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**TLP-X10U** 

## TOSHIBA

OWNER'S MANUAL

## **3LCD DATA PROJECTOR**

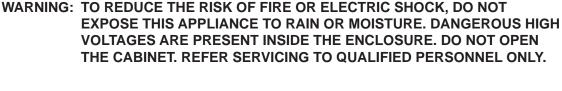
## TLP-X10U TLP-X11U (WITH DOCUMENT IMAGING CAMERA) TLP-X20U TLP-X21U (WITH DOCUMENT IMAGING CAMERA)



## SAFETY PRECAUTIONS



Before use



FCC Radio Frequency Interference Statement

- **Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiates radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
- **WARNING:** Changes or modifications made to this equipment, not expressly approved by Toshiba, or parties authorized by Toshiba, could void the user's authority to operate the equipment.
- Notice: This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

**CAUTION:** Laser beam is emitted when the laser button of the remote control is pressed. Do not look from the front of the remote control. Do not face toward a person

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The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of

electric shock to persons.

CAUTION

RISK OF ELECTRIC SHOCK

DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE

COVER (OR BACK). NO USERSERVICEABLE

PARTS INSIDE. REFER SERVICING TO

QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

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#### Save Original Packing Materials

The original shipping carton and packing materials will come in handy if you ever have to ship your LCD projector. For maximum protection, repack the set as it was originally packed at the factory.

#### Avoid Volatile Liquid –

Do not use volatile liquids, such as an insect spray, near the unit. Do not leave rubber or plastic products touching the unit for a long time. They will mar the finish.

#### Moisture Condensation \_

Never operate this unit immediately after moving it from a cold location to a warm location. When the unit is exposed to such a change in temperature, moisture may condense on the crucial internal parts. To prevent the unit from possible damage, do not use the unit for at least 2 hours when there is an extreme or sudden change in temperature. In the spaces provided below, record the Model and Serial No. located at the bottom of your LCD projector.

Model No. \_\_\_\_\_ Serial No. \_

Retain this information for future reference.



CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS GIVEN IN THIS OWNER'S MANUAL AND THOSE MARKED ON THE UNIT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use and servicing. This unit is fully transistorized and does not contain any parts that can be repaired by the user.

#### DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

#### 1. Read Owner's Manual

After unpacking this product, read the owner's manual carefully, and follow all the operating and other instructions.



#### 2. Power Sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

For products intended to operate from battery power, or other sources, refer to the operating instructions.

#### 3. Source of Light

Do not look into the lens while the lamp is on. The strong light from the lamp may cause damage to your eyes or sight.



#### 4. Ventilation

Openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.





#### 5. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

#### 6. Water and Moisture

Do not use this product near water – for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool and the like.

#### 7. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

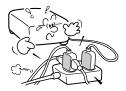


#### 8. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

#### 9. Overloading

Do not overload wall outlets; extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.



#### 10. Lightning

For added protection for this product during storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.



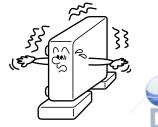
#### 11. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or shortout parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.



#### 12. Do not place the product vertically

Do not use the product in the upright position to project the pictures at the ceiling, or any other vertical positions. It may fall down and dangerous.



#### 13. Stack Inhibited

Do not stack other equipment on this product or do not place this product on the other equipment.

Top and bottom plates of this product develops heat and may give some undesirable damage to other unit.



#### 14. Attachments

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Do not use attachments not recommended by the product manufacturer as they may cause hazards.

#### 15. Accessories

Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



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## rs e or use

#### 16. If glass components, including lens and lamp, should break, contact your dealer for repair service.

This product incorporates glass components, including a lens and a lamp. If such parts should break, please handle with care to avoid injury and contact your dealer for repair service. The broken pieces of glass may cause to injury.

In the unlikely event of the lamp rupturing, thoroughly clean the area around the projector and discard any edible items placed in that area.

#### 17. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a) When the power-supply cord or plug is damaged.
- b) If liquid has been spilled, or objects have fallen into the product.
- c) If the product has been exposed to rain or water.
- d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e) If the product has been dropped or damaged in any way.
- f) When the product exhibits a distinct change in performance – this indicates a need for service.

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#### 18. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.



#### **19. Replacement Parts**

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards. (Replacement of the lamp only should be made by users.)

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## **IMPORTANT SAFETY INSTRUCTIONS (continued)**

#### 20. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

#### 22. Do not carry by the camera arm.

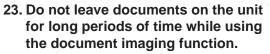
Do not carry the projector by the camera arm.

Doing so can result in damage or injury.



#### 21. Do not get your hands between the camera arm and the main unit when setting the camera arm back in its original position.

To avoid injury, be careful not to get your hands caught when setting the camera arm back in its original position. Families with children should be particularly careful.



Do not leave texts, papers or other documents for projection on the unit for long periods of time. The heat could erase the letters on a thermal paper. 24. Do not move the projector while the arm is still erect.

Always store the arm back in position when moving the projector. Otherwise injury or damage may result.



25. Do not look into the arm light while it is lit.

The strong light may cause damage to your eyes or sight.



If your line voltage is 220 to 240V, use one of the following types of cable.

Plug configuration	Plug type	Line voltage	
- CAR	EURO 240V 10 – 15A	220 – 240V	
	UK 240V 6A	200 – 240V	
T Con	Australian 240V 10A	200 – 240V	
	North American 240V 15A	200 – 240V	
	Switzerland 240V 6A	200 – 240V FixYourDLP.c	Merchant.com (800) 281-8860
		THE TRUST	ED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

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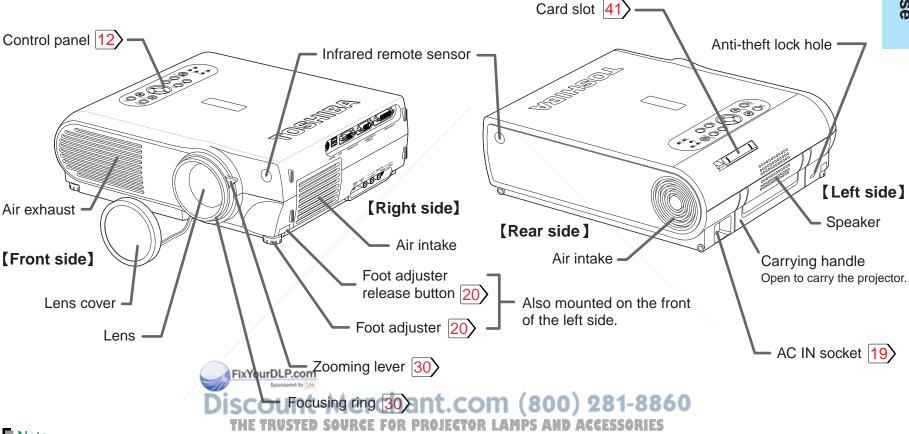
10

COVER

## Names of each part on the main unit

#### CAUTION

Openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The explanation here is only for the model not with the document imaging camera. For the model with the document imaging camera, refer to 74.



#### Note

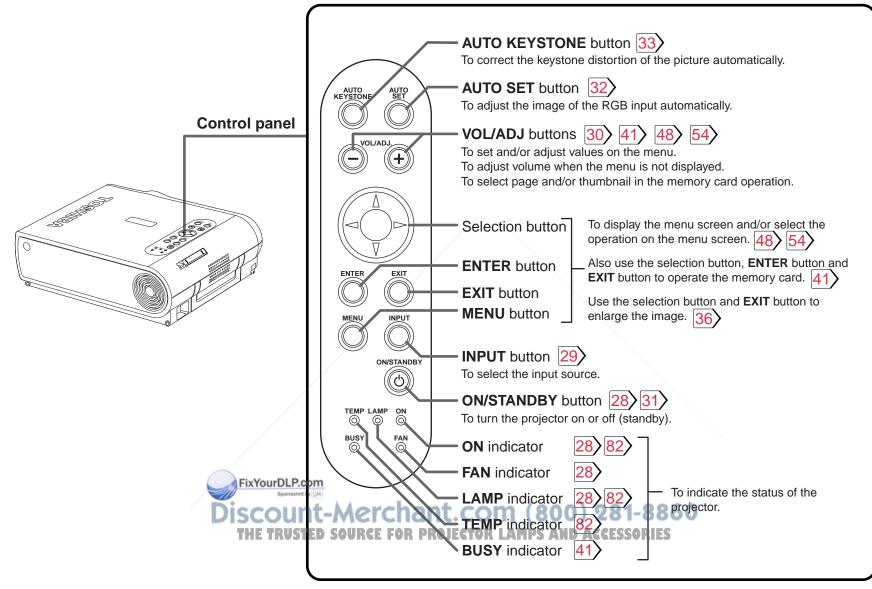
The air exhaust discharges high temperature air. Do not put something around the air exhaust, otherwise it may be deformed by the high temperature air.

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ONTFNTS

Continued

## Names of each part on the main unit (continued)

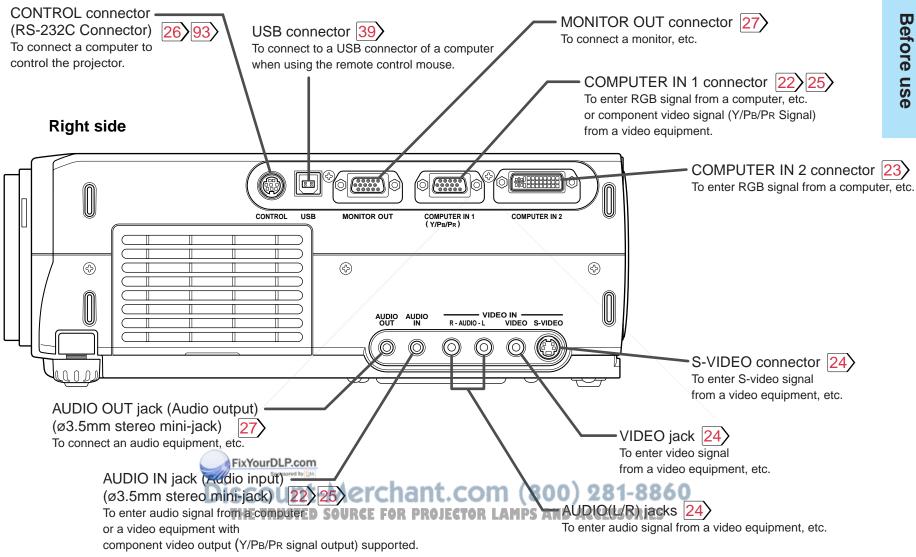


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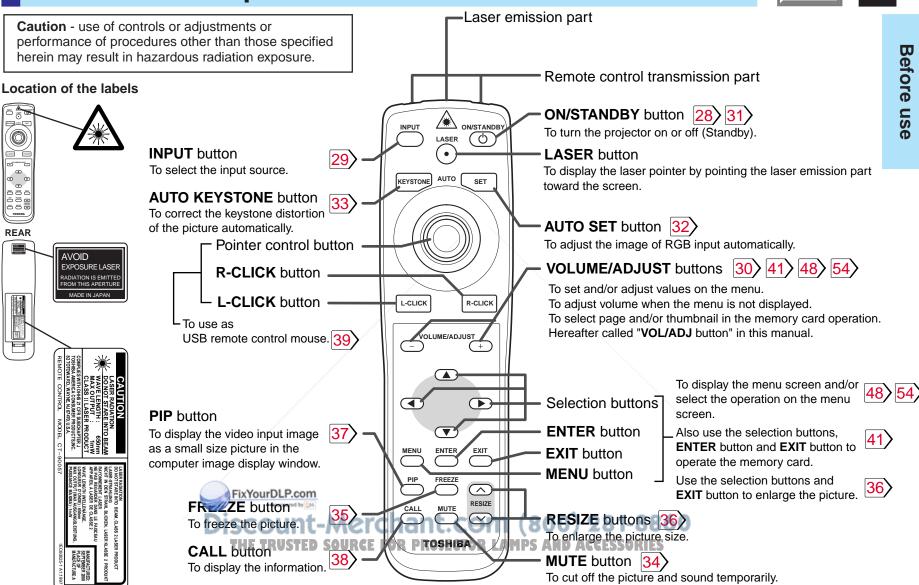
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Continued

## Names of each part on the main unit (continued)



## Names of each part on the remote control

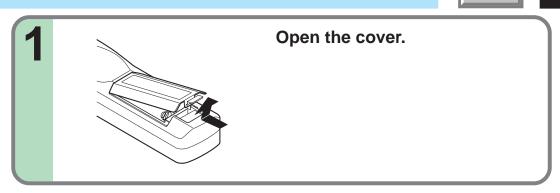


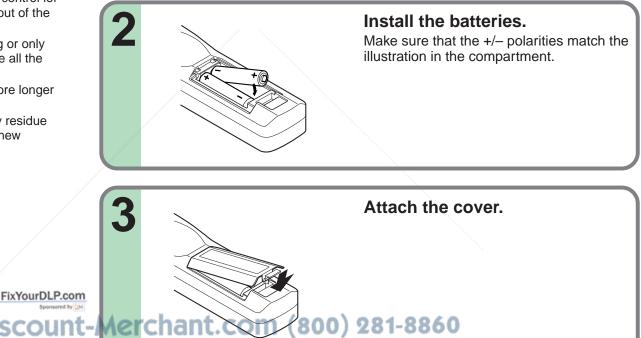
## **Loading batteries**

## Notes

Using batteries incorrectly can cause them to leak or burst. Strictly observe the following.

- Install the batteries with their + and ends facing correctly.
- Do not charge, heat, disassemble, or short the batteries or throw them into a fire.
- Do not leave exhausted batteries in the remote control.
- Do not mix different types of batteries or new and old batteries.
- When you will not be using the remote control for a prolonged period, take the batteries out of the remote control.
- When the remote control stops working or only works from very close distance, replace all the batteries with new ones.
- When replacing the batteries, use a more longer life alkaline batteries.
- If a battery leaks, carefully wipe off any residue inside the battery case before loading new batteries.



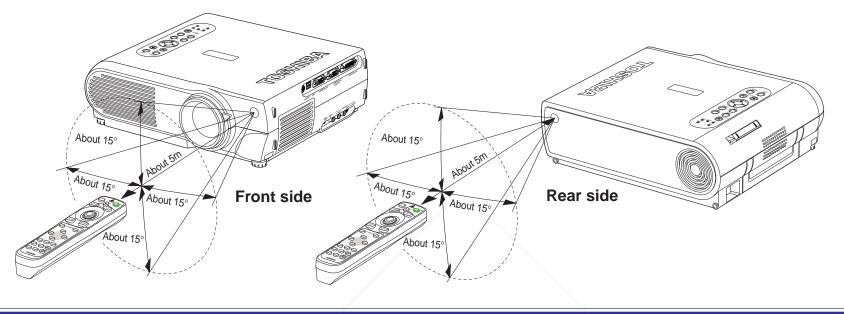


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## **Remote control operation**

Point the remote control at the infrared remote sensor and press a button.



## Notes

- The remote control may not operate when there is sunlight or other strong light such as a fluorescent lamp shining on the remote sensor.
- Operate the remote control from a position where the remote sensor is visible.
- Do not drop the remote control or otherwise jolt it.
- Keep the remote control out of locations with excessively high temperature or humidity.
- Do not get water on the remote control or place wet objects on it.
- Do not disassemble the remote control.
- Under unusual circumstances the rote control may not operate well due to the location being used or the surroundings. At such times, change the direction the remote control to the projector and retry the operation.

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## **Floor-mounted projector placement**

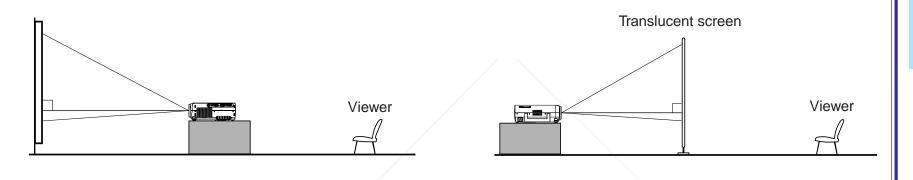
There are two ways to place the floor-mounted projector. Perform the "Projection mode" setting on the menu screen for the projection method. 67 For the ceiling-mounted projector placement, refer to the page 21.

#### Floor-mounted front projection

Viewing a picture projected on the front of the screen from a floor installation.

#### Floor-mounted rear projection

Viewing a picture projected through the back of the screen from a floor installation.





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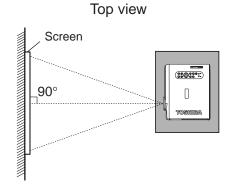


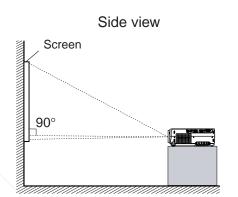
## Floor-mounted projector placement (continued)

# nstallation and connection

#### Place the projector on a steady, level surface such as a table.

To obtain proper screen projected, place the projector so that the projecting light hits the screen squarely.





Point the lens straight at the center of the screen as above.

Place the projector horizontally so that the projecting light hits the screen squarely.

## Determine the screen size projected on the screen.

The projection size depends on the distance between the lens and the screen. Adjust the projection size by changing the distances as shown below.

a (min.) =	Projection size - 0.9345 27.343	Projection size	a ( Minimum	m) Maximum	
		(inches)	(At maximum zoom)	(At minimum zoom)	b (cm)
a (max.) =	Projection size - 0.7301	25	-	1.14	3.8
	21.362	40	1.43	1.84	6.1
D =	Projection size (cm) x 0.06	60	2.16	2.77	9.1
90° FixYourDLP.com		80	2.89	3.71	12.2
b ∔	Distance between the lens and	100	3.62	4.65	15.2
Discount-M	the screen (m) t. com (80)	2150 - 88	6 5.45	6.99	22.9
	Distance between the lens height	200 DIF	7.28	9.33	30.5
a <b>Inclusion</b>	and the bottom of projection area	250	9.11	_	38.1
	(cm)	The values are	approximatio	ns.	

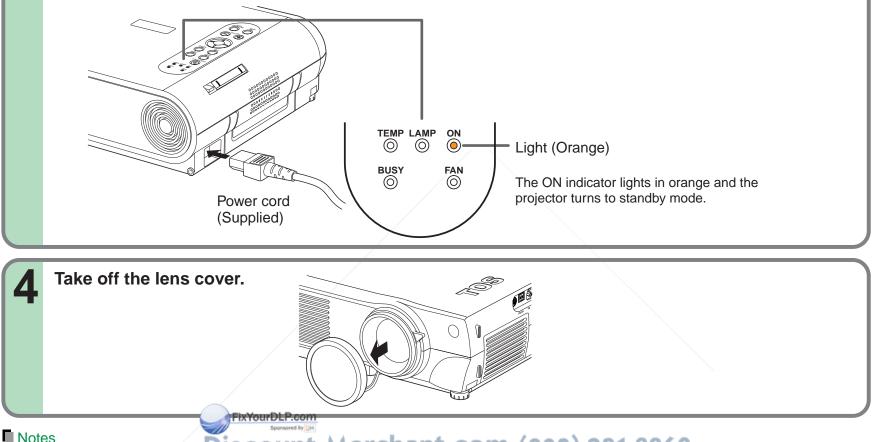
## Floor-mounted projector placement (continued)



#### Connect the power cord.

• Insert one end in the AC IN socket on the projector.

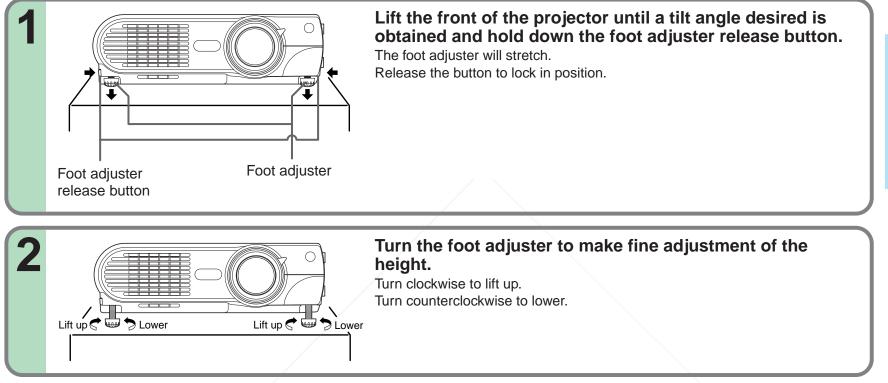
• Insert the other end in a wall outlet.



