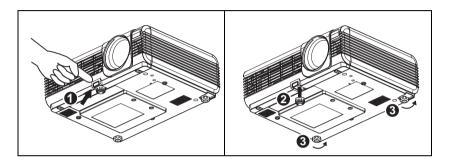
1 Lamp indicator

The Lamp Indicator will light up when the lamp needs service or replacement. See "Lamp Information" on page 25 for more detailed information.

Adjuster

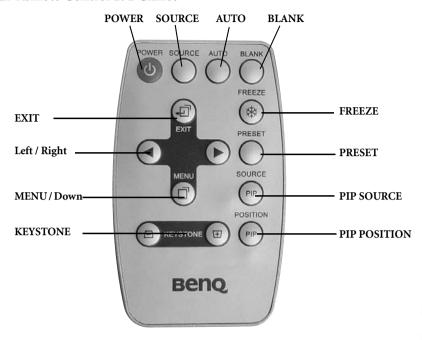
The projector is equipped with 1 quick-release adjuster foot. Push the button to adjust its tilt angle.

- 1. Lift the projector up and press the adjuster button to release the front adjuster.
- 2. The adjuster will drop into position and be locked
- 3. If the projected image is higher than the screen, you can screw the 2 rear adjusters to decrease the offset.



Remote Control Description

Your Remote Control at a Glance



Remote Control Effective Range

The remote sensors are located on the front and the back of the projector. It can function in a range of 30 degrees horizontally and 30 degrees vertically relative to a line that is a right angle to the remote sensors. The distance between the remote control and the remote sensors must be shorter than 6 meters (19.5 feet).

Remote Control Functions

1. POWER, SOURCE, AUTO, BLANK, ⁴, ▶, EXIT, MENU

The functions of these buttons are the same as those on the external control panel. Please refer to "External Control Panel" on page 7 for more information.

2. KEYSTONE

If the image is trapezoid after adjusting the projection offset, press KEYSTONE + OR KEYSTONE - to correct distorted image.

3. FREEZE

The image can be frozen when FREEZE is pressed. An icon will appear in the lower right corner of the screen. To release the freeze function, press the FREEZE button again.

4. PRESET

Users can switch 4 kinds of preset modes. The preset mode changes each time when you press PRESET button

- PC Signal:
 - Presentation Mode (Default) --> Vivid Mode --> Video Mode --> Economic Mode
- YPbPr/ S-Video/ Video Signal:
 Gaming Mode (Default) --> Video Mode --> Cinema Mode --> Economic Mode

Gaming Mode (Default) --> Video Mode --> Cinema Mode --> Economic Mod

5. PIP SOURCE

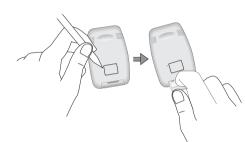
User can activate PIP and select the source between S-Video and Video while the input source is PC. The PIP source changes in the order of S-Video, Video, and off.

6. PIP POSITION

While PIP is activated, you can select one of the nine positions.

Installing or Replacing Batteries

1. Use a pointy-sided stick to release the barttery tray. Pull the tray off.



2. Install or replace a battery.



3. Snap the battery tray back into place.

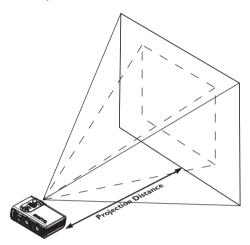


Avoid excessive heat and humidity. There may be danger of an explosion if batteries are incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.



Screen Size

Place the projector at the required distance from the screen according to the desired picture size (see the table below).