- When the projector is moved from a cold location to a warm location, or when the ambient temperature in the projection room has risen suddenly, moisture may condense on the lens or the internal optical section to blur the projected pictures. In such a case, leave the projector for an adequate time (1 to 2 hours, depending on the room's condition) before using it, so it adjusts to the ambient temperature.
- If the screen is exposed to direct sunlight or other strong light, the projected picture becomes too faint to see. Shut out the light with curtains or other means.
- If the screen and the projector are not installed properly, the projected picture may be distorted.

## **Projector placement angle adjustment**

The tilt of the projector can be adjusted using the foot adjuster.



## Notes

- To put the foot adjuster back, hold down the foot adjuster release button and lower the front slowly.
- Be sure to hold the projector when putting the foot adjuster back so as not to let the front fall on your fingers.
- Do not tilt the projector at an ang ceding the cange adjustable by the foot adjusters, since the duration life of the lamp may be shortened.

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## **Ceiling-mounted projector placement**

## CONTENTS

#### CAUTION

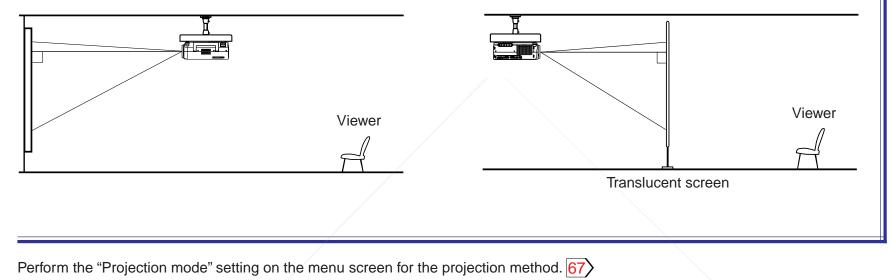
When a ceiling mount is required, please consult with the dealer.

#### **Ceiling-mounted front projection**

Viewing a picture projected on the front of the screen from a ceiling installation.

#### Ceiling-mounted rear projection

Viewing a picture projected through the back of the screen from a ceiling installation.



Notes

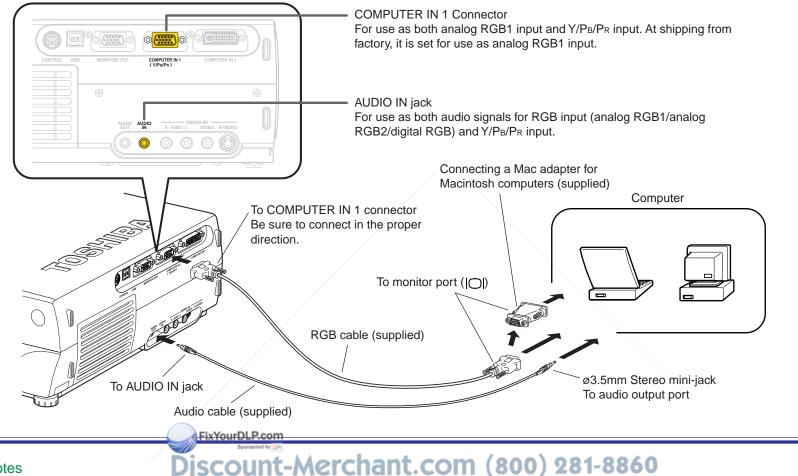
- For models with a document imaging camera, the ceiling-mounting is not recommended, since the camera arm may hang down if the projector is suspended from the ceiling.
   FixYourDLP.com
- The relation between the projection size and the distance to the screen is the same as that of the floor-mounted projection mode 18.

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## **Connecting a computer**

You can project the picture from the computer.

Check that the power for the projector and computer is off before connecting the cables.

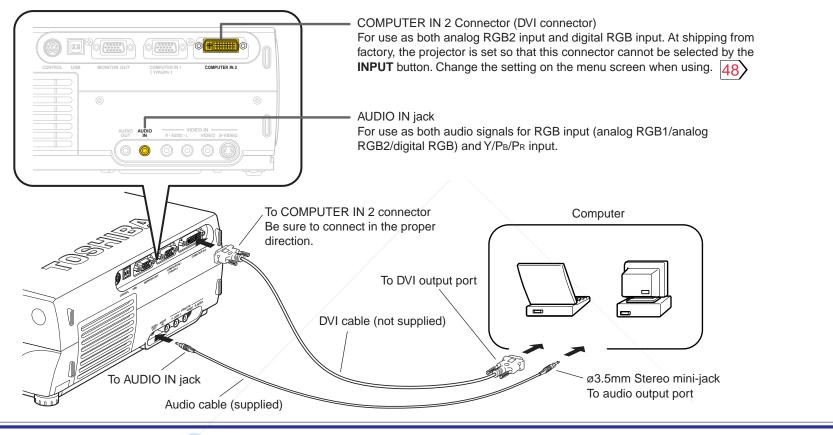


#### Notes

- The projector cannot be connected to a computer without an analog RGB connector. For details, refer to the computer manual.
- When connecting to a Macintosh computer, use the supplied Mac adapter (Multiple Scan 21 compatible). For some models the adapter is not required.
- You may not be able to connect some computers to the projector. For details, consult the dealer.
- Some computers may have output modes which are not compatible with this projector. Check the compatibility of the connectors, signal levels, timing, resolutions, etc.

## Connecting a computer with DVI output connector

You can project the picture by entering the digital RGB signals from a computer with DVI output connector. Check that the power for the projector and computer is off before connecting the cables.



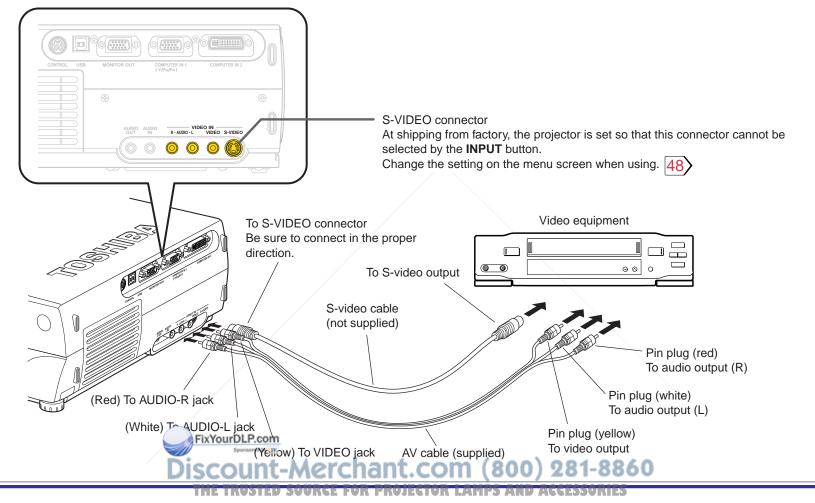
## Notes

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- The COMPUTER IN 2 connector can be used to input either digital RGB or analog RGB signals, depending on the connection cable used.
- The projector's DVI connector is of the DVI analog & digital type. Check the type of output connector on the computer, then purchase the appropriate type of connection cable. (To input analog RGB signals from a computer without a DVI connector, use a DVI cable on which the computer side connector is a mini D-sub 15-pin connector.)
- You may not be able to connect some computers to the projector. For details, consult the dealer.
- Some computers may have output modes which are not compatible with this projector. Check the compatibility of the connectors, signal timing, resolutions, etc.

## **Connecting video equipment**

You can project the picture from video equipment by using VIDEO IN connectors. Check that the power for the projector and video equipment is off before connecting the cables.



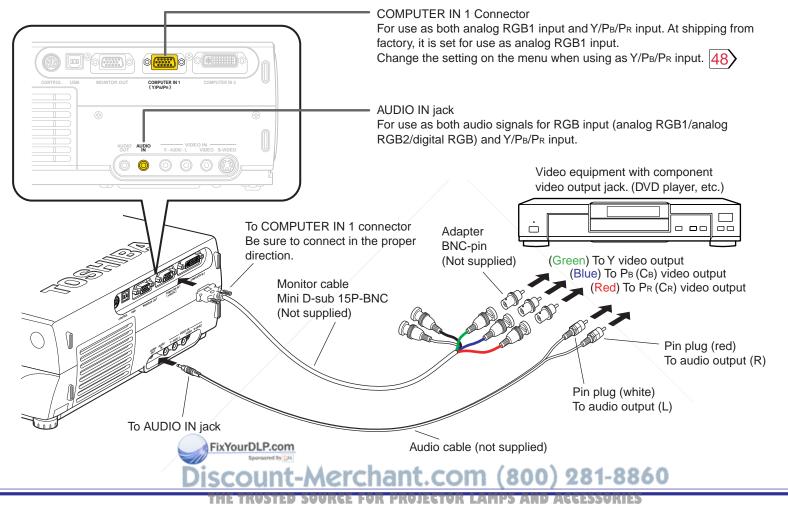
## Note

The S-VIDEO connector and VIDEO jack can be used independently, but the audio input jacks are used as both the S-VIDEO and VIDEO input.

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## **Connecting video equipment (continued)**

You can project the picture from video equipment with component video output jack. Check that the power for the projector and video equipment is off before connecting the cables.



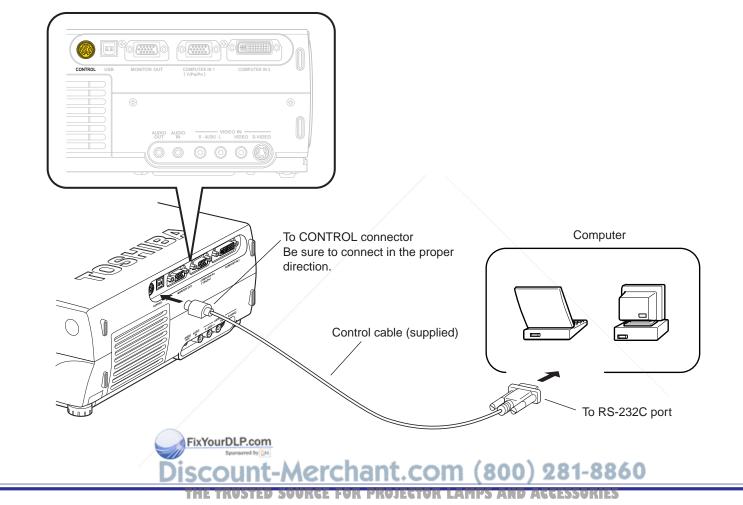
## Note

Some component video signal sources include the Y/CB/CR signals of a DVD player and the Y/PB/PR signals of high definition devices, etc.

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## **Projector operation control by a computer**

You can control the projector by a computer connected with the control cable supplied. 93 Check that the power for the projector and computer is off before connecting the cables.

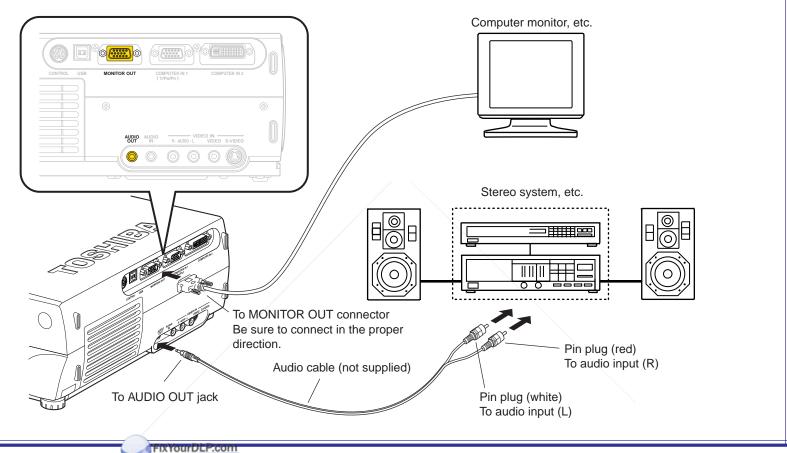


## Note

Do not connect a cable other than the exclusive one supplied.

## How to use the output connector

You can output video and audio signals to a computer monitor, a stereo system, etc. Check that the power for the projector and the equipments is off before connecting the cables.



Notes

- The audio signals of the input source selected by the input select operation are output from the AUDIO OUT jack. The signal level (volume) is fixed.
- The analog RGB signals of the COMPUTER IN 1 or COMPUTER IN 2 connector selected by the input select operation are output from the MONITOR OUT connector. If neither of these input sources is selected, the analog RGB signal of the COMPUTER IN 1 connector is output. (Digital RGB signals are not output.)
- Signals are output from the MONITOR OUT connector even when in the standby mode.
- Do not turn the projector on or off with the stereo system, etc., turned on. This may damage the stereo's speakers.

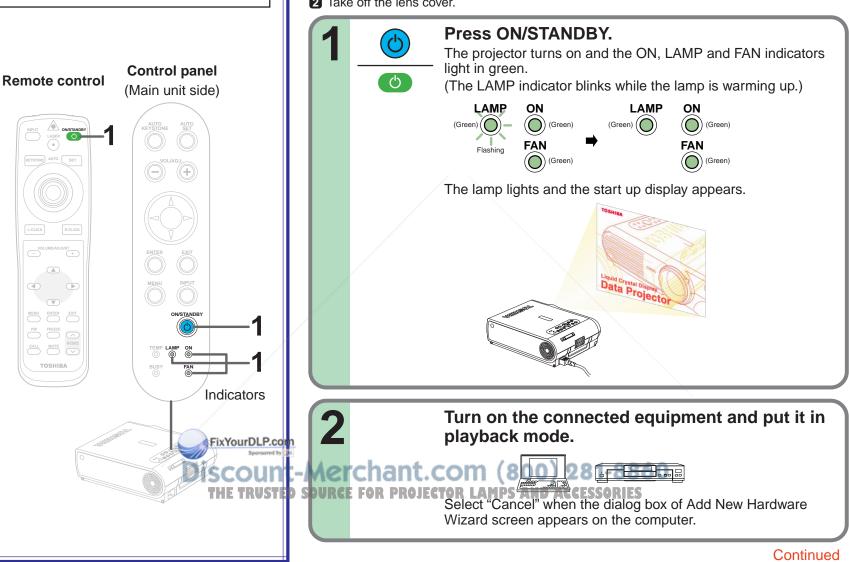
## **Projection on the screen**

CAUTION - Do not look into the projection lens while operating the projector.



1 Install and connect the projector properly.

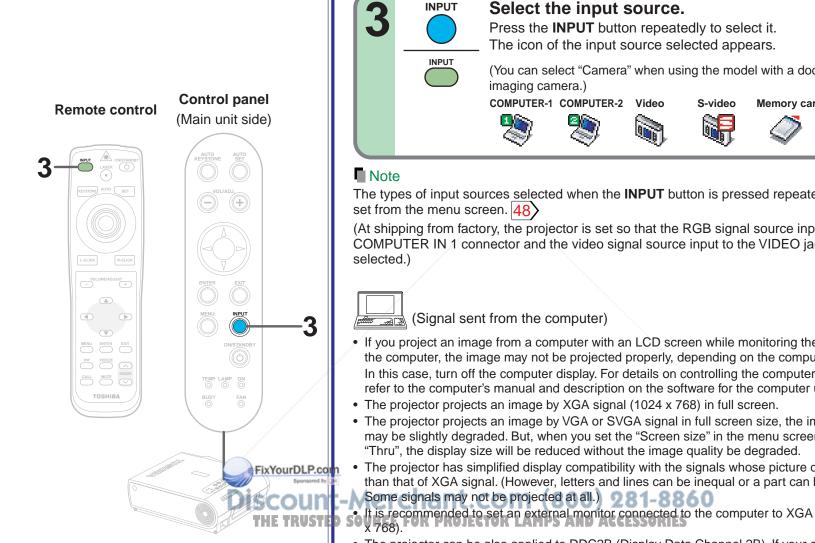
2 Take off the lens cover.



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## **Projection on the screen (continued)**





Select the input source.

(You can select "Camera" when using the model with a document

Memorv card Camera



The types of input sources selected when the **INPUT** button is pressed repeatedly can be

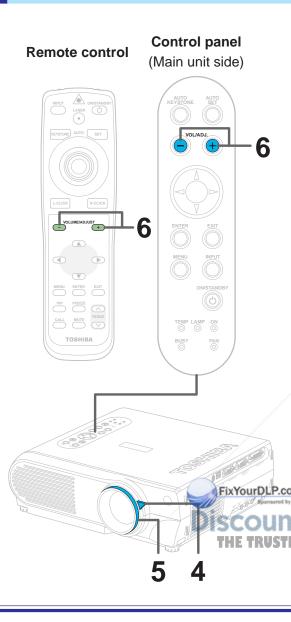
(At shipping from factory, the projector is set so that the RGB signal source input to the COMPUTER IN 1 connector and the video signal source input to the VIDEO jack can be

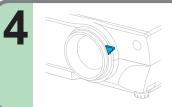
- If you project an image from a computer with an LCD screen while monitoring the image on the computer, the image may not be projected properly, depending on the computer model. In this case, turn off the computer display. For details on controlling the computer display. etc., refer to the computer's manual and description on the software for the computer used.
- The projector projects an image by VGA or SVGA signal in full screen size, the image quality may be slightly degraded. But, when you set the "Screen size" in the menu screen 54 to
- The projector has simplified display compatibility with the signals whose picture dots are more than that of XGA signal. (However, letters and lines can be inequal or a part can be missing.
- It is recommended to set an external monitor connected to the computer to XGA mode (1024 x 768).
- The projector can be also applied to DDC2B (Display Data Channel 2B). If your computer is applied to the DDC, start up your computer after turning on the projector.



## **Projection on the screen (continued)**







## Adjust the picture size by turning the zooming lever.

Turn to the right to enlarge the picture. Turn to the left to reduce the picture.

## Focus on the picture by turning the focusing ring.

A still picture is recommended for focusing.

## Press VOL/ADJ (+/-) to adjust volume.

Press the (+) button to increase volume. Press the (-) button to decrease volume. The volume adjusting bar and the icon appear.

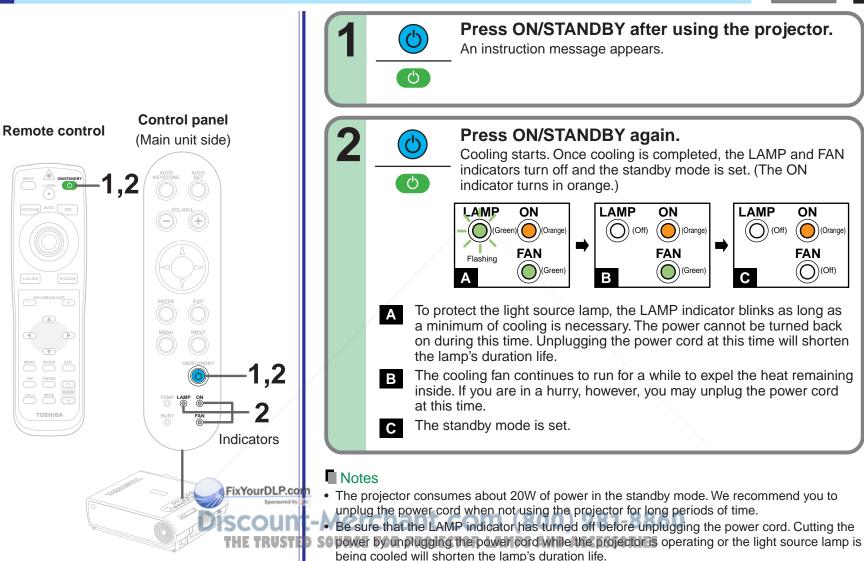


## Notes

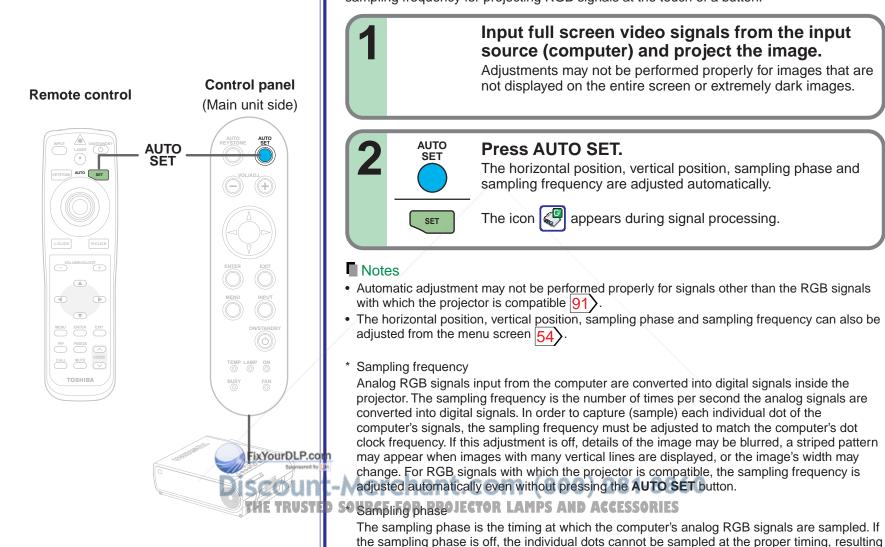
5

- When changing the projecting angle, adjust the foot adjuster. 20
- When the screen image is distorted in keystone, press the AUTO KEYSTONE button. 33>
- The projector may stop operating if the surrounding temperature is too high or if the air filter is clogged with dust. 82
- Due to the lamp characteristic, flickers may occasionally occur in a picture. This is not malfunction of the unit.
- The projector's liquid crystal panel is made using extremely advanced technology, but there
   So may be black spots (pixels that do not light) or bright spots (pixels that are constantly lit) on the panel. Please note that these are not malfunctions.
- When trying to press the button whose operation is not available, the icon 🖉 appears.
- When supplying the signal not compatible to the projector, the icon 😓 appears.
- When signals are not input from the input source, the icon  $\fbox$  appears.