PB6200 (XGA) screen size chart (4:3 aspect ratio)

Diet	onco	Diag	gonal m	al measurement			Distanc	o from	Dia	gonal m	easurem	ent		
	Distance from screen		finimum Maximum		Minimum		Maximum			Distance from - screen		num	Maxii	num
110111	0010011	ZOO	om	ZO	om		5616		ZOC	m	zoom			
feet	inches	feet	inches	feet	inches	Г	meters	cm	meters	cm	meters	cm		
4	48	2.49	29.9	3.05	36.6		1	100	0.62	62.2	0.76	76.2		
6	72	3.73	44.8	4.57	54.9		1.5	150	0.93	93.3	1.14	114.3		
8	96	4.98	59.7	6.10	73.2		2	200	1.24	124.5	1.52	152.4		
10	120	6.22	74.7	7.62	91.4		2.5	250	1.56	155.6	1.91	190.5		
12	144	7.47	89.6	9.14	109.7		3	300	1.87	186.7	2.29	228.6		
14	168	8.71	104.5	10.67	128.0		3.5	350	2.18	217.8	2.67	266.7		
16	192	9.96	119.5	12.19	146.3		4	400	2.49	248.9	3.05	304.8		
18	216	11.20	134.4	13.72	164.6		4.5	450	2.80	280.0	3.43	342.9		
20	240	12.45	149.4	15.24	182.9		5	500	3.11	311.2	3.81	381.0		
22	264	13.69	164.3	16.76	201.2		5.5	550	3.42	342.3	4.19	419.1		
24	288	14.94	179.2	18.29	219.5		6	600	3.73	373.4	4.57	457.2		
26	312	16.18	194.2	19.81	237.7		6.5	650	4.04	404.5	4.95	495.3		
28	336	17.42	209.1	21.34	256.0	Ī	7	700	4.36	435.6	5.33	533.4		
30	360	18.67	224.0	22.86	274.3	Ī	7.5	750	4.67	466.7	5.72	571.5		
32	384	19.91	239.0	24.38	292.6		8	800	4.98	497.8	6.10	609.6		

PB6200 (XGA) screen size chart (16:9 aspect ratio)

Diet	Distance from screen		Diagonal measurement						
_			mum	Maximum					
Hom	screen	ZO	om	ZO	om				
feet	inches	feet	inches	feet	inches				
4	48	2.29	27.5	2.80	33.6				
6	72	3.44	41.3	4.20	50.4				
8	96	4.59	55.1	5.60	67.2				
10	120	5.74	68.8	7.00	84.0				
12	144	6.88	82.6	8.40	100.8				
14	168	8.03	96.4	9.80	117.6				
16	192	9.18	110.1	11.20	134.4				
18	216	10.32	123.9	12.60	151.2				
20	240	11.47	137.7	14.00	167.9				
22	264	12.62	151.4	15.39	184.7				
24	288	13.77	165.2	16.79	201.5				
26	312	14.91	179.0	18.19	218.3				
28	336	16.06	192.7	19.59	235.1				
30	360	17.21	206.5	20.99	251.9				
32	384	18.35	220.3	22.39	268.7				

Distanc	Distance from screen		Diagonal measurement						
			num	Maximum					
SCIC	C11	zoc	m	zoom					
meters	cm	meters	cm	meters	cm				
1	100	0.57	57.4	0.70	70.0				
1.5	150	0.86	86.0	1.05	105.0				
2	200	1.15	114.7	1.40	140.0				
2.5	250	1.43	143.4	1.75	179.4				
3	300	1.72	172.1	2.10	209.9				
3.5	350	2.01	200.8	2.45	244.9				
4	400	2.29	229.4	2.80	279.9				
4.5	450	2.58	258.1	3.15	314.9				
5	500	2.87	286.8	3.50	349.9				
5.5	550	3.15	315.5	3.85	384.9				
6	600	3.44	344.1	4.20	419.9				
6.5	650	3.37	372.8	4.55	454.9				
7	700	4.02	401.5	4.90	489.8				
7.5	750	4.30	430.2	5.25	524.8				
8	800	4.59	458.9	5.60	559.8				

PB6100 (SVGA) screen size chart (4:3 aspect ratio)

Dict	Distance from screen		Diagonal measurement						
_			mum	Maximum					
110111	SCICCII	ZO	om	zo	om				
feet	inches	feet	inches	feet	inches				
4	48	1.96	23.5	2.40	28.7				
6	72	2.93	35.2	3.59	43.1				
8	96	3.91	47.0	4.79	57.5				
10	120	4.89	58.7	5.99	71.9				
12	144	5.87	70.4	7.19	86.2				
14	168	6.85	82.2	8.39	100.6				
16	192	7.83	93.9	9.58	115.0				
18	216	8.80	105.7	10.78	129.4				
20	240	9.78	117.4	11.98	143.7				
22	264	10.76	129.1	13.18	158.1				
24	288	11.74	140.9	14.37	172.5				
26	312	12.72	152.6	15.57	186.9				
28	336	13.70	164.3	16.77	201.2				
30	360	14.67	176.1	17.97	215.6				
32	384	15.65	187.8	19.17	230.0				

Distance from		Diagonal measurement						
	screen		num	Maximum				
301	CCII	Z00	m	zoo	m			
meters	cm	meters	cm	meters	cm			
1	100	0.49	48.9	0.60	59.9			
1.5	150	0.73	73.4	0.90	89.8			
2	200	0.98	97.8	1.20	119.8			
2.5	250	1.22	122.3	1.50	149.7			
3	300	1.47	146.7	1.80	179.7			
3.5	350	1.71	171.2	2.10	209.6			
4	400	1.96	195.7	2.40	239.6			
4.5	450	2.20	220.1	2.70	269.5			
5	500	2.45	244.6	2.99	299.5			
5.5	550	2.69	269.0	3.29	329.4			
6	600	2.93	293.5	3.59	359.4			
6.5	650	3.18	317.9	3.89	389.3			
7	700	3.42	342.4	4.19	419.3			
7.5	750	3.67	366.8	4.49	449.2			
8	800	3.91	391.3	4.79	479.1			

PB6100 (SVGA) screen size chart (16:9 aspect ratio)

Diet	ance	Diagonal measurement			Diagonal measurement Distance fro			e from	Diag	onal m	easurem	ent
_	screen	Mini	mum	Maxi	imum	scre		Minir	num	Maxir	num	
110111	SCIECII	ZO	om	zo	om	SCI	2011	zoo	m	zoo	m	
feet	inches	feet	inches	feet	inches	meters	cm	meters	cm	meters	cm	
4	48	1.80	21.6	2.20	26.4	1	100	0.45	45.1	0.55	55.0	
6	72	2.70	32.4	4.20	50.4	1.5	150	0.68	67.6	0.82	82.5	
8	96	3.61	433	5.60	67.2	2	200	0.90	90.1	1.10	110.0	
10	120	4.51	54.1	7.00	84.0	2.5	250	1.13	112.7	1.37	137.5	
12	144	5.41	64.9	8.40	100.8	3	300	1.35	135.2	1.65	164.9	
14	168	6.31	75.7	9.80	117.6	3.5	350	1.58	157.7	1.92	192.4	
16	192	7.21	86.5	11.20	134.4	4	400	1.80	180.3	2.20	219.9	
18	216	8.11	97.3	12.60	151.2	4.5	450	2.03	202.8	2.47	247.4	
20	240	9.01	108.2	14.00	167.9	5	500	2.25	225.3	2.75	274.9	
22	264	9.91	119.0	15.39	184.7	5.5	550	2.48	247.9	3.02	302.4	
24	288	10.82	129.8	16.79	201.5	6	600	2.70	270.4	3.30	329.9	
26	312	11.72	140.6	18.19	218.3	6.5	650	2.93	292.9	3.57	357.4	
28	336	12.62	151.4	19.59	235.1	7	700	3.15	315.5	3.85	384.9	
30	360	13.52	162.2	20.99	251.9	7.5	750	3.38	338.0	4.12	412.4	
32	384	14.42	173.1	22.39	268.7	8	800	3.61	360.5	4.40	439.8	

There is 3% ~ 5% tolerance among these numbers due to optical component limits.

Connecting to Various Equipment

HDTV Equipment

The projector is capable of displaying various High Definition TV display modes. Some of these sources are:

- Digital-VHS (D-VHS) player
 DVD player
- Satellite Dish HDTV receiver DTV tuners

Most of these sources will provide an analog component video output, a standard VGA output, or a YPbPr (default) format.

The projector is capable of accepting HDTV data through a D-Sub connector. Use a HDTV cable that is an optional accessory to display HDTV images.