## Turning the power off



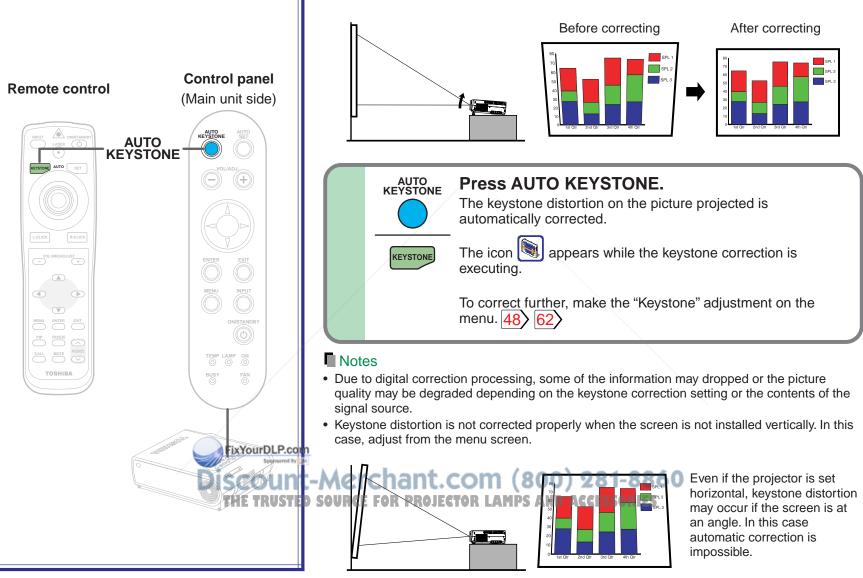
## Adjusting the picture automatically



in blurred or flickering images.

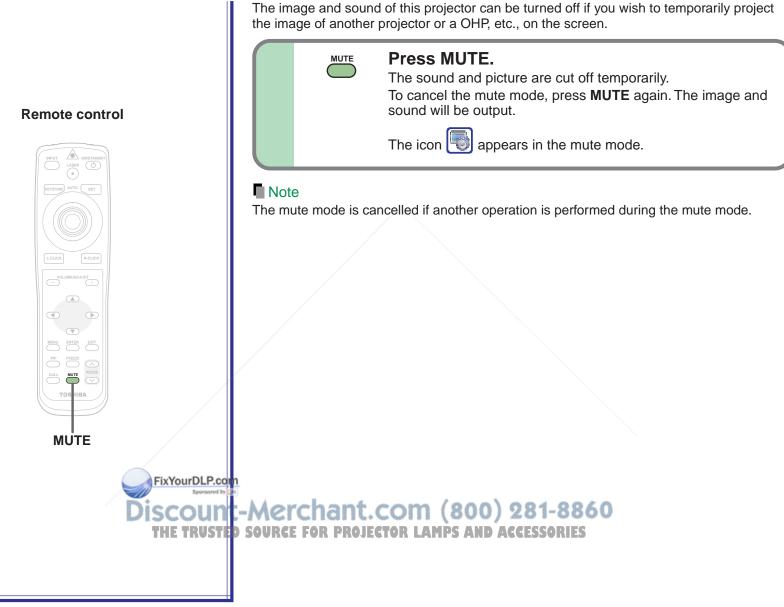
You can adjust the optimum horizontal position, vertical position, sampling phase and sampling frequency for projecting RGB signals at the touch of a button.

## **Correcting the keystone distortion**



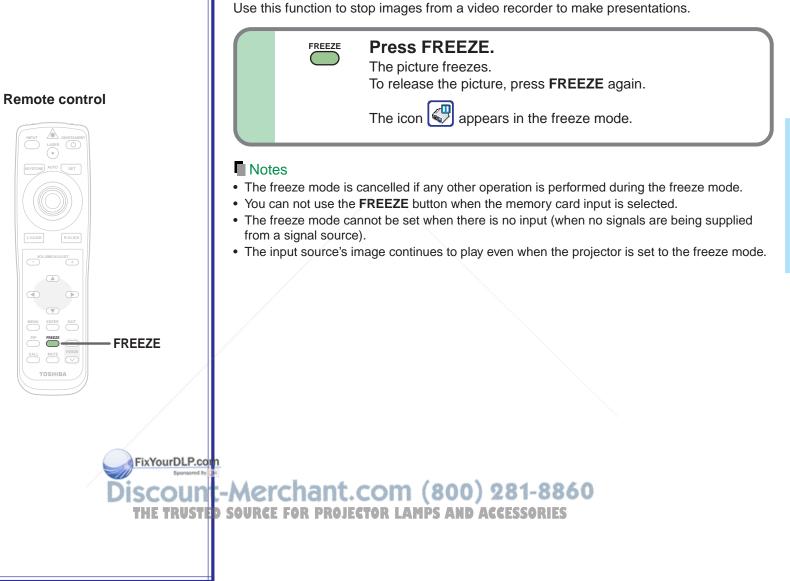
A picture may be expanded on the upper side if projected upward from the projector lifted up by the foot adjuster. The projector can correct this keystone distortion automatically.

## Cutting off the picture and sound temporarily



Operations

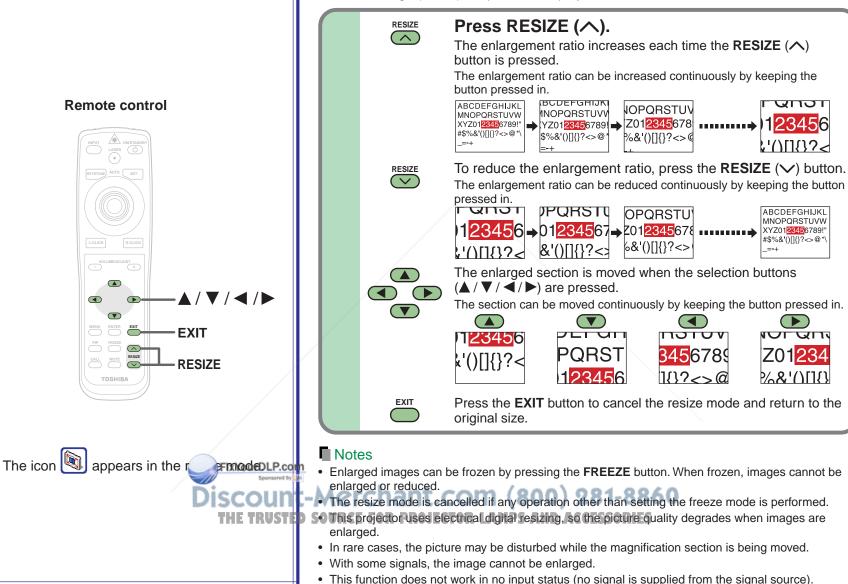
## **Freezing the picture**



You can freeze the image being projected.

Operations

#### **Enlarging the picture size**



You can enlarge (resize) the picture size projected.

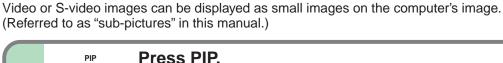
#### **Displaying PIP Sub-pictures**

**Remote control** 

PIP-

MUTE V





A sub-picture is displayed. Press the **PIP** button again to turn off the sub-picture.

#### Notes

- The PIP function cannot be used when a source other than an RGB input source is selected.
- The PIP function cannot be used with no signals supplied from an RGB signal source.
- The sub-picture turns off if any other operation is performed.
- The signal source, size, display position and audio input source to display sub-pictures can be changed from the menu screen. 73



#### **Displaying Information**

Remote control

TOSHIBA

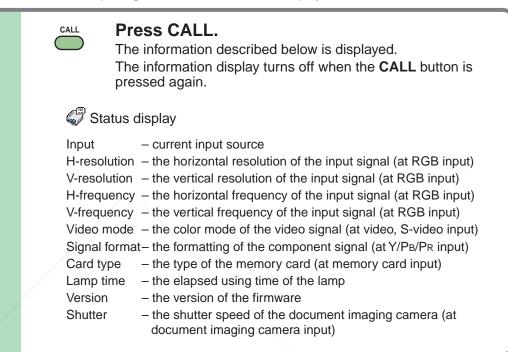
CALL-

CONTENTS

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Operations

Information on the input signal source, etc., can be displayed.



#### Notes

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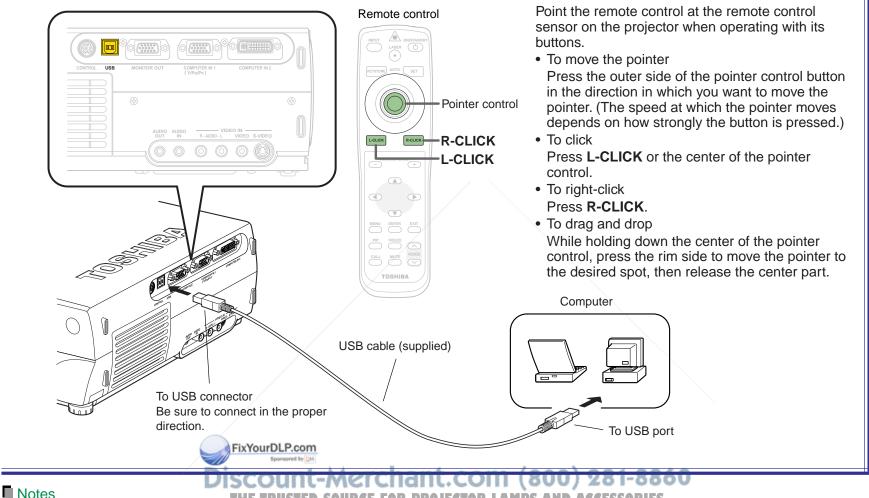
- The information displayed is not refreshed even if it changes. To refresh the information, turn off the information display, then turn it back on.
- The information display turns off if any other operation is performed.
- The "Lamp time" shows an approximate time for lamp replacement. (It should not be used as a lamp warranty time counter.) If the time indicated here nears 1000, contact your store of purchase about obtaining a replacement lamp (TLPLX10, sold separately). The fractions of the actual usage time are discarded from the time indicated here each time the projector is used, so the indicated time is actually somewhat shorter than the actual usage time.

So The "Lamp time" can be reset when the lamp is replaced.

• The "Version" is the version of the control program used in the projector and is used for servicing, etc.

# **Operating a computer by the remote control**

You can control a computer by the remote control when the projector and computer are connected with the supplied USB cable. In this manual, this function is explained as "mouse remote control".



#### THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

- This function is available with Windows98 and Mac OS9 computers equipped with a USB port as standard.
- When connecting the computer's USB port for the first time, a message asking you to insert the Windows98 CD-ROM may appear on the computer's monitor screen, depending on whether or not the device driver is installed. If so, do as the message says.
- When using a USB cable other than the supplied one, be sure to use a shielded type.

# Projecting images stored in a memory card

This projector can read the image data of JPEG format stored in a memory card to project the images on the screen.

For example, you can perform the presentation without a computer by converting the presentation data prepared on the computer into JPEG format and then saving in the memory card. (It cannot reproduce the motion in the same manner of the Microsoft PowerPoint animated effect.)

Read this page carefully before using this function.

#### About memory cards

- The card slot on the projector conforms with PC Card Standard TYPE II. Use a memory card and converter adapter (PC card adapter) compatible to this type of card slot.
- The following ATA-compatible recording media (on the market) is available. In this manual all such cards are explained in general as "memory card".
  - · Flash ATA card
  - SmartMedia<sup>™</sup> card (used with a SmartMedia<sup>™</sup> PC card adapter)
  - CompactFlash card (used with a CompactFlash PC card adapter)
  - Memory Stick (used with a Memory Stick PC card adapter)
  - Multimedia card (used with a Multimedia PC card adapter)
  - SD Memory card (used with an SD Memory card PC card adapter)
  - TOSHIBA mobile HDD MEHDD20A

Note that inserting other memory cards, adapters or PC cards with different functions into the projector may damage the card or cause malfunction.

- Memory cards confirmed to operate properly on the projector Toshiba does not guarantee the whole operation.
  - Flash ATA card: I-O DATA PCFCA-96M (96MB), PCFCA-128M (128MB)
  - SmartMedia card: TOSHIBA PDR-SM16 (16MB), PDR-SM32 (32MB), PDR-SM64 (64MB)

FUJIFILM PC-AD3B, OLYMPUS MA-2 Adapter:

- CompactFlash card: SanDisk SDCFB-64-505 (64MB), SDCFB-128-505 (128MB) Adapter: SanDisk SDCF FixYourDLP.com
- SONY MSA-32 (MB) Memory Stick: SONY MSAC-PC2N
- Adapter:
- ount-Merchant.com (800) 281-8860 I-O DATA PCMMC-32MS (32MB) Multimedia card: I-O DATA PCMMC-ADP Adapter:
- SD Memory card: Panasonic RP-SD032 (32MB)
- Adapter: Panasonic BN-SDAAP3

- \* The Toshiba IPC5019A, BUFFLO RFD-A2 SmartMedia PC card interface adapter cannot be used.
- · For security, we recommend you to back up the data stored in the memory cards before use. (Note that Toshiba will take no responsibility for damages, loss of profits, etc., due to lost data or other problems causing from the use of the projector.)

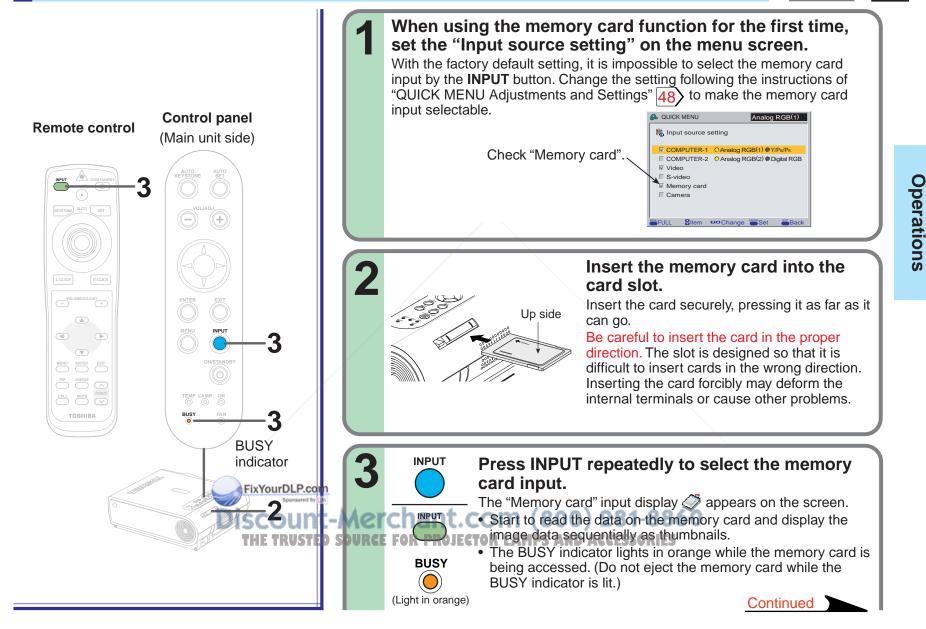
#### About JPEG files

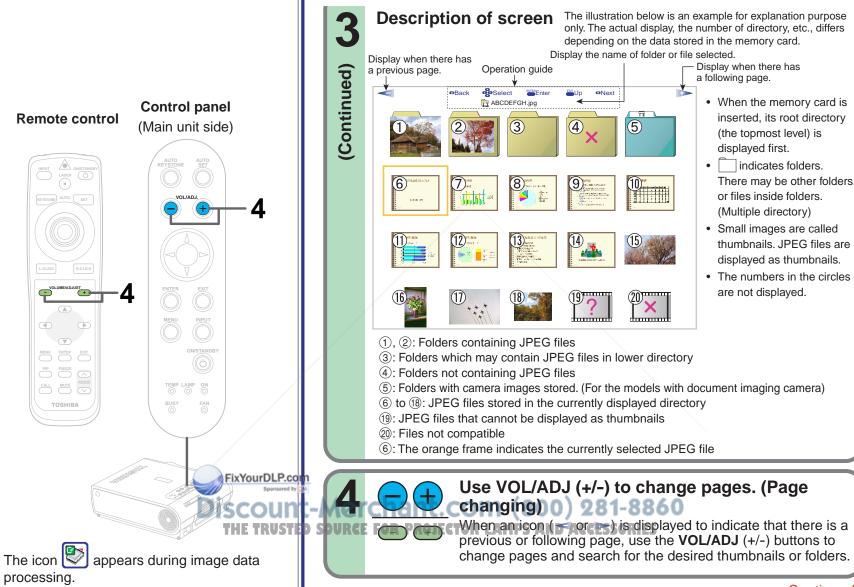
- 1) Folder names must have no more than 11 characters, file names no more than 8 characters.
- 2) Only compatible with files with the following extensions: .jpg, .JPG, .jpeg, JPEG
- 3) The total number of Sub-folders and files in a folder should be within 512.
- 4) Depending on the JPEG compression format, it may take time to display images.
- 5) Depending on the JPEG compression format, some images may not be used on the projector.
- 6) The maximum available file size is 1 MB.
- 7) The maximum available image size is 1280 x 1024 dots.
- \* If you record the JPEG file into the memory card after converting the JPEG files with the exclusive utility software (contained in the supplied CD-ROM), the processing time of the 4) above can be shortened. Moreover, the restrictions above-mentioned in the 5) to 7) can be eased.



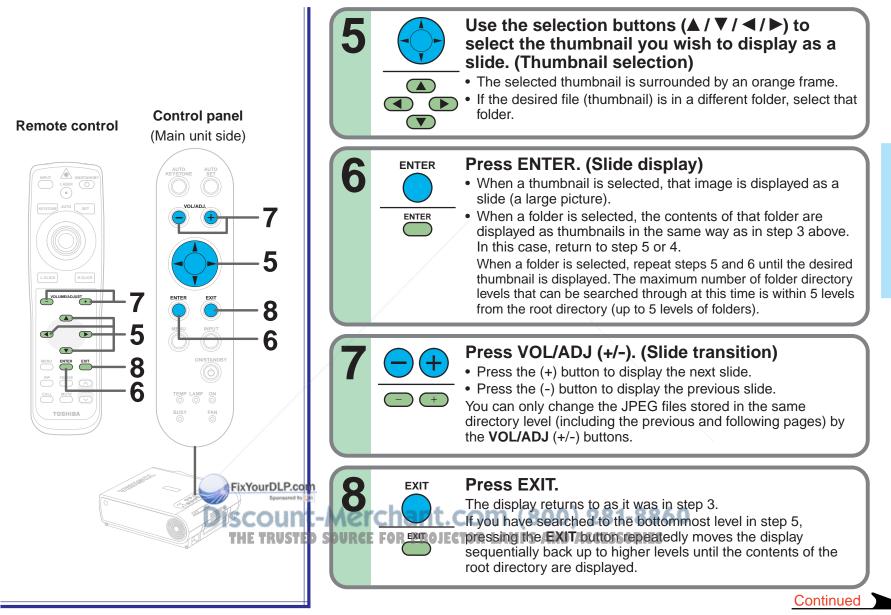


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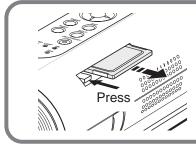


#### Continued





ΔΔ



#### To eject the memory card

To eject a memory card, first check that the BUSY indicator is off, then press the card slot's eject button. The memory card pops out part way, then pull it out by hand.

#### Notes

- In the memory card input mode, you can perform the operations described below using the menu screen settings.
  - Automatic input selection function
     When "Input select mode" 54 is set to "Auto.", the mode automatically switches to the memory card input mode when a memory card is inserted.
  - Auto slide show 1
  - When "Auto. demo" 48 is set to "On" and a memory card is loaded, a slide show of the JPEG files in the root directory starts automatically when the memory card input mode is selected.
  - Auto slide show 2 When "Slide show" 54 is set to "Auto.", a slide show starts automatically at the place where the leading thumbnail appointed in the step 6.
  - Auto slide show 3

When "Input select mode" is set to "Auto.", "Auto. demo" is set to "On" and memory card is loaded, a slide show of the JPEG files in the root directory starts automatically when the power is turned on. When "Power on" 67 is set to "Auto.", the slide show starts when the power cord is plugged into an outlet.

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- Press the EXIT button to stop the automatic slide show. \_Merchant.com (800) 281-8860
- \* In this manual, "Slide show" means the operation by which slides (large projector LAMPS AND ACCESSORIES images) are displayed in sequence.

- With the factory default settings, the followings are set for manual operation.
  - Input selection mode: Manual Auto. demo: Off Slide show: Manual Power on: Manual
- You can select the interval time of automatic slide show transition among four types on the menu screen. 48 Depending on the compression format of the JPEG files, however, it may take more than the set time to transit images.
- Depending on the compression format of the JPEG files and the file sizes, it may take a time for page changing or slide transition.
- The sort order (thumbnail displaying order = slide show order) of JPEG files is in character number order. When the number of characters is the same, the sort order is arranged by the numerical characters used in each file name at first and then the alphabetical characters.

## Adjustments and settings on the menu screen

- The menu screens for making various adjustments and settings include a QUICK MENU for frequently used adjustments and settings and a FULL MENU for all the adjustments and settings. The FULL MENU is divided into six sections by function: "Picture", "Audio", "Keystone", "Display", "Default setting" and "Factory reset mode".
- The items in the "Picture" and "Audio" sections of the QUICK MENU and FULL MENU differ depending on the input source.
- Some of the adjustments and settings are stored separately for different input sources, others are applied to all input sources when they are set for one. For details, refer to the pages on which the individual adjustment and setting instructions are located.

	Analog RGB 1 Analog RGB 2	Digital RGB	Y/Рв/Рк	Video S-video	Memory card	Document imaging camera (With camera model)
	ontrast	Contrast	Contrast	Contrast	Contrast	Contrast
B	rightness	Brightness	Brightness	Brightness	Brightness	Brightness
PI PI	hase	Picture mode	Color	Color	Auto. demo	Shutter
≥ Pi	icture mode	Keystone	Keystone	Keystone	Interval	Keystone
QUICK MENU	eystone	Lamp power	Lamp power	Lamp power	Keystone	Lamp power
	amp power	Input source setting	Input source setting	Input source setting	Lamp power	Input source setting
	put source setting	Language	Language	Language	Input source setting	Language
O La	anguage				Language	
	Picture	Picture	Picture	Picture	Picture	Picture
	ontrast	Contrast	Contrast	Contrast	Contrast	Contrast
	rightness hase	Brightness Position	Brightness Color	Brightness Color	Brightness	Brightness
		Position Picture mode	Tint	Tint	Input select mode Auto, demo	Sharpness Shutter
	requency	Screen size	Sharpness	Sharpness	Slide show	Snutter Screen size
	icture mode	Level	Signal format	Video mode	Interval	Level
	creen size	Level	Signal format	Screen size	Screen size	Level
	evel		Level	Level	Level	
	Audio	Audio	Audio	Audio	Audio	Audio
	peaker output	Speaker output	Speaker output	Speaker output	There is no audio signal	There is no audio signal
	hannel select (Mini)	Channel select (Mini)	Channel select (Mini)	Channel select (RCA)	in this input.	in this input.
	oudness (Mini)	Loudness (Mini)	Loudness (Mini)	Loudness (RCA)		
MENU	Keystone	Keystone	Keystone Keystone	Keystone	Keystone Keystone	Keystone Keystone
	prizontal reference value reset	Horizontal reference value reset	Horizontal reference value reset	Horizontal reference value reset	Horizontal reference value reset	Horizontal reference value reset
	Display	Display	Display	Display	Display	Display
	anguage o signal background	Language No signal background	Language No signal background	Language No signal background	Language No signal background	Language No signal background
	on	Icon	Icon	Icon	Icon	Icon
	enu position	Menu position	Menu position	Menu position	Menu position	Menu position
	enu background translucent	Menu background translucent	Menu background translucent	Menu background translucent	Menu background translucent	Menu background translucent
	tart-up screen	Start-up screen	Start-up screen	Start-up screen	Start-up screen	Start-up screen
	Default setting	It setting LP.co	· · · · · · · · · · · · · · · · · · ·	Default setting	Default setting	Default setting
In	put source setting	Input e setting spansored by	Input source setting	Input source setting	Input source setting	Input source setting
	amp power	Lamp power	Lamp power	Lamp power	Lamp power	Lamp power
	rojection mode	Projection mode	Projection mode	Projection mode	Projection mode	Projection mode
	o signal power off	No signal power off	No signal power off	No signal power off	No signal power off	No signal power off
	ower on	Power on	Power on	Power on	Power on 1	Power on
	Factory reset mode	Factory reset mode	Factory reset mode	Factory reset mode	Factory reset mode	Factory reset mode
Pi	icture only	Picture only All	Picture only All	Picture only All	Picture only All	Picture only All
AI						

# Adjustments & Settings

CONTENTS

Continued

### Adjustments and settings on the menu screen (continued)

|--|

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#### 48 QUICK MENU

Item	Meaning		
Contrast	Adjust the image contrast	Audio	60 (Adjust the audio output from the speaker on the main unit)
Brightness	Adjust the image brightness (paying attention to the dark parts)	Item	Meaning
Color	Adjust the image color (except for RGB inputs)	Speaker output	Set the speaker output On/Off
Phase	Adjust the image flicker (analog RGB)	Channel select (RCA)	Select the channel of AUDIO (L/R) jack in VIDEO IN
Picture mode	Set brightness priority or picture quality (color) priority (RGB)	Loudness (RCA)	Set the loudness of AUDIO (L/R) jack On/Off in VIDEO IN
Auto. demo	Set the automatic slide show function on and off (memory card)	Channel select (Mini)	Select the channel of AUDIO IN jack
Interval	Set the interval time to transit the automatic slide show (memory card)	Loudness (Mini)	Set the loudness of the AUDIO IN jack On/Off
Shutter	Set the shutter speed (document imaging camera)		
Keystone	Adjust keystone distortion	Keystone	62
Lamp power	Set the lamp power (cooling sound selection)	Item	Meaning
Input source setting	Set the input mode selected by the INPUT button	Keystone	Adjust the Keystone distortion
Language	Set the display language used for menus and messages	Horizontal reference value reset	Reset the horizontal reference value for the automatic adjustment

FULL MENU		Display	64
Picture	54	Item	Meaning
Item	Meaning	Language	Set the display language used for menus and messages
Contrast	Adjust the image contrast	No signal background	Set the background at no signal input
Brightness	Adjust the image brightness	Icon	Set the icon display On/Off
Color	Adjust the image color	Menu position	Set the position of the menu screen
Tint	Adjust the image tint	Menu background translucent	Set the menu background translucent On/Off
Sharpness	Adjust the image sharpness	Start-up screen	Set the start-up screen at power on
Phase	Adjust the image flicker (dot clock timing adjustment)	• • •	
Frequency	Adjust the vertical stripes with detailed images (dot clock frequency adjustment)	Default setting	67
Position	Adjust the horizontal and vertical positions of the image	Item	Meaning
Level	Adjust the red, green and blue level (balance)	Input source setting	Set the input mode selected by the INPUT button
Picture mode	Set brightness priority or picture quality (color) priority	Projection mode	Set the direction of the screen according to the projection mode
Video mode	Set the video or S-video color system	No signal power off	Set the automatic power off function On/Off when no signal status continues
Signal format	Set the Y/PB/PR signal DTV format	Power on	Set the power on On/Off when plugging the power cord
Screen size	Set whether to convert to XGA size or display with the input resolution	Lamp power	Set the lamp power (cooling sound selection)
Input select mode	Set the input selection Auto./Manual at memory card detection	· · ·	
Auto. demo	Set the automatic	Factory reset mode	
Slide show	Set slide show advancing Auto./Manual	Item	Meaning
Interval	Set the interval time to transit the automatic slide show	Picture only	Return the items of the picture menu to the factory default setting for each input source.
Shutter	Set the shutter speed according to the power supply frequency	ALCTOR LAMPS	Return all of the items to the factory default setting for all input sources.

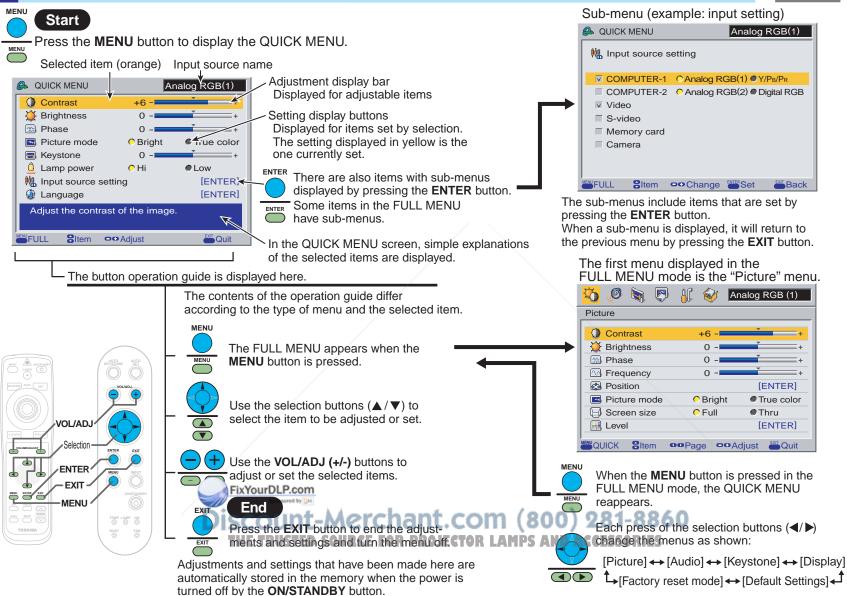
# Adjustments Settings Qo

#### Note

An exclusive menu is displayed when making PIP function sub-picture settings.  $\overline{73}$ 

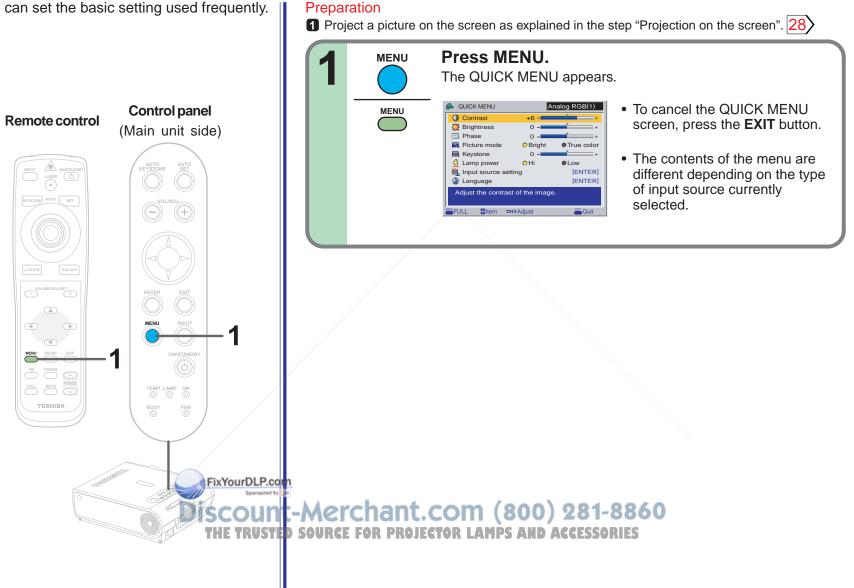


#### **Operating the menu screen**



### **QUICK MENU** adjustments and settings

You can set the basic setting used frequently.



Adjustments Settings Qo

Continued



Qo

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Ο

Х

Х

Document

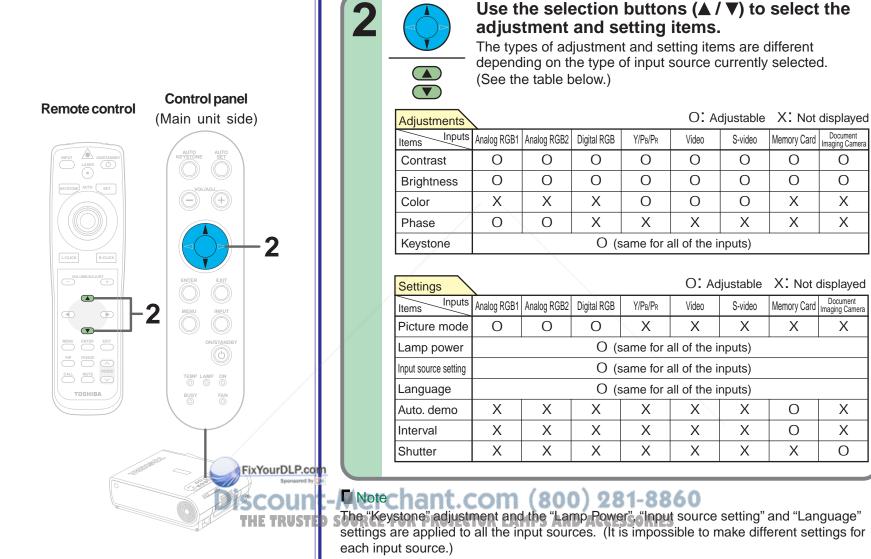
Imaging Camera

Х

Х

Х

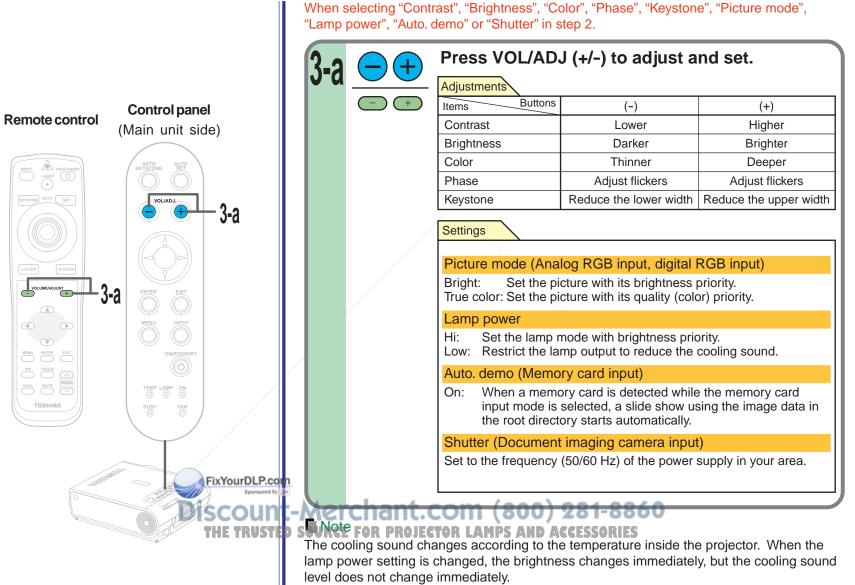
Ο



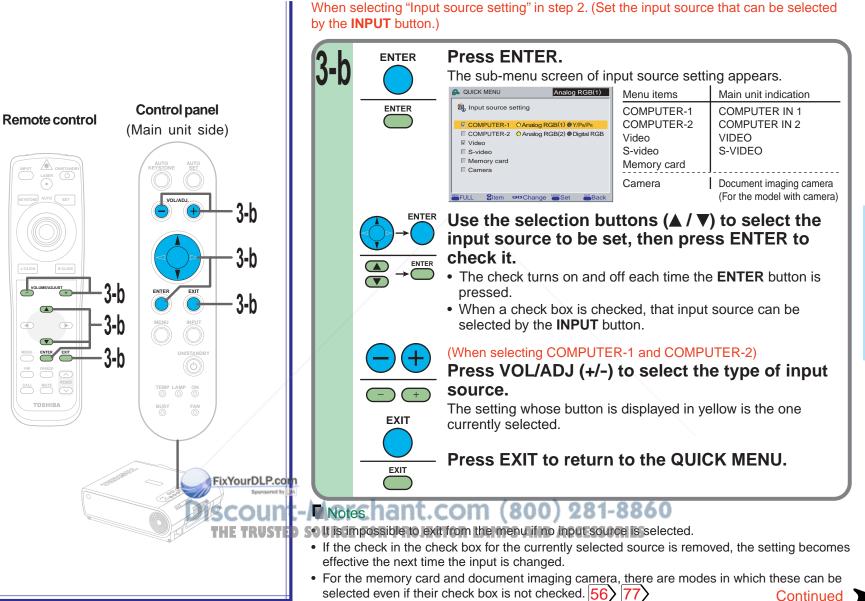
Other items marked "O" can be adjusted or set respectively for the different input sources.

CONTENTS

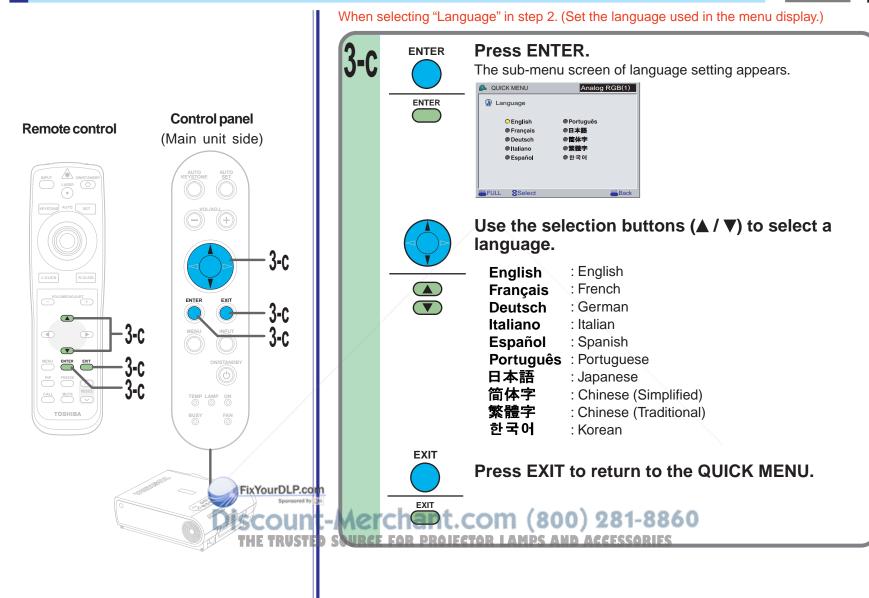
Continued



Continued



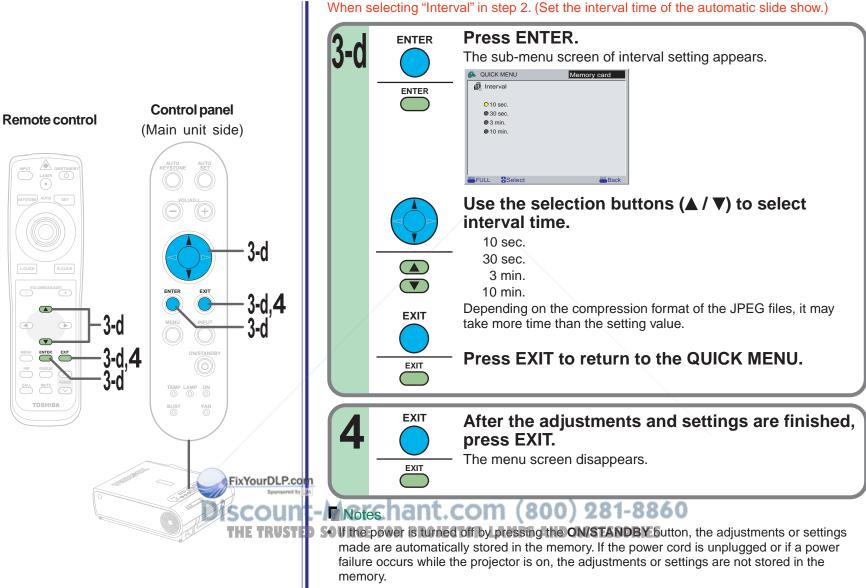
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Adjustments & Settings

CONTENTS

Continued



# FULL MENU adjustments and settings – Picture

You can adjust contrast, brightness, color level, image position, etc.