The following standards are supported in the HDTV function:

480i • 480p

• 576i • 576p

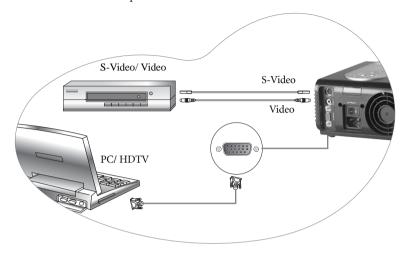
• 720p • 1080i

Please refer to "Menu System" on page 18 for information on the HDTV OSD selections.

^{* 1}m = 3.28 feet, 1 feet = 0.305m, 1m = 100cm, 1 feet = 12 inches

Connecting to Various Equipment

It only takes a few seconds to connect your projector to your desktop or notebook computer, VCR, or other systems. However, a Mac adapter (an optional accessory) is needed for connection to Macintosh computers.





Start Up

1. Plug the power cord into the projector and into a wall socket.



2. Turn the main power switch on.



3. Press and hold POWER for 1 second to start the projector. The back-lit POWER key flashes green and stays green when the power is turned on.

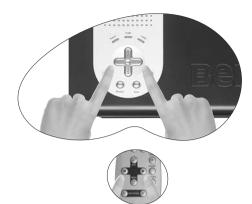


(When the power is turned off, there is a 110-second cooling period before the projector can be re-started.)

4. Switch on all connected equipment.

Digital Keystone Correction

Keystoning refers to the situation where the projected image is noticeably wider at either the top or bottom. To correct this, press Left/ Right (hot key) on the control panel of the projector or KEYSTONE /) on the remote control, and then adjust the sliding bar labeled Keystone, as needed. Press + to correct keystoning at the top of the image. Press - to correct keystoning at the bottom of the image.



Auto Adjustment

In some cases, you may need to optimize the picture quality. To do this, press the AUTO key on the control panel of the projector or on the remote control. Within 3 seconds, the built-in Intelligent Auto Adjustment function will readjust settings to provide the best picture quality.



Source Selection

When several input sources are available, press the SOURCE key to make a selection from the control panel of the projector or the remote control.



Blank

Use **Blank** to hide the screen image. You can unseal the image gradually by using the mouse of the remote control, or simply press **Blank** to turn the image on immediately.



Menu System

Press **Menu** for the main menu, and then press or to select a sub-menu. Press **Menu** again to select items in the sub-menu.

Functions available when connecting to different equipment						
Sub-Menu	PC	Y/Pb/Pr	S-Video / Video			
Display	Keystone Brightness Contrast Phase H Size		Keystone Brightness Contrast Color Tint			
Image	Aspect Ratio H Position V Position Color Temp Information	Aspect Ratio Color Tint Color Temp	Aspect Ratio System Sharpness Color Temp Information			
Source	Mirror Source Source Scan Blank Time Auto Off					
Control	Language OSD Pos. OSD Time Preset Mode Reset Lamp Hour					
PIP	Main Page: PIP Source PIP Size PIP Pos. H Position V Position More Options	Sub Page: Brightness Contrast Color Tint Sharpness				

1. Display Menu

FUNCTION	DESCRIPTION
Keystone	Corrects any keystoning of the image.
Brightness	Adjusts the brightness of the image.
Contrast	Adjusts the degree of difference between dark and light in the image.
Phase	Adjusts to avoid the occurrence of flicker. This function is not available when the input mode is Video or S-Video.
H Size	Adjusts to fit in the desired image size. This function is not available when the input mode is Video or S-Video.
Color	Increases or decreases the color range (R,G,B) of the image. This function is not available when the input mode is PC.
Tint	Adjusts the image to make it appear more red or blue. This function is not available when the input mode is PC.

2. Image Menu

FUNCTION	DESCRIPTION					
	Makes the best fit of the image to the screen,					
Aspect Ratio	1. 4:3 2. 16:9 3. Native					
	"Native" is available only when the input mode is PC.					
H Position	Adjusts the horizontal position of the projected image.					
	This function is available only when the input mode is PC.					
V Position	Adjusts the vertical positon of the projected image.					
V Toolston						
	This function is available only when the input mode is PC.					
Color Temp	Adjusts the color temperature to fit your preference.					
Information	Shows the current resolution and preset mode.					
System	System information will be shown:					
	1.NTSC 2. PAL 3.SECAM 4. YUV					
Sharpness	Adjusts the image to make it look sharper or softer.					
	This function is not available when the input mode is PC or YPbPr.					
Color	Increases or decreases the color range (R, G, B) of the image.					
	This function is not available when the input mode is PC.					
Tint	Adjusts the image to make it appear more red or blue.					
	This function is available only when the selected System is NTSC.					

3. Source Menu

FUNCTION	DESCRIPTION	
Mirror	1. Default	2. Ceiling mounted projection
	Benzi	Bono
	3. Rear screen projection	4. Ceiling mounted and rear- screen projection
	Benq	Bena
Source	Shows the selected input source am when they are available.	ong PC, YPbPr, S-Video and Video
Source Scan	e	rated and the projector starts to scan in deo when there is no signal detected. If etects the last input source.
Blank Time	Determines the length of time before is activated.	re the projector is shut off when Blank
Auto Off	Sets the length of time before the sy detected.	stem is shut off when no input is

4. Control Menu

FUNCTION	DESCRIPTION		
Language	Language sets the language for the OSD control menus.		
	Use the ◀ / ▶ key to select the desired language from among English, French, German, Italian, Spanish, Korean, Traditional Chinese and Simplified Chinese.		
OSD Pos.	Selects a desired OSD position.		
OSD Time	Sets the length of time the OSD will remain active after the last time you pressed the button. The range is from 5 to 60 seconds in 5-second increments.		
Preset Mode	To optimize the projected images, you are free to choose one of the preset modes in accordance to the purpose of projection.		
	PC Signal		
	1. Presentation Mode : It is designed for presentations. The brightness		
	is emphasized in this mode.		
	2. Vivid Mode : It is perfect for gaming. The color saturation and		
	brightness are well-balanced.		
	 Video Mode: It is suitable for cinematic enjoyment in their natural color. 		
	4. Economic Mode : With lower system noise, the lamp can save 20% power to extend its life.		
	YPbPr/ S-Video/ Video Signal		
	 Gaming Mode: It is suitable for playing video games in a bright living room. 		
	 Video Mode: With a higher color temperature, it is suitable for enjoying movies. 		
	3. Cinema Mode: With a lower color temperature, it is suitable for enjoying movies.		
	4. Economic Mode : With lower system noise, the lamp can save 20% power to extend its life.		
Reset	Returns all settings to their factory preset values.		
Lamp Hour	Displays the number of hours the lamp has been used.		

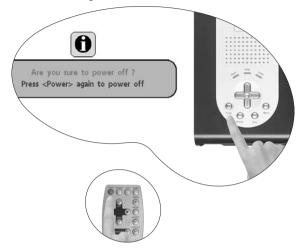
5. PIP Menu

These functions are available only when the input mode is PC and the PIP source is Video or S-Video.

FUNCTION	DESCRIPTION	
PIP Source	Selects the source for the PIP.	
PIP Size	Enables use of the 4 / • key to scroll through the four alternatives: Off, Small, Medium, Large.	
PIP Position	Selects a desired position for the PIP.	
H Position	Adjusts the horizontal position of the PIP image.	
V Position	Adjusts the vertical position of the PIP image.	
More Options	Enables use of the ⁴ / ▶ key to select more PIP functions including Brightness, Contrast, Color, Tint, Sharpness and System.	
Brightness	Adjusts the brightness of the PIP image.	
Contrast	Adjusts the degree of difference between dark and light for the PIP image.	
Color	Increases or decreases the color range (R, G, B) of the image.	
Tint	Adjusts the image to make it appear more red or blue.	
Sharpness	Adjusts the image to make it appear sharper or softer	

Shutdown

Press and hold **POWER** and a warning message will appear. To turn the projector off, press and hold POWER again.



- 2. The fan will continue to run for approximately 110 seconds.
- 3. Turn the main power switch off.



4. Disconnect the power cord from the wall socket.



No not unplug the power cord before POWER is shut down or during the 110-second cooling process.