**Remote control** 

CALL MUTE RESIZE

TOSHIBA

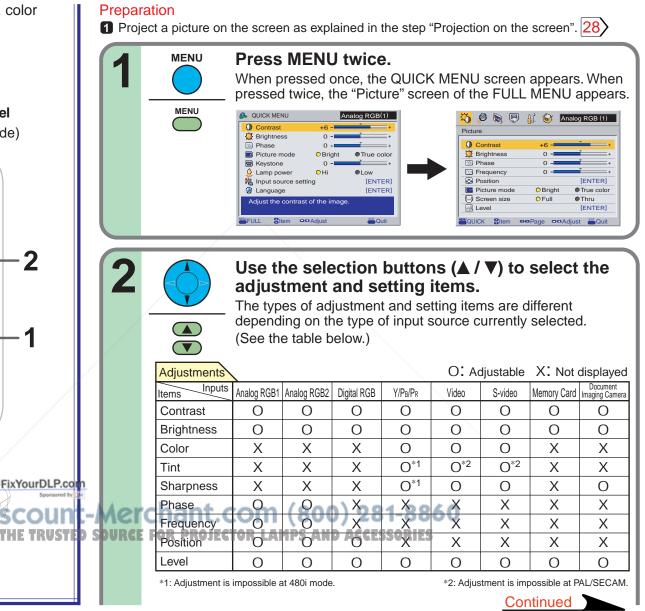
**Control panel** 

(Main unit side)

TEMP LAMP ON

FAN

BUSY



**Control panel** 

(Main unit side)

TEMP LAMP ON

FAN

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BUSY

**Remote control** 

MENU ENTER EXIT CALL MUTE

TOSHIBA



X: Not displayed

Memory Card Х

Ο

Х

Х

Ο

Ο

Ο

Ο

Х

Document Imaging Camera

Х

Ο

Х

Х

Х

Х Х

Х

0

	2	Items	Analog RGB1	Analog RGB2	Digital RGB	Y/Pb/Pr	Video	S-video	
	$\sim$	Picture mode	0	0	0	Х	Х	Х	
	ed	Screen size	0	0	0	0	0	0	
	nu	Signal format	Х	Х	Х	0	Х	Х	
	Ę	Video mode	Х	Х	Х	Х	0	0	
	(Continued)	Input select mode	Х	Х	Х	Х	Х	Х	
	0	Auto. demo	Х	Х	Х	Х	Х	Х	I
		Slide show	Х	Х	Х	Х	Х	Х	
2 0		Interval	Х	Х	Х	Х	Х	Х	
3-a		Shutter	X	Х	Х	Х	Х	Х	
2		electing "Contra							

ase", "Frequency", show" in step 2.



ount-Merchant SOURCE

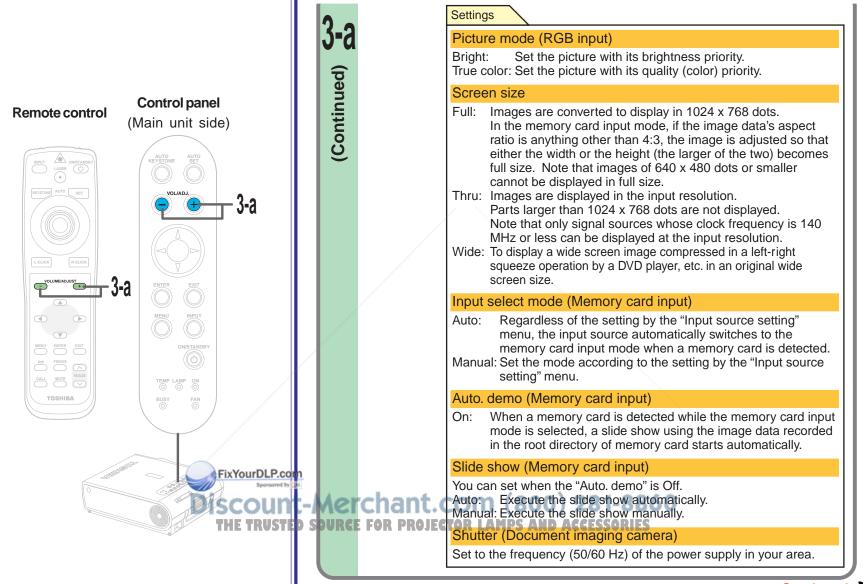
#### Press VOL/ADJ (+/-) to adjust and set.

	Adjustments							
(-) $(+)$	Items Buttons	(-)	(+)					
	Contrast	Lower	Higher					
	Brightness	Darker	Brighter					
	Color	Thinner	Deeper					
	Tint	Redder	Greener					
	Sharpness	Softer	Sharper					
1	Phase	Adjust flickers	Adjust flickers					
chant.c	Frequency 800)	Adjust vertical stripes	Adjust vertical stripes					
FOR PROJEC	tor lamps and a	CCESSORIES						

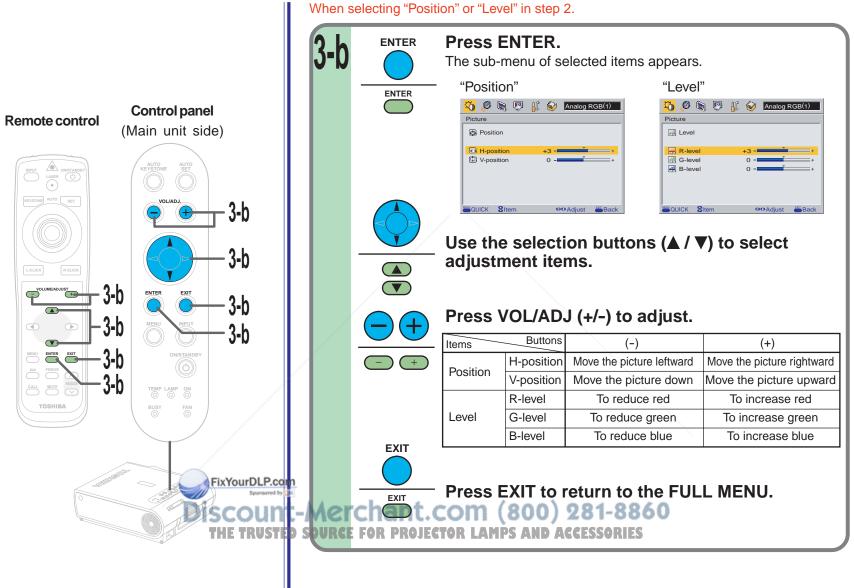




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Continued

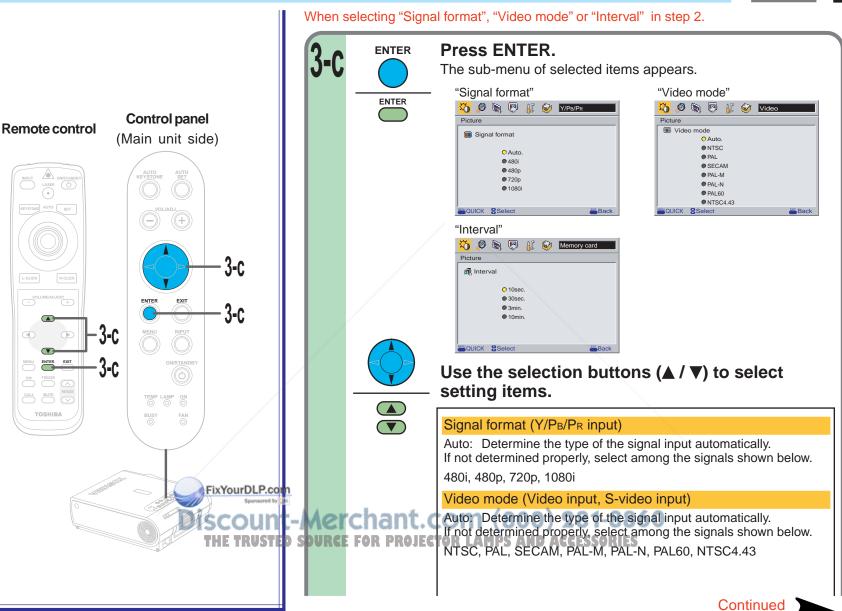


Qo

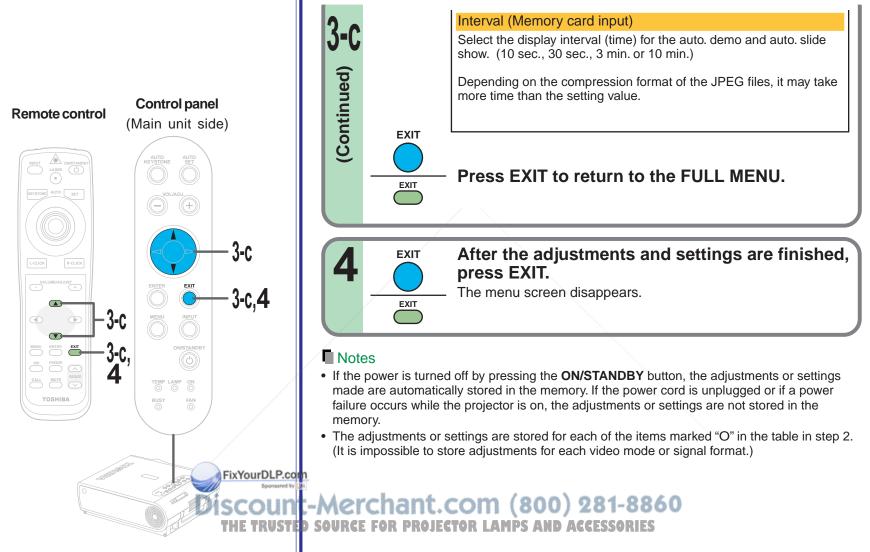


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Continued



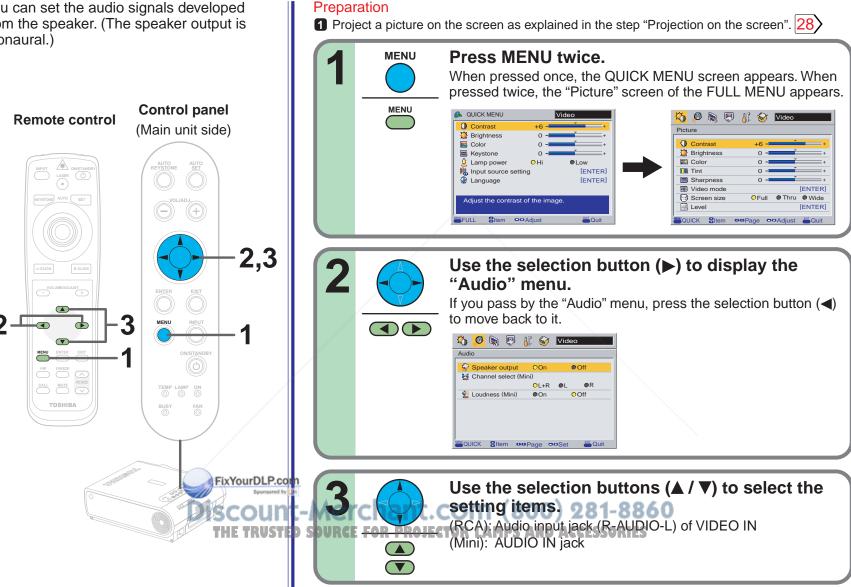
58



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## **FULL MENU settings – Audio**

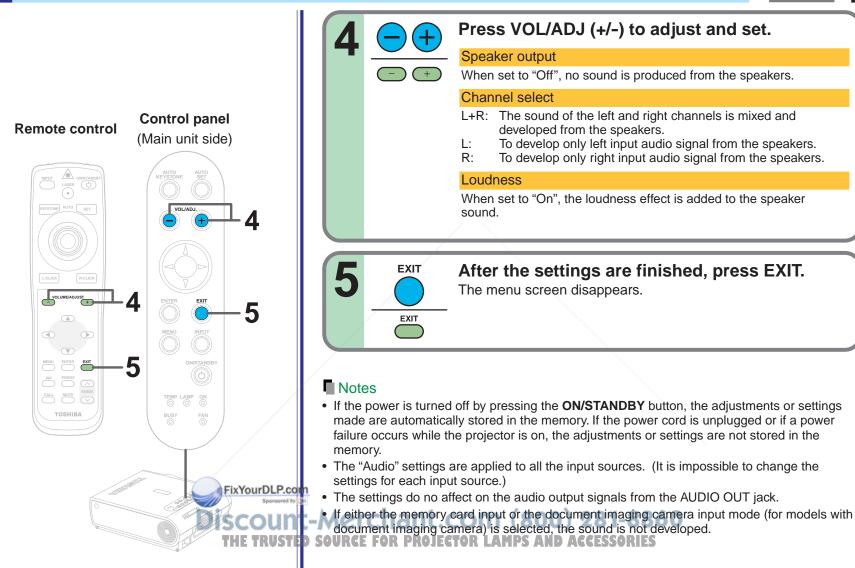
You can set the audio signals developed from the speaker. (The speaker output is monaural.)



CONTENTS

Continued

#### **FULL MENU settings – Audio (continued)**



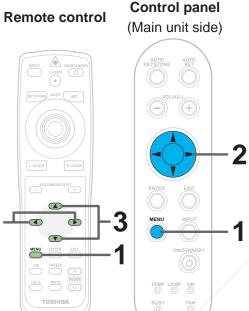


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# **FULL MENU settings – Keystone**

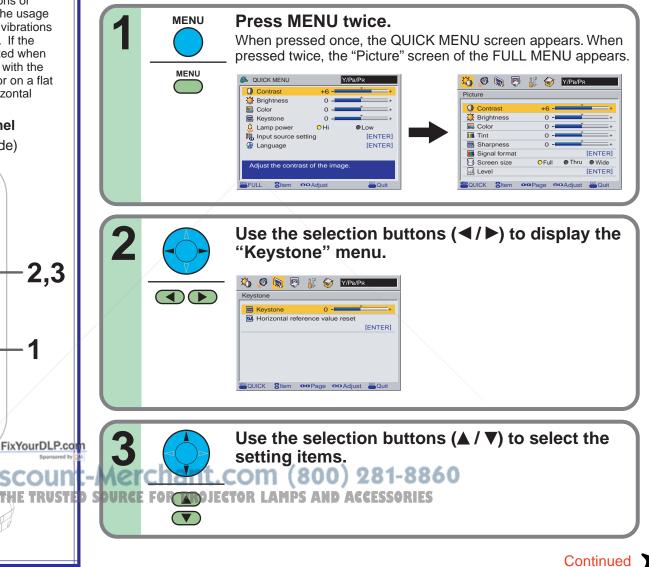
62

- If the screen is not installed vertically, you can adjust the keystone distortion manually.
- The projector stores the standard conditions of horizontal installation, but depending on the usage environment (if the projector is subject to vibrations or shock, etc.), the standard may change. If the keystone distortion is not properly corrected when the **AUTO KEYSTONE** button is pressed with the screen installed vertically, set the projector on a flat surface then use the menu screen's "Horizontal reference value reset" function.

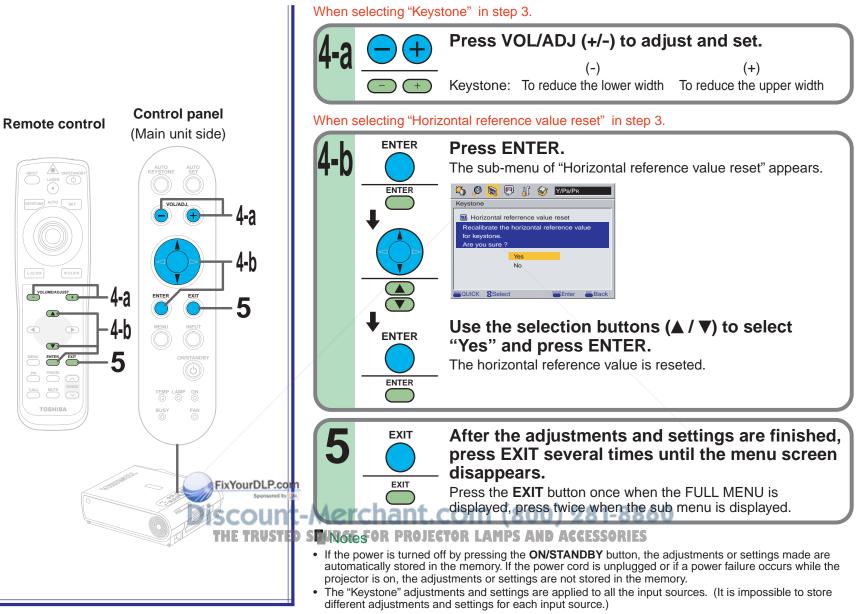


#### Preparation

1 Project a picture on the screen as explained in the step "Projection on the screen".  $|28\rangle$ 



### FULL MENU settings – Keystone (continued)



## **FULL MENU settings – Display**

**Control panel** 

(Main unit side)

TEMP LAMP ON

FAN

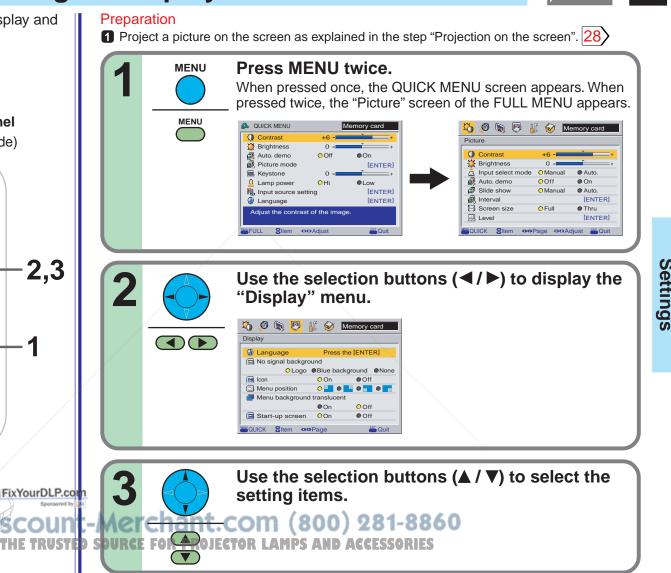
BUSY

You can set the language, menu display and start-up screen, etc.