If the projector is not properly shut down, to protect the lamp, the system will detect this and cool the lamp for 110 seconds automatically before turning on again.

5 Maintenance

Lamp Information

Use and Replacement of the Lamp

When the Lamp Indicator lights up red or a message appears suggesting the time of lamp replacement, please install a new lamp or consult your dealer. An old lamp could cause a malfunction in the projector and in rare instances may even break.

For more detailed information, please refer to "LED Indicator Status & Illustration" on page



/i\ The Lamp and Temp indicators will light up if the lamp becomes too hot. Turn the power off and let the projector cool for 45 minutes. If the Lamp or Temp indicator still lights up when turning the power on, please contact your dealer.

Lamp Replacement



To reduce the risk of electrical shock, always turn the projector off and disconnect the power cord before changing the lamp.

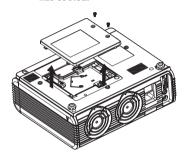
To reduce the risk of severe burns, allow the projector to cool for at least 45 minutes before replacing the lamp.

To reduce the risk of injuries to fingers and damage to internal components, use caution when removing lamp glass that has shattered into sharp pieces.

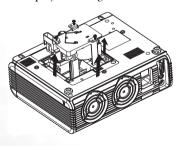
To reduce the risk of injuries to fingers and/or compromising image quality by touching the lens, do not touch the empty lamp compartment when the lamp is removed.

This lamp contains mercury. Consult your local hazardous waste regulations to dispose of this lamp in a proper manner.

- Step 1. Turn the projector off. Disconnect the power cord from the outlet and the projector.
- Step 2. Loosen the screw and remove the lamp cover. (It is strongly recommended that you use a magnetic-head screwdriver.) If the lamp is hot, avoid burns by waiting 45 minutes until the lamp has cooled.

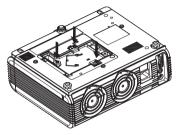


Step 3. Loosen the 3 screws. Pull the handle to remove the lamp housing. If the screws are not loosened completely, they could injure your fingers. Do not insert your hand into the box after the lamp is removed. If you touch the optical components inside, this could cause color unevenness in projected images.

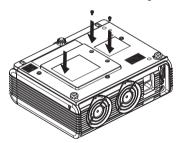


Step 4. Replace the lamp with a new one.

Insert it into the projector, and tighten the screws firmly. Loose screws may cause a bad connection, which may result in malfunction.



Step 5. Re-install the lamp cover and tighten the screw. **Do not turn** the power on with the lamp cover removed. Whenever the lamp is replaced, reset the total lamp operation time. **Do not** reset if the lamp is not replaced as this could cause damage.



Resetting Lamp Hours

If you replace the lamp with a new one, please follow the instructions below to reset the lamp hour.

OSD	INSTRUCTIONS
Lamp Hours Info 1990 : 25 Press < Menu D Enable RESET	Press and hold the Exit button on the projector for 3 seconds to display the total used lamp time. With the OSD on, press MENU to activate RESET function or press EXIT to leave.
Lamp Hours Reset 1990: 25 Press 《 Or 》 TO RESET	Press ◀ or ▶ to reset the lamp hour to zero or or press EXIT to leave.
Lamp Hour Reset OK! Dogs	This message displays when the lamp hour is reset to zero. You can press EXIT to leave.

Temp Information

When the LED lights up, it is warning you of the following possible problems:

- 1. The internal temperature is too high.
- 2. The fans are not working.

Turn the projector off and contact qualified service personnel for further help.

For more detailed information, please refer to "LED Indicator Status & Illustration" on page 28.

LED Indicator Status & Illustration

llustration

1. -: LED OFF

2. LED blinking

3. : LED solid ON

4. **O**: LED lights up orange.

5. \mathbf{R} : LED lights up red.

6. **G**: LED lights up green.

LED			Status & Description		
Power	Temp	Lamp			
	Power events				
0	0	0	Power switch on		
0	1	1	Power-up cooling. Projector cooling system will auto-cool for 110 seconds when power was abnormally shutdown without cooling and power on again within hours.		
0	-	-	Stand-by		
G	-	-	Lamp LED is blinking during powering up.		
0	-	-	Power-down cooling for 110 seconds after power has been turned off.		
G	1	ı	Normal operation		
			Lamp events		
-	-	R	Lamp spoil, it is warning you that lamp usage has exceeded 3000 hours. Replace the projection lamp with a new one immediately.		
-	-	R	Lamp error, the lamp is not properly attached or lamp damaged. Please contact your dealer.		