**Remote control** 

LASER

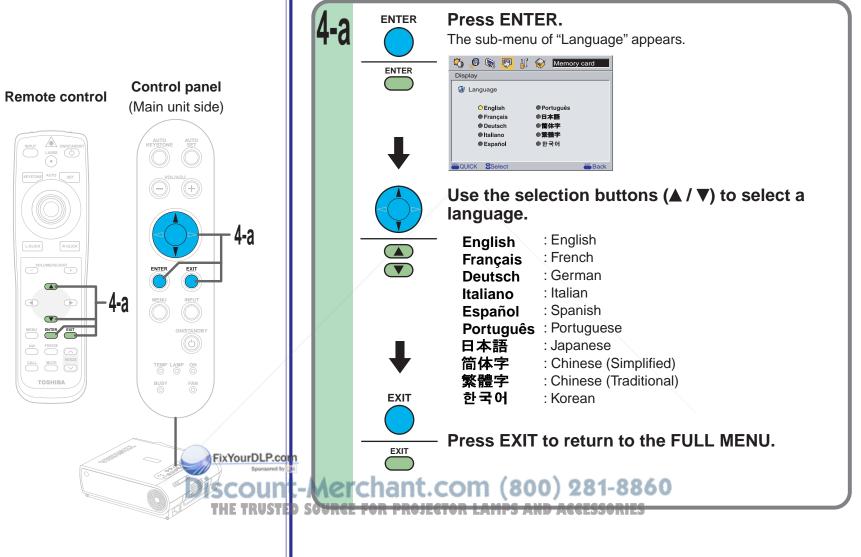
TOSHIBA



# Adjustments & Settings

64

### FULL MENU settings – Display (continued)

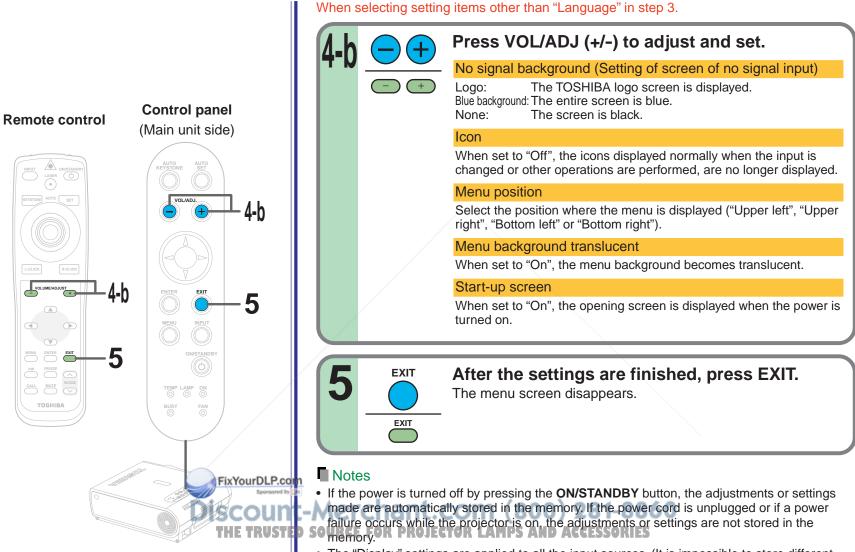


When selecting "Language" in step 3.

Adjustments & Settings

Continued

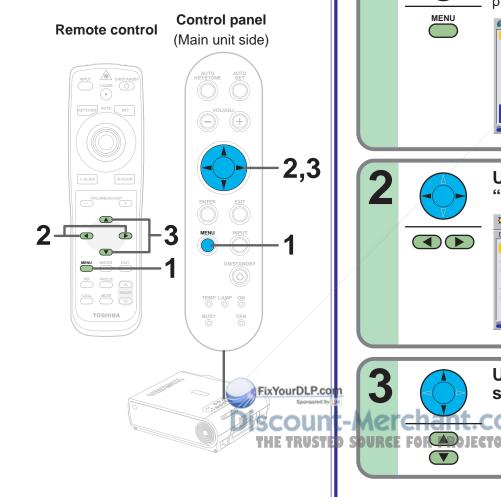
## FULL MENU settings – Display (continued)



• The "Display" settings are applied to all the input sources. (It is impossible to store different settings for each input source.)

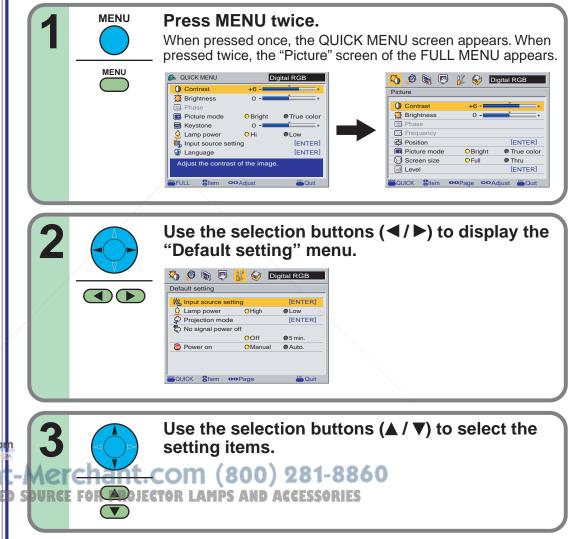
## **FULL MENU settings – Default setting**

You can set the input source which can be selected by the **INPUT** button; you can also set the projection mode, power off at no signal status, power on mode and lamp power.



#### Preparation

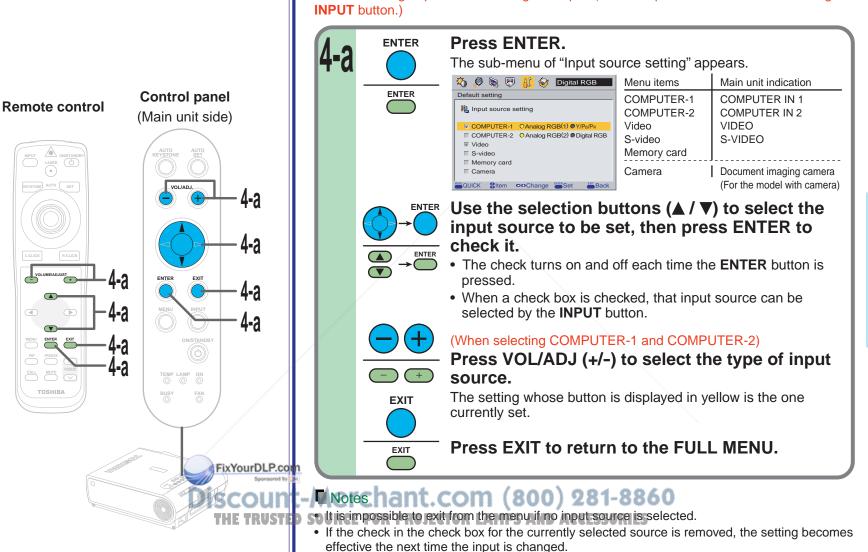
1 Project a picture on the screen as explained in the step "Projection on the screen".  $|28\rangle$ 



CONTENTS

Continued

### FULL MENU settings – Default setting (continued)

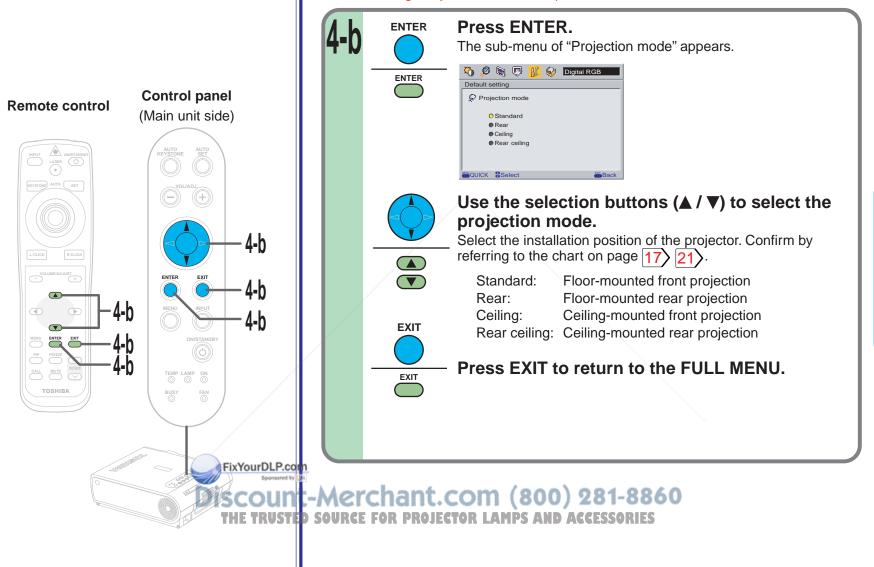


For the memory card and document imaging camera, there are modes in which these can be selected even if their check box is not checked. 56 77
 Continued

When selecting "Input source setting" in step 3. (Set the input that can be selected using

68

#### FULL MENU settings – Default setting (continued)



When selecting "Projection mode" in step 3.

Adjustments & Settings

Continued

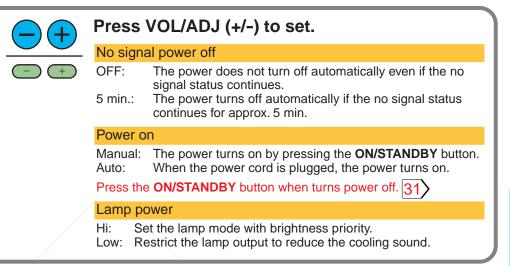
69

#### FULL MENU settings – Default setting (continued)



70

When selecting "No signal power off", "Power on" or "Lamp power" in step 3.



#### Note

**Control panel** 

(Main unit side)

BUSY

4-c

5

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**Remote control** 

VOLUME/ADJUST +

TOSHIBA

EXIT 

MENU ENTER

4-C

5

The cooling sound changes according to the temperature inside the projector. When the lamp power setting is changed, the brightness changes immediately, but the cooling sound level does not change immediately.



#### After the settings are finished, press EXIT.

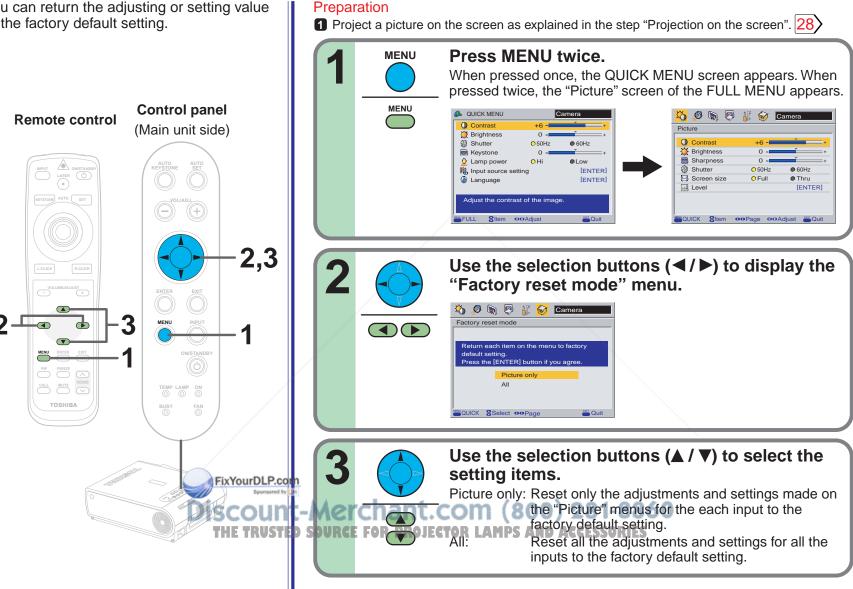
The menu screen disappears.

#### Notes

- If the power is turned off by pressing the ON/STANDBY button, the adjustments or settings made are automatically stored in the memory. If the power cord is unplugged or if a power So failure occurs while the projector is on, the adjustments or settings are not stored in the memory.
- The settings of "Default setting" are applied to all the input sources. (It is impossible to store different settings for each input source.)

### **FULL MENU settings – Factory reset mode**

You can return the adjusting or setting value to the factory default setting.



# Adjustments Settings Qo

Continued

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### FULL MENU settings – Factory reset mode (continued)

**Remote control** 

5

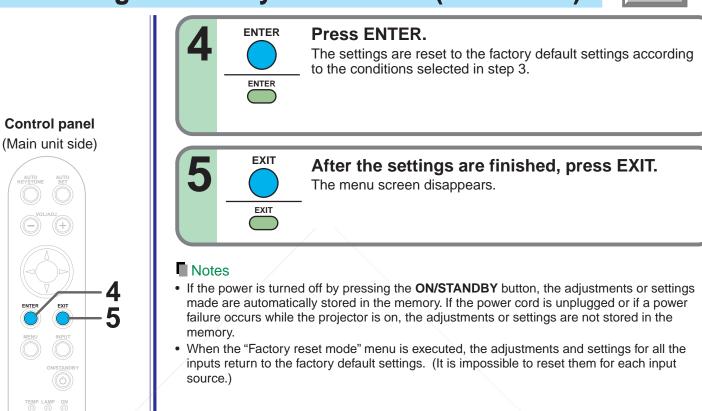
BUSY

FAN

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CALL MUTE

TOSHIBA



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### **PIP** menu setting

You can make the PIP sub-picture settings and the sound settings when a PIP subpicture is displayed.

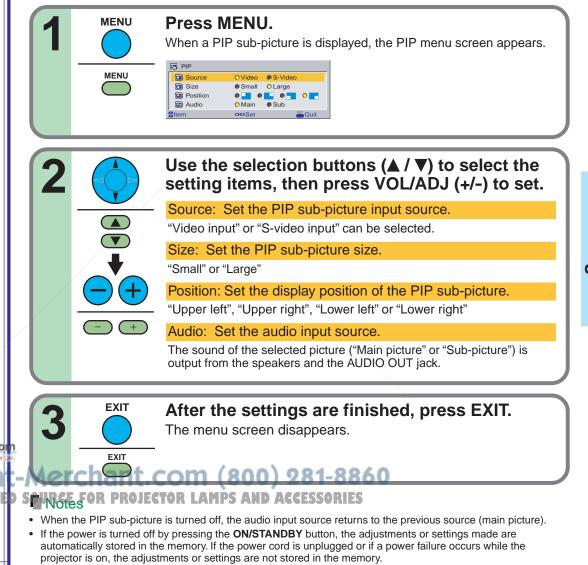
**Control panel Remote control** (Main unit side) VOL/ADJ. MENI < 0N () TOSHIBA BUSY FAN FixYourDLP.com

3

HE TR

#### Preparation

1 Display the PIP sub-picture on the screen as explained in the step "Displaying PIP Sub-pictures".  $|37\rangle$ 



73

### Part names (of the document imaging camera model)

#### CAUTION

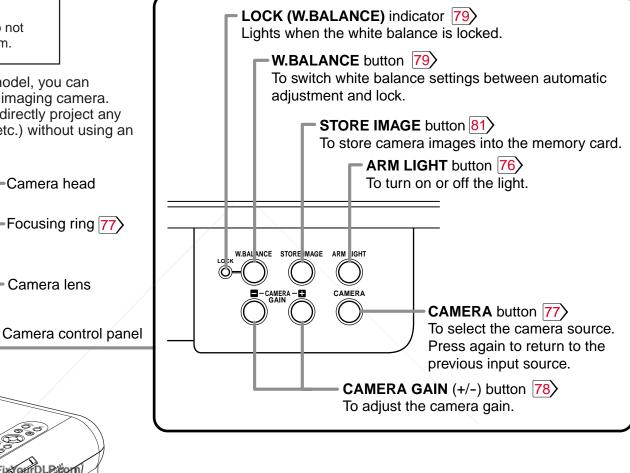
When using the camera, be careful to not pinch your hand or fingers into the arm.

Arm

0000

LED light

On the document imaging camera model, you can project pictures using the document imaging camera. The document imaging camera can directly project any materials (documents, illustrations, etc.) without using an OHP film.



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Infrared remote sensor 16

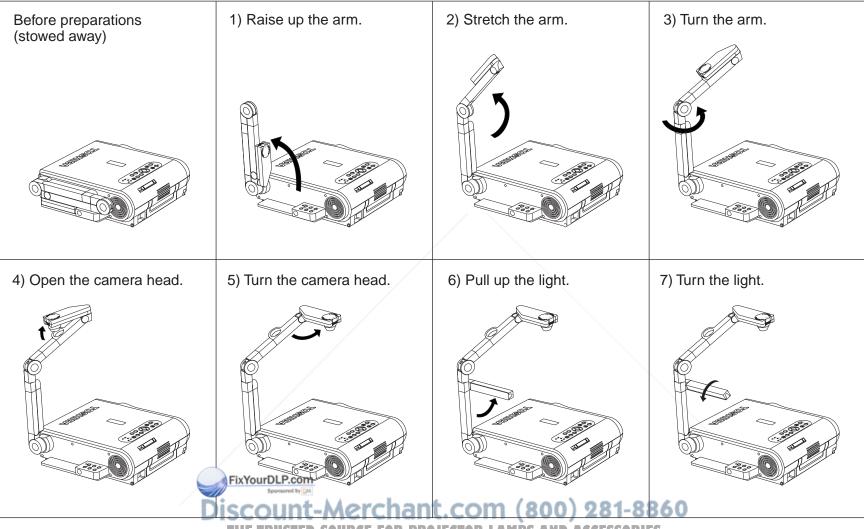
# Document imaging camera

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### Preparation of the document imaging camera

75

Document imaging camera



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#### Notes

- Never give shocks or impacts to the camera or arm as this may cause malfunction.
- While raising up or turning the arm, the arm moves describing an arc, be careful not to hit your face or your body.

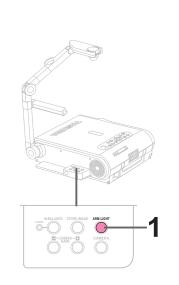
### Picture projection with the document imaging camera



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#### CAUTION

Do not look into the arm light while it is lit.



#### **Camera control panel**

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ount-Merchar

SOURCE

#### Preparation

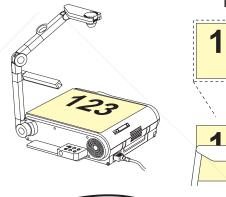
1 Project a picture on the screen as explained in the step "Projection on the screen".  $|28\rangle$ 

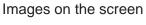
#### ARM LIGHT Press ARM LIGHT.

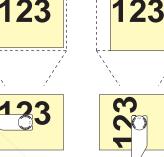
The light turns on.

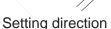
#### Set a document to be projected.

Place the document (illustrations, etc.) onto or around the projector, and turn the camera head to the direction of the document.





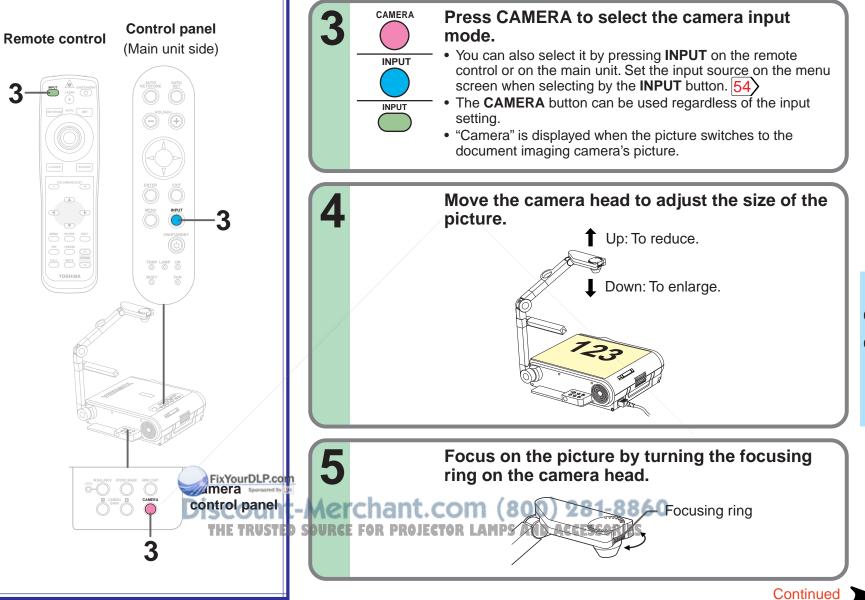




Setting direction

The arm and the camera head can be moved freely, so you can project the document if it is not placed on the projector.

### Picture projection with the document imaging camera (continued)



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### Picture projection with the document imaging camera (continued)





Camera control panel 6

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Press CAMERA GAIN (+/-) to improve view of a camera subject which is too dark or vivid.

#### Notes

- You can adjust the "Sharpness" of the camera image on the menu screen. 54
- If the image flickers due to a fluorescent light in the room, either turn off the fluorescent light or set the "Shutter" from the menu screen. 54

Note that the image may still flicker due to the lighting, the document status, the image adjustment, etc., even if the "Shutter" setting is changed.

### When finished, turn off the light and close it, and put back the arm.

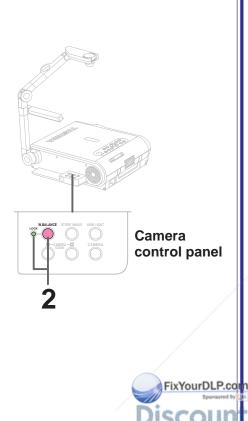
Follow the steps of "Preparation of the document imaging camera" in reverse.

#### Notes

- Though this projector uses a 1.45 million pixel camera unit, the images projected on the screen are  $1024 \times 768$  dot images. If the "Screen size" in the menu screen 54 is set to "Full", the camera's full image is compressed to  $1024 \times 768$  dots. If "Thru" is selected, the  $1024 \times 768$  dots at the center of the image are projected.
- The light turns off automatically when the arm is leaned.
- When the arm is not raised up, the camera source cannot be projected.
- In the camera input selected, audio signals are not output.