Thermal events			
R	R	-	Fan 1 error, projector will auto shutdown. If you return on the power, and projector shutdown again. Please contact your dealer.
R	R	G	Fan 2 error, projector will auto shutdown. If you return on the power, and projector shutdown again. Please contact your dealer.
R	R	G	Fan 3 error, projector will auto shutdown. If you return on the power, and projector shutdown again. Please contact your dealer.
G	R	-	Thermal sensor 1 over-temperature, projector will auto shutdown. If you return on the power, and projector shutdown again. Please contact your dealer.
G	R	G	Thermal sensor 2 over-temperature, projector will auto shutdown. If you return on the power, and projector shutdown again. Please contact your dealer.
G	R	G	Thermal sensor 3 over-temperature, projector will auto shutdown. If you return on the power, and projector shutdown again. Please contact your dealer.
-	R	-	Thermal sensor 1 doesn't work, projector will auto shutdown. If you return on the power, and projector shutdown again. Please contact your dealer.
-	R	G	Thermal sensor 2 doesn't work, projector will auto shutdown. If you return on the power, and projector shutdown again. Please contact your dealer.
-	R	G	Thermal sensor 3 doesn't work, projector will auto shutdown. If you return on the power, and projector shutdown again. Please contact your dealer.

Service Information

Accessories (included in the standard package)

Description of parts	Part Number
VGA cable.	. 50.J0508.503
Video cable	. 50.J1303.501
S-Video cable	50.72920.011
Remote control	. 56.26J86.001

Alternative Accessories (vary from country to country)

Description of parts	Part Number
Power cord (US)	.27.01818.000
3-2 converter (US)	22.91007.001
Power cord (EU)	.27.82718.281
Power cord (UK)	27.01018.000

Optional Accessories (not included in the standard package)

Description of parts
Mac adapter (switchable)
200W lamp module
Ceiling mount kit
Soft carry case
HDTV cable

Ordering Parts or Getting Information

For product information, product assistance, service information, or to order accessories, please visit the BENQ Corporation website at http://www.BenQ.com.

6 Troubleshooting

Common Problems & Solutions

? NO POWER

Try these solutions:

- Make sure the power cord is inserted snugged into the AC adapter socket.
- Make sure the power cord is inserted snugged into the power outlet.
- Toggle the power switch to the position "I".
- Wait 110 seconds after the projector is turned off before turning the projector back on.

? NO PICTURE

Try these solutions:

- · Check for the proper input source.
- Ensure all cables are connected properly.
- Adjust the brightness and contrast.
- Remove the lens cap.

? TRAPEZOID IMAGE ON THE SCREEN

Try these solutions:

- Reposition the unit to improve its angle on the screen.
- Use the **Keystone** correction key on the control panel of the projector or the remote control unit.

? POOR COLOR

Try these solutions:

- Select the correct video system.
- Adjust brightness, contrast, or saturation.

② BLURRED IMAGE

Try these solutions:

- Press Auto on the control panel of the projector or the remote control unit to get better picture quality.
- Adjust the focus.
- Reposition the unit to improve its projection angle.
- Ensure the distance between the unit and screen is within the adjustment range of the lens.

? REMOTE CONTROL DOES NOT WORK

Try these solutions:

- Replace the batteries with new ones.
- Make sure there is no obstacle between the remote control and the projector.
- Stand within 6 meters (19.5 feet) of the projector.
- Make sure nothing is blocking the front and rear receivers.

Status Messages

On-Screen Messages	Description
SEARCHING	Projector is searching for input.
ACQUIRING SIGNAL	Projector has identified the input signal and is running the auto image adjustment function.
OUT OF RANGE	Input signal frequency exceeds the projector's range.
Lamp Warning - Change Lamp If Brightness Is Low.	The lamp has been in operation for over 1980 hours. Install a new lamp for optimal performance. This message will display for 10 seconds after starting up the projector.
Out Of Lamp Usage Time - Change The Lamp! The Power Will Turn Off After 3000 Hours.	The lamp has been in operation for over 2980 hours, and the power will turn off after 3000 hours. This message will display for 30 seconds after starting up the projector.
Out Of Lamp Usage Time - Change The Lamp! Press <menu> to enable <reset></reset></menu>	The lamp has been in operation for over 3000 hours. The warning message will display for 40 seconds and then shut down automatically. If you have installed a new lamp, press <menu> during the OSD on to enter for resetting the lamp hour to zero.</menu>



Projector Specifications

Technical Specifications

All specifications are subject to change without notice.

General

Product name Digital Projector

Model name PB6200 1024X768 XGA PB6100 800X600 SVGA

Optical

Display system 1-CHIP DMD

Lens F/Number $F = 2.4 \text{ to } 2.6, f = 24.3 \sim 29.2 \text{ mm}$

Lamp 200W lamp

Electrical

Power supply AC100 ~ 240V, 3.2A, 50/60 Hz (Automatic)

Power consumption 285W (Max)

Mechanical

Dimensions 262 mm (W) x 98.4 mm (H) x 215.5 mm (D)

Operating temperature $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$

range

Weight 5.8 lbs (2.6 Kg)

Input terminal

Computer input

RGB input D-sub 15-pin (female)

Video signal input

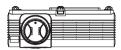
S-VIDEO Mini DIN 4-pin port x1

VIDEO RCA jack x1

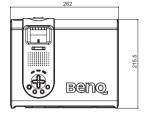
Timing Chart

Resolution	H Sync (kHz)	V Sync (Hz)	Remark
640x350	31.5	70.1	
640x400	37.9	85.1	VESA
720x400	31.5	70.0	
720x400	37.9	85.1	VESA
640x480	31.5	60.0	VESA
640x480	37.9	72.8	VESA
640x480	35	66.7	Macintosh
640x480	43.3	85.0	VESA
800x600	35.2	56.3	VESA
800x600	37.9	60.3	VESA
800x600	46.9	75.0	VESA
800x600	48.1	72.2	VESA
800x600	53.7	85.1	VESA
832x624	49.7	74.5	Macintosh
1024x768	48.4	60.0	VESA
1024x768	56.5	70.1	VESA
1024x768	60.0	75.0	VESA
1024x768	68.7	85.0	VESA
1280x1024	64.0	60.0	VESA

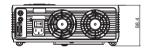
Dimensions

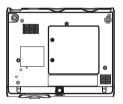












Unit: mm

• Warranty

Limited Warranty

BENQ warrants this product against any defects in material and workmanship, under normal usage and storage.

Exclusion to Warranty: The lamps are considered as consumable items and are warranted for 90 days or 1000 hours, whichever occurs first. Proof of purchase date will be required with any warranty claim. In the event this product is found to be defective within the warranty period, BENQ's only obligation and your exclusive remedy shall be replacement of any defective parts (labor included). To obtain warranty service, immediately notify the dealer from which you purchased the product of any defects.

Important: The above warranty shall be void if the customer fails to operate the product in accordance with BENQ's written instructions. This warranty gives you specific legal rights, and you may have other rights which vary from country to country.

For other information, please refer to BenQ Warranty Information Book.

Safety Regulations

FCC Statement

CLASS A: This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class "A" computing device pursuant to Subpart B of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his/her own expense will be required to take whatever measures may be required to correct the interference.

CLASS B: 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 communications. 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 distance 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.

EEC Statement

This machine was tested against the 89/336/EEC (European Economic Community) for EMC (Electro Magnetic Compatibility) and fulfills these requirements.

MIC Statement

A class equipment (Business purpose info/telecommunications equipment)

As this equipment has undergone EMC registration for business purpose, the seller and/or the buyer is asked to beware of this point and in case a wrongful sale or purchase has been made, it is asked that a change to household use be made.

B class equipment (Household purpose info/telecommunications equipment)

As this equipment has undergone EMC registration for household purpose, this product can be used in any area including residential area.