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### Lock the white balance

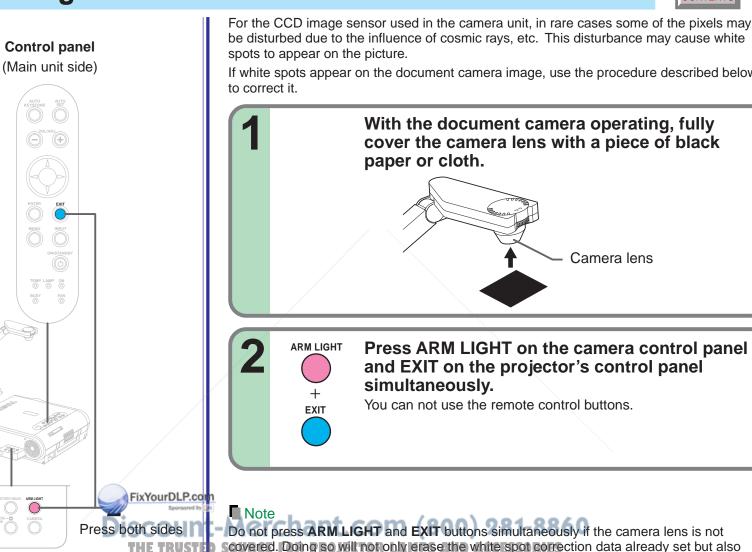


Project a white paper and enlarge it to fill the screen. LOCK-W.BALANCE Press W.BALANCE to turn the LOCK indicator  $\bigcirc$ on. The white balance is locked. To release the white balance, press W.BALANCE again to turn the LOCK indicator off. Notes • If you raise up the arm while the camera input is selected, the color of the picture may vary for an instant due to the automatic white balance adjustment. This is not a malfunction. • If you put back the arm and raise it up while the white balance is locked (the LOCK indicator is lit), the projector releases the white balance. (800) 281-8860 LAMPS AND ACCESSORIES

Normally, this camera automatically adjusts the color balance to project the picture. If the adjustment is not sufficient, follow the steps below to lock the white balance.



### **Correcting illuminated defects**



**Camera control panel** 

O O O

Do not press **ARM LIGHT** and **EXIT** buttons simultaneously if the camera lens is not scovered. Doing so will not only erase the white spot correction data already set but also result in parts that are displayed normally being corrected. Also be careful if the camera input mode is not selected.

For the CCD image sensor used in the camera unit, in rare cases some of the pixels may be disturbed due to the influence of cosmic rays, etc. This disturbance may cause white

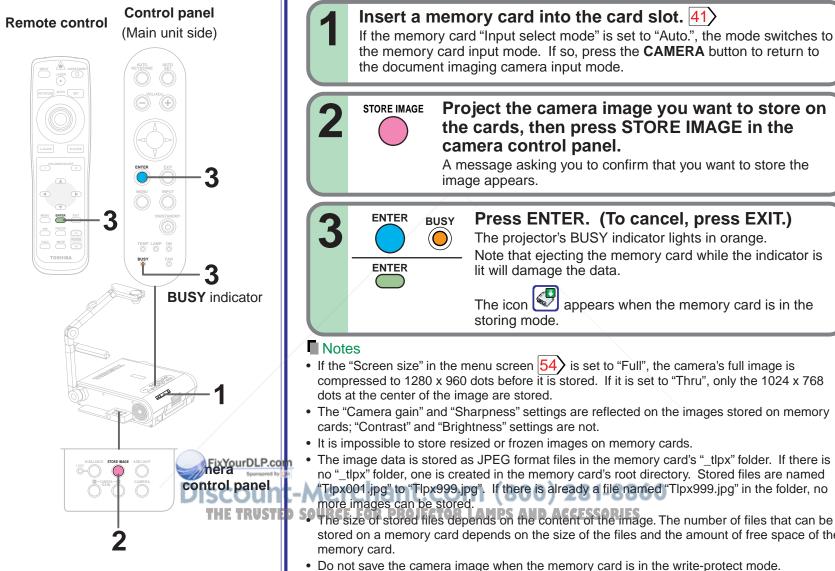
If white spots appear on the document camera image, use the procedure described below

80

### Store the camera images into the memory card



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Document camera images can be stored on memory cards.

Project the camera image you want to store on the cards, then press STORE IMAGE in the camera control panel.

A message asking you to confirm that you want to store the image appears.

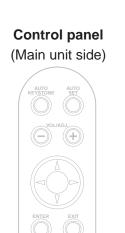
Press ENTER. (To cancel, press EXIT.) The projector's BUSY indicator lights in orange. Note that ejecting the memory card while the indicator is lit will damage the data.

The icon appears when the memory card is in the storing mode.

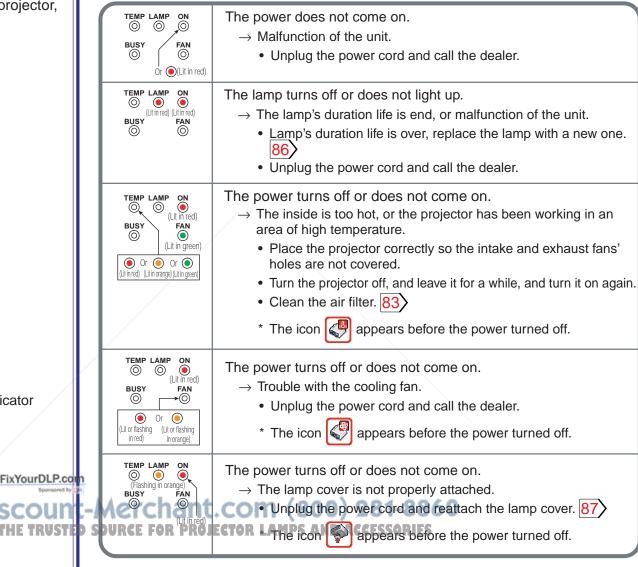
- If the "Screen size" in the menu screen 54 is set to "Full", the camera's full image is compressed to 1280 x 960 dots before it is stored. If it is set to "Thru", only the 1024 x 768 dots at the center of the image are stored.
- The "Camera gain" and "Sharpness" settings are reflected on the images stored on memory cards; "Contrast" and "Brightness" settings are not.
- It is impossible to store resized or frozen images on memory cards.
- The image data is stored as JPEG format files in the memory card's "\_tlpx" folder. If there is no "\_tlpx" folder, one is created in the memory card's root directory. Stored files are named "Tlpx001.jpg" to "Tlpx999.jpg". If there is already a file named "Tlpx999.jpg" in the folder, no more images can be stored.
- The size of stored files depends on the content of the image. The number of files that can be stored on a memory card depends on the size of the files and the amount of free space of the
- Do not save the camera image when the memory card is in the write-protect mode. The memory card may not be accessed.

### **Trouble indications**

If there is some problem inside the projector, the indicators light up or blink.



BUSY



#### Note

If abnormality occurs while operating, unplug the power cord.

### Air filter cleaning

#### CAUTION

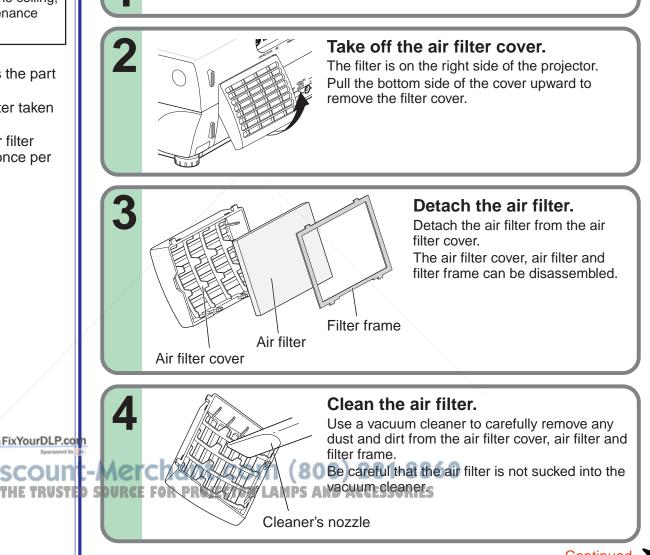
If you use the projector mounted on the ceiling, ask the dealer to carry out the maintenance such as cleaning.

The filter inside the air filter cover is the part to shut out dusts or dregs.

Do not use the projector with the filter taken off.

We recommend you to clean the air filter frequently. (The cleaning period is once per about 50 hours).

#### Unplug the power cord.



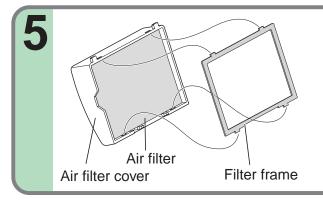
### Air filter cleaning (continued)

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#### Notes

- When the air filter is dusty, the ventilation is impaired. This causes the temperature inside the projector to rise, and may damage the unit.
- Attach the air filter cover firmly after the cleaning. If it is not set correctly, the dusts will enter and they will be projected and overlapped on the picture.
- If you wash the air filter with water, be sure to let it dry fully before reinstalling it. Using it damp will result in malfunction.
- If the air filter is damaged, contact your store of purchase and replace it with a new one. Using a damaged air filter will cause dust or dirt to get inside the projector and onto the images.



#### Assemble the air filter.

Place the air filter in the air filter cover, then insert the four tabs on the filter frame into the holes in the air filter cover.

# install it.

#### Mount the air filter cover.

Insert the top of the air filter cover into the projector first, then press on the bottom side to

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### Lens and main unit cleaning

#### CAUTION

If you use the projector mounted on the ceiling, ask the dealer to carry out the maintenance such as cleaning.



#### **Cleaning the lens**

Use a blower or a lens cleaner to clean the lens. Never rub or tap the lens with a hard object as the lens surface is fragile.

#### Cleaning the main unit

- Pull out the power cord before cleaning.
- Use a soft cloth to wipe off stains from the surface.
- To remove difficult stains, use a soft cloth slightly moistened with a weak solution of synthetic detergent and water, and finish with a soft, dry cloth.

#### Replacing the intake, exhaust fans and air filter

To maintain the efficiency of the projector, replace the intake and exhaust fans about every two to three years. Ask the dealer for the replacement.

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### Lamp replacement

The lamp will eventually begin to project dark or dull pictures and finally will not light up. (Lamp's life length depends on the use condition.) In such a case, replace the lamp with new one.

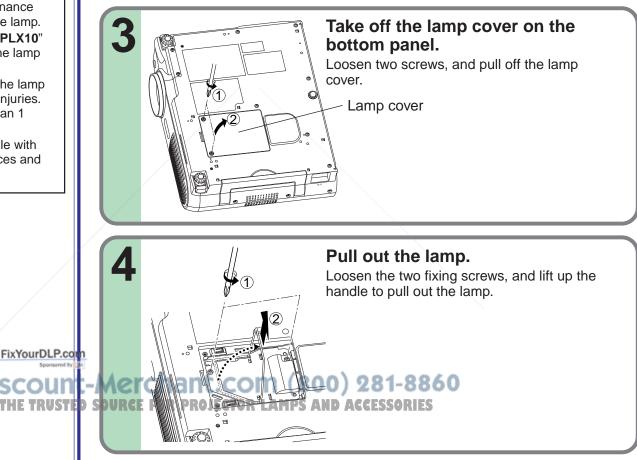
#### CAUTION

- If you use the projector mounted on the ceiling, ask the dealer to carry out the maintenance such as cleaning or replacement of the lamp.
- When replacing, always use lamp "TLPLX10" (sold separately). For detail, refer to the lamp instruction.
- If you have been using the projector, the lamp will be very hot, and may cause burn injuries. Wait for the lamp to cool (for longer than 1 hour) before replacing it.
- If the lamp should break, please handle with care to avoid injury due to broken pieces and contact your dealer for repair service.



Unplug the power cord.





### Lamp replacement (continued)

#### Notes

- When the **CALL** button is pressed, the "Lamp time" (the approximate amount of time the lamp has been used) is displayed. **38**
- The lamp should be replaced if the total working time exceeds about 1,000 hours.

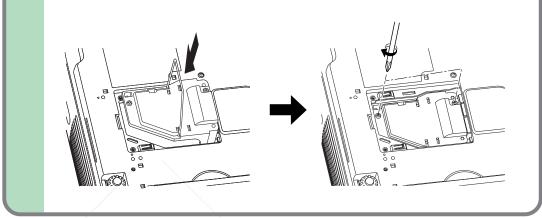
When the "Lamp time" is displayed 1000 hours, the icon and a message appear. They will disappear when you do some operation.

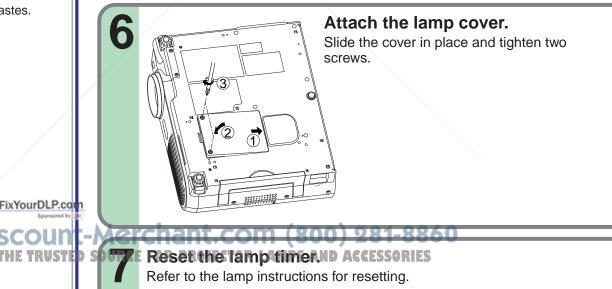
- Attach the lamp cover firmly after replacing the lamp. If it is not set correctly, the power will not turn on.
- Use a new lamp when replacing it.
- The lamp is made of glass and is very fragile. Do not touch the lamp with your bare hands and do not jolt or damage it. Do not use an exhausted lamp.
- Dispose the exhausted lamp as toxic wastes.

5 Lo

#### Load a new lamp.

Slide until it hits the bottom and tighten the two fixed screws.





### **Before calling service personal**

Check the following points before asking for support service. Refer also to "Trouble indications". 82

Symptom	Cause	Correction	Page
The power does not come on.	The power cord is disconnected.	Firmly plug in the power cord.	19
	The lamp cover is not attached correctly.	Attach the cover correctly.	87
The power turns off while	• The ambient temperature of the projection room is too high.	Lower the ambient temperature of the projection room,	82
using the projector.		and turn the power on.	
No image appears.	The lens cover is on.	Take off the lens cover.	19
	The wrong input is selected.	Select the input source correctly.	29
	The muting mode is on.	Press MUTE to restore the picture.	34
	The "Brightness" adjustment is at its darkest.	Make the "Brightness" adjustment.	48
	• The source is not correctly connected to the projector.	Connect the source correctly to the projector.	22>
No sound is heard.	The wrong input is selected.	Select the input source correctly.	29
	The muting mode is on.	Press MUTE to restore the sound.	34>
	The sound volume is at the minimum.	Adjust the sound volume.	12>
	The source is not correctly connected to the projector.	Connect the source correctly to the projector.	22>
Desired input source cannot	• Input is not set so that it can be selected with the INPUT button.	Set from the menu screen so that the source can be	48
be selected by the INPUT	By default, only the RGB1 and video input modes can be selected.	selected with the INPUT button.	
button.			
RGB1 input or Y/PB/PR input colors are not right.	• The COMPUTER IN 1 connector's input setting is wrong.	At the menu screen, set for the proper input signal type.	48
RGB2 input image does not	The COMPUTER IN 2 connector's input setting is wrong.	At the menu screen, set for the proper input signal type.	48
appear.	The signal cable type is wrong.	Use a proper signal cable.	23
Digital RGB input image does	The COMPUTER IN 2 connector's input setting is wrong.	At the menu screen, set for the proper input signal type.	48
not appear.	The signal cable type is wrong.	Use a proper signal cable.	23
The image is blurred.	The lens is dirty.	Clean the lens with a blower or lens cleaner, etc.	85
Focusing is uneven.	The picture is out of focus.	Focus the picture.	30>
	The projection distance is not appropriate.	Adjust the distance properly.	18
	<ul> <li>The cting light is not hitting the screen squarely.</li> </ul>	Adjust the projecting direction so that the light hits the	18
	The "Brightness", "Contrast", "Sharpness" or "Phase" adjustments are not correct.	screen squarely. Make the "Picture" adjustments.	54
The picture is dim.	• The "Brightness" or "Contrast" adjustments are not correct.	Make the "Picture" adjustments.	54
	The lamp life is ending.	Replace the lamp.	86>

Others

CONTENTS

Continued

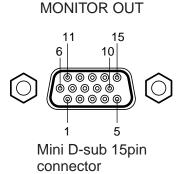
### **Before calling service personal (continued)**

Symptom	Cause	Correction	Page		
The color is faint.	• The "Color", "Tint", "R-Level", "G-Level" or "B-Level" adjustments	Make the "Picture" adjustments.	54		
The tint is not good.	are not correct.				
	• The lamp life is ending.	Replace the lamp.	85		
The remote control does not	The remote control is not facing the remote sensor.	Face the remote control transmitter toward the remote	16		
work.		sensor on the projector.			
	The remote control is too far.	Operate within about 5 meters.	16		
	There is an obstruction between the remote control and the	Remove the obstacle.	-		
	remote sensor.				
	The batteries are exhausted.	Replace the batteries.	15		
Image data on a memory card	No memory card is inserted.	Insert the memory card properly.	41>		
cannot be displayed.	A different type of memory card is inserted.	Replace with a compatible memory card.			
	There are no JPEG files on the memory card.	Check using the thumbnail display.	42>		
	The JPEG files have been created with an incompatible	Convert JPEG files to a compatible compression format.	-		
	compression format.				
Mouse function cannot be	The USB cable is not properly connected.	Connect the USB cable properly.	39		
used from the remote control	The computer or OS is not compatible.	The remote control mouse function is not available.	-		
unit.	The batteries are exhausted.	Replace the batteries.	15		
Document camera image is	The lens is dirty.	Clean the lens with a blower or lens cleaner, etc.	85		
blurry.	The picture is out of focus.	Focus the picture by turning the focus ring.	77>		
	The light is not on.	Turn on the light.	<mark>76</mark> >		
Document camera image flickers.	Image is being affected by fluorescent light in the room.	Set the shutter speed on the menu screen.	54		
Document camera image	The image's number of frames is low. This is not a malfunction.				
movement is awkward.	• The images number of names is low. This is not a manufation.				
Horizontal stripes appear	The image's number of frames is low. This is not a malfunction.				
when document projected with	The image shumber of italies is low. This is not a manufulloin.				
the document camera is	FireVerup I D com				
moved.	FixYourDLP.com				
moveu.	Discount-Merchant com	(800) 281-8860			

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### **Pin assignment of COMPUTER IN, MONITOR OUT connector**

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**COMPUTER IN 1** 

Input signal

Analog R, G, B signal: 0.7V(p-p) 75 $\Omega$ 

Horizontal sync signal:

TTL level (positive/negative polarity)

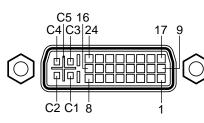
Vertical sync signal:

TTL level (positive/negative polarity)

Y signal: 1.0V(p-p) 75 $\Omega$ 

PB, PR signal: 0.7V(p-p) 75 $\Omega$ 

**COMPUTER IN 2** 



**DVI ANALOG & DIGITAL** connector

Analog input signal

Analog R, G, B signal: 0.7V(p-p) 75 $\Omega$ Horizontal sync signal:

Description

Hot plug detection

T.M.D.S. data 0 -

T.M.D.S. data 0 +

T.M.D.S. data 5 -

T.M.D.S. data 5 +

T.M.D.S. clock +

T.M.D.S. clock -

T.M.D.S. clock shield

Analog Video signal (Red)

Analog Video signal (Green)

Analog horizontal sync signal

Analog Video signal (Blue)

Analog GND (R,G & B)

T.M.D.S. data 0/5 shield

TTL level (positive/negative polarity) Vertical sync signal:

TTL level (positive/negative polarity)

Pin No.	Descriptio	n	Pin No.	Description	Pin No.	
	RGB input	Y/Pв/Pr input	1	T.M.D.S. data 2 -	16	Hot p
1	Video signal (Red)	Color difference signal (PR)	2	T.M.D.S. data 2 +	17	T.M.I
2	Video signal (Green)	Luminance signal (Y)	3	T.M.D.S. data 2/4 shield	18	T.M.I
3	Video signal (Blue)	Color difference signal (PB)	4	T.M.D.S. data 4 -	19	T.M.I
4	GND	*	5	T.M.D.S. data 4 +	20	T.M.I
5	GND	*	6	DDC clock	21	T.M.I
6	GND (Red)	GND (Pr)	7	DDC data	22	T.M.I
7	GND (Green)	GND (Y)	8	Analog vertical sync signal	23	T.M.I
8	GND (Blue)	GND (PB)	9	T.M.D.S. data 1 -	24	T.M.I
9	N.C	*	10	T.M.D.S. data 1 +	C1	Anal
10	GND	*	11	T.M.D.S. data 1/3 shield	C2	Anal
11	GND	*	12	T.M.D.S. data 3 -	C3	Anal
12	DDC2B data	*	13	T.M.D.S. data 3 +	C4	Anal
13	Horizontal sync signal	FixYourDLP.com	14	+5V power	C5	Anal
14	Vertical sync signal	Spansared by DM	15	GND (+5V, H Sync & V Sync)	]	
15	DDC2B clock	Discount-	Verch	nant.com (800)	281-88	60
			V L THE R LAND			-

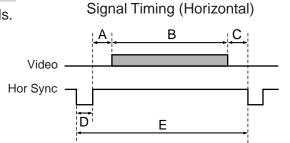
THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

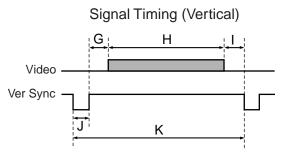
\*: Do not connect anything.

### **Applicable signal**

#### Applicable RGB signal

The unit is applicable to the following signals. However, some computers may have different timings than those in the chart. Make the necessary adjustments if the picture has flickers or is blurred.





#### Timing chart

Marta		Α	В	С	D	E	fh	fv	Clock	G	Н	I	J	К
Mode	Resolution	(Pixels)	(Pixels)	(Pixels)	(Pixels)	(Pixels)	(kHz)	(Hz)	(MHz)	(Lines)	(Lines)	(Lines)	(Lines)	(Lines)
TEXT70	640 x 350	50	640	14	96	800	31.469	70.086	25.175	59	350	38	2	449
TEXT70	640 x 400	50	640	14	96	800	31.469	70.086	25.175	34	400	13	2	449
TEXT85	640 x 350	96	640	32	64	832	37.861	85.080	31.500	60	350	32	3	445
TEXT85	640 x 400	96	640	32	64	832	37.861	85.080	31.500	41	400	1	3	445
NEC PC98 24k	640 x 400	85	640	59	64	848	24.820	55.900	21.047	25	400	11	8	444
VGA60	640 x 480	48	640	16	96	800	31.469	59.940	25.175	33	480	10	2	525
VGA72	640 x 480	128	640	24	40	832	37.861	72.809	31.500	28	480	9	3	520
VGA75	640 x 480	120	640	16	64	840	37.500	75.000	31.500	16	480	1	3	500
VGA85	640 x 480	80	640	56	56	832	43.269	85.008	36.000	25	480	1	3	509
MAC13"	640 x 480	96	640	64	64	864	35.000	66.667	30.240	39	480	3	3	525
SVGA56	800 x 600	128	800	24	72	1024	35.156	56.250	36.000	22	600	1	2	625
SVGA60	800 x 600	88	800	40	128	1056	37.879	60.317	40.000	23	600	1	4	628
SVGA72	800 x 600	64	800	56	120	1040	48.077	72.188	50.000	23	600	37	6	666
SVGA75	800 x 600	160	800	16	80	1056	46.875	75.000	49.500	21	600	1	3	625
SVGA85	800 x 600	152	800	32	64	1048	53.674	85.061	56.250	27	600	1	3	631
MAC16"	832 x 624	216	832	40	64	1152	49.725	74.550	57.283	39	632	1	3	667
XGA43i	1024 x 7	Fix YoourD	_P.t024	8	176	1264	35.522	43.479	44.900	20	768	0	4	817
XGA60	1024 x 76	160 500	<sup>risore</sup> 1024	24	_136	1344	48.363	60.004	65.000	29	768	3	6	806
XGA70	1024 x 768	C 144	1024	24	136	1328	56.476	70.069	75.000	- 29	768	3	6	806
XGA75	1024 x 768	176	1024	16	96	1312	60.023	75.029	78.750	28	768	1	3	800
XGA85	1024 x 768	208	1024	48	96	1376	68.677	84.997	94.500	36	768	1	3	808
MAC19"	1024 x 768	180	1024	20	96	1320	60.197	74.872	73.200	30	768	3	3	804

### **Applicable signal (continued)**

Timing chart (Continued)

N4 - L-		А	В	С	D	E	fh	fv	Clock	G	н	I	J	K
Mode	Resolution	(Pixels)	(Pixels)	(Pixels)	(Pixels)	(Pixels)	(kHz)	(Hz)	(MHz)	(Lines)	(Lines)	(Lines)	(Lines)	(Lines)
*SXGA1152x864 75Hz	1152 x 864	256	1152	64	128	1600	67.500	75.000	108.000	32	864	1	3	900
*SXGA1280x960 60Hz	1280 x 960	312	1280	96	112	1800	60.000	60.000	108.000	36	960	1	3	1000
*SXGA1280x960 85Hz	1280 x 960	224	1280	64	160	1728	85.938	85.002	148.500	47	960	1	3	1011
*SXGA1280x1024 60Hz	1280 x 1024	248	1280	48	112	1688	63.981	60.020	108.000	38	1024	1	3	1066
*SXGA1280x1024 75Hz	1280 x 1024	248	1280	16	144	1688	79.976	75.025	135.000	38	1024	1	3	1066
*SXGA1280x1024 85Hz	1280 x 1024	224	1280	64	160	1728	91.146	85.024	157.500	44	1024	1	3	1072
*UXGA60	1600 x 1200	304	1600	64	192	2160	75.000	60.000	162.000	46	1200	1	3	1250
*UXGA65	1600 x 1200	304	1600	64	192	2160	81.250	65.000	175.500	46	1200	1	3	1250
*UXGA70	1600 x 1200	304	1600	64	192	2160	87.500	70.000	189.000	46	1200	1	3	1250
*UXGA75	1600 x 1200	304	1600	64	192	2160	93.750	75.000	202.500	46	1200	1	3	1250

#### Notes

• Signal sources marked "\*" are displayed in compressed format, so some of their data may be missing or their picture quality may be degraded.

- With analog RGB input, if the signal source's dot clock frequency exceeds 140 MHz, not all of the pixel signals can be sampled.
- For digital RGB inputs, the projector is not compatible with signal sources whose dot clock frequency exceeds 112 MHz.

#### The compatible video signal

Mode	fh (kHz)	fv (Hz)	fsc (MHz)
NTSC	15.73	60	3.58
PAL	15.63	50	4.43
SECAM	15.63	50	4.25 or 4.41
PAL-M	15.73	60	3.58
PAL-N	15.63	50	3.58
PAL-60	15.73	EixYourDI Pcc	4.43
NTSC4.43	15.73 🔪	60 Spansared by	4.43

#### The compatible component signal (Y/PB/PR)

Mode	fh (kHz)	fv (Hz)
480i	15.73	59.94
480p	31.47	59.94
720p	45.00	60.00
1080i	33.75	60.00

Discount-Merchant.com (800) 281-8860

THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

### **Controlling the projector by using RS-232C**

93 ONTENTS

You can also control the projector by entering the command from a computer via RS-232C.

#### Signal assignment of RS-232C



OT RS-23	26	
Pin No.	Signal	Description
1	RXD	Receiving data
2	CTS	Consent to send
3	DSR	Data set ready
4	GND	Signal ground
5	RTS	Request to send
6	N.C	No connection
7	TXD	Sending data
8	N.C	No connection

#### Interface format

1	Communication method	RS-232C 9600 bps, No parity, Data length: 8 bit,
	method	Stop bit: 1 bit
2	Communication	STX (02h) Command (3Byte) ETX (03h)
	format	One command only can be used in one communication.
3	Data format	Command shall be composed of alphanumeric characters of ASCII description. Use only capital letters.
4	Return value	Acknowledge ACK (06h)
		Not Acknowledge NAK (15h)

#### **Command list**

•••iiiiiiaii									
Classification	Items/Status	Selection Command	Adjustment Command	Analog RGB1 Analog RGB2	Digital RGB	Video S-video	Y/Pb/Pr	Memory Card	Document Imaging Camera
Power	On	PON	_	0	0	0	0	0	0
	Off (with confirmation message)	POF	_	0	0	0	0	0	0
	Shut Down (without confirmation message)	PSD	_	0	0	0	0	0	0
Normal (RS	-232C Condition Display Off)	DOF	—	0	0	0	Ο	0	0
Picture	Contrast	VCN	0	0	0	0	0	0	0
	Brightness	VBR	0	0	0	0	Ο	0	0
	Phase	PPH	0	0	_	_		_	-
	Frequency	PCK	0	0	_	_	_	_	_
	Color	VCL	0	-	_	0	0	-	_
	Tint	VTN	0	_	_	O *1	O *2	-	_
	Sharpness	VSH	0	-	_	Ο	O *2	_	-
	Shutter 50xMourDLP.cor	CS0	_	-	_	_	_	_	0
	60 Hz	CS1	- 1 - <del>-</del>	_			× 0 <sup>-</sup>	_	0
Notes	Discount	-mer	cnant	.com	(800)	281-88	00		

#### Notes

• When commands are transmitted serially, keep more than 100 ms intervals between the commands. AND ACCESSORIES

• Adjustment commands include "ARG" (increase adjustment value) and "ALF" (decrease adjustment value). For usable items (marked "O"), send after the selection command.

• The "O" marks in the input source columns indicate that that command can be used. \*1 Not possible for PAL/SECAM. \*2 Not possible for 480i mode.

Continued

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Classification	Items/Status		Selection Command	Adjustment Command	Analog RGB1 Analog RGB2	Digital RGB	Video S-video	Y/Pb/Pr	Memory Card	Document Imaging Camera
Picture	Position	H-position	PHP	0	0	_	_	_	_	_
		V-position	PVP	0	0	_	_	_	_	_
-	Picture mode	Bright	MVB	_	0	0	_	_	_	_
		True color	MVP	_	0	0	_	_	_	_
	Video mode	Auto.	KV0	_	-	_	0	_	_	_
		NTSC	KV1	_	_	_	0	_	_	_
		PAL	KV2	_	_	_	0	_	_	_
		SECAM	KV3	_	_	_	0	_	_	_
		PAL-N	KV4	_	_	_	0	_	_	_
		PAL-M	KV5	_	_	_	0	_	_	_
		PAL60	KV6	_	_	_	0	_	_	_
		NTSC4.43	KV7	_	/ - \	_	0	_	_	_
	Signal format	Auto.	SG0		- \	_	_	0	_	_
		480i	SG1	- /	_		_	0	_	_
		480p	SG2	_/	_		_	0	_	_
		720p	SG3	/-	_	_	_	0	_	_
		1080i	SG4	/ -	_	- \	_	0	_	_
	Input Select mode	Manual	JIO	_	-	_		_	0	_
		Auto.	JI1	_	_	_		_	0	_
	Auto. demo	Off	JD0	_	-	_	~ ~	_	0	_
		On	JD1	_	_	_	-	_	0	_
	Slide show	Manual	JS0	_	-	_			0	_
		Auto.	JS1	_	-	_		<	0	_
	Interval	10 sec.	JT0	_	-	_	_	<u> </u>	0	_
		30 sec.	JT1	—	_	—	_	_	0	—
		3 min.	JT2	_	-	_	_	_	0	_
		10 min.	JT3	_	_	_	_	_	0	_
	Screen size	FixYourDLP.cor	MSF	—	0	0	0	0	0	0
		hru Sponsored by	MST		0	0	0	0	0	Ο
		Wide	MSW	chant	com	(900)	22023	600	_	—
	Level	R-level	VLR	0	com	0	0	0	0	0
		G-level	VLG	LOK QROT	CTO LAM	PS AD A	GES O'RIE	0	0	0
		B-level	VLB	0	0	0	0	Ο	0	Ο

CONTENTS	95

Classification	Items/Status		Selection Command	Adjustment Command	Analog RGB1 Analog RGB2	Digital RGB	Video S-video	Y/Pb/Pr	Memory Card	Document Imaging Camera
Audio	Speaker output	On	AS1	—	Ō	0	0	Ο	_	_
		Off	AS0	_	0	0	0	0	_	_
	Channel select (RCA)	L+R	APA	—	_	_	0	_	_	_
		L	APL	—	—	-	0	_	-	-
		R	APR	—	—	-	0	_	-	-
	Loudness (RCA)	Off	LR0	—	—	—	0	—	-	-
		On	LR1	—	—	—	0	_	—	-
	Channel select (Mini)	L+R	AMA	—	0	0	—	0	—	-
		L	AML	—	0	0	—	0	-	-
		R	AMR	—	0	0	—	0	—	-
	Loudness (Mini)	Off	LM0	—	0	0	—	0	—	-
		On	LM1	—	0	0	—	0	—	-
Keystone	Keystone		PKS	0	0	0	0	0	0	0
	Horizontal reference va	alue reset	PKR	- /	0	Ο	0	0	0	0
Display	Language	English	LEN		0	0	0	0	0	0
		French	LFR	/-	0	0	0	0	0	0
		German	LGR	/ -	0	0	0	0	0	0
		Italian	LIT	—	0	0	Ο	0	0	0
		Spanish	LSP	—	0	0	Ο	0	0	0
		Portuguese	LPO	—	0	0	0	0	0	0
		Japanese	LJP	—	0	0	Ο	0	0	0
		Chinese(Simplified)	LPK	—	0	0	0	Ο	0	0
		Chinese(Traditional)	LKT	—	0	0	0	0	0	0
		Korean	LKK	—	0	0	0	0	0	0
	No signal background	Logo	BG0	_	0	0	Ο	0	0	0
		Blue background	BG1	—	0	0	0	0	0	0
		Non	BG2	—	0	0	0	0	0	0
	Icon	FixYourDLP.con	MO0	—	0	0	0	0	0	0
		Off Sponsored by	MO1	—	0	0	0	0	0	0
	Menu position 🧹 📘	Upper left	MP1	-hant	<u>c</u> om	(20)	0000	600	0	0
		Lower left	MP2		0	0	0	0	0	0
		Upper right	MP3	FOR <u>Proji</u>	0	PS AGD A	CESORIE	0	0	0
		Lower right	MP4	—	0	0	0	0	0	0

Classification	Items/Status		Selection Command	Adjustment Command	Analog RGB1 Analog RGB2	Digital RGB	Video S-video	Y/Pb/Pr	Memory Card	Document Imaging Camera
Display	Menu background translucent	On	MB1	_	0	0	0	Ο	0	0
		Off	MB0	_	0	0	0	Ο	0	0
	Start-up screen	On	MS0	_	0	0	0	0	Ο	0
		Off	MS1	—	Ο	0	0	Ο	Ο	0
Default setting	Input source setting	-								
	COMPUTER-1	On	l10	_	0	0	0	0	0	0
		Off	I11	—	Ο	0	Ο	Ο	Ο	0
		Analog RGB1	IS0	—	0	0	0	Ο	0	0
		Y/Pb/Pr	IS1	—	0	0	0	Ο	0	0
	COMPUTER-2	On	120	—	0	0	0	Ο	0	0
		Off	l21	_	0	0	0	0	0	0
		Analog RGB2	IV0	_	0	0	0	0	0	0
		Digital RGB	IV1	- /	0	0	0	0	0	0
	Video	On	130	- /	0	0	0	0	0	0
		Off	131		0	0	0	0	0	0
	S-video	On	140		0	0	0	0	0	0
		Off	I41	/ -	0	0	0	0	0	0
	Memory card	On	150	_	0	0	0	0	0	0
		Off	151	_	0	0	0	0	0	0
	Camera	On	160	_	0	0	0	0	0	0
		Off	l61	_	0	0	0	0	0	0
	Lamp power	Hi	LP0	_	0	0	0	0	0	0
		Low	LP1	_	0	0	0	0	0	0
	Projection mode	Standard	PJ0	_	0	0	0	0	0	0
		Rear	PJ1	_	0	0	0	0	0	0
		Ceiling	PJ2	_	0	0	0	0	0	0
		Rear ceiling	PJ3	_	0	0	0	0	0	0
	No signal power off	Off FixYourDLP.con	PN0	_	0	0	0	0	0	0
		MIN. Sponsored by DA	PN1	_	0	0	0	0	0	0
	Power on	Manual	AP0	chant	<u>ccom</u>	(20)	220.22		0	0
		Auto.				0	0	0	0	0
	Factory reset mode	Picture only	DRV	FOR <u>P</u> ROJE	CTON LAM	PS AJD AG	GESÖRIE	0	0	0
	,	All	DRS	_	0	0	0	0	0	0
Status disp	lay (CALL)		DON	_	0	<u> </u>	0	0	0	0

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Classification	Items/Status		Selection Command	Adjustment Command	Analog RGB1 Analog RGB2	Digital RGB	Video S-video	Y/Pb/Pr	Memory Card	Document Imaging Camera
Volume	Increase		VLU	_	Ο	0	0	0	_	_
	Decrease		VLD	_	0	Ο	0	0	_	_
Input select	Toggle		IN0	_	0	0	0	0	0	0
	COMPUTER-1		IN1	_	0	0	0	0	0	0
	COMPUTER-2		IN2	_	0	0	0	0	0	0
	Video		IN3	_	0	0	0	0	0	0
	S-video		IN4	_	0	0	0	0	0	0
	Memory card		IN5	_	0	Ο	0	0	Ο	0
	Camera		IN6	_	0	Ο	0	0	Ο	0
RESIZE	Increase the enlargeme	ent ratio	RUP	_	0	0	0	0	0	0
	Decrease the enlargement ratio (M	dinimum: reset status)	RDW	_	0	0	0	0	0	0
	Move the enlargement	Upper	PO1	_	0	0	0	0	0	0
	section	Lower	PO2	_ /	0	0	0	0	0	0
		Lefter	PO3	- /	0	0	0	0	0	0
		Righter	PO4	<i></i>	0	Ο	0	0	Ο	0
	Enlargement reset		RS0	/-	0	0	0	0	0	0
FREEZE	On		FON	/ -	0	0	0	0	0	0
	Off		FOF	_	0	0	0	0	0	0
MUTE	On		MON	_	0	0	0	0	0	0
	Off		MOF	_	0	0	0	0	0	0
PIP	On		PIN	_	0	0	-	_	_	—
	Off	/	PIF	_	0	0		_	_	—
	PIP input source	Video	PI0	_	0	0	_	<u> </u>	_	—
		S-video	PI1	_	0	0	_		_	—
	PIP size	Small	PS0	_	0	0	_		_	_
		Large	PS1	_	0	0			_	-
	PIP position	Upper left	PP0	_	0	0			_	_
		Upper right.com	PP1	_	0	0			_	_
		Lower left-sored by DM	PP2	-	0	0		_	_	_
		Lower right	PP3	chant.	ccon	(80)	281-88	60-	_	_
	PIP audio input source	Main	PA0	FOR PROJE	0	0	CECCARIES		_	_
		Sub	PA1	ran <u>r</u> uaje	CTUGLAM	PS AOD AG		-	_	_

Classification	Items/Status		Selection Command	Adjustment Command	Analog RGB1 Analog RGB2	Digital RGB	Video S-video	Y/Pb/Pr	Memory Card	Document Imaging Camera
AUTO SET			PAT	_	0	0	_	_	_	_
AUTO KEYS	STONE		PKA	_	0	0	0	0	0	0
Memory card	Move Thumbnail	Up	JMU	_	_	_	_	_	0	_
	(Thumbnail selection)	Down	JMD	-	—	_	_	_	0	-
		Left	JML	-	—	_	_	_	0	_
		Right	JMR	-	—	_	_	_	0	_
	Move page	Next	JPN	-	—	_	_	_	0	_
		Back	JPB	-	—	_	_	_	0	_
	Move folder	Up	JFU	-	—	_	_	_	0	_
		Тор	JFT	-	—	_	_	_	0	_
	Select		JFG	-	—	_	_	_	0	_
	On-screen display	Pause	JFP	_	-	_	—	_	0	—
		Quit	JFE	- /	-	—	—	_	0	—
Document	Short cut		CDR	- /	-	<u> </u>	—	-	-	0
imaging	Auto W/B	On	CW1	-	_	_	—	_	-	0
camera		Off	CW0	/-	_	2	—	_	-	0
	Lighting	On	CL1	/ -	_	-	—	_	-	0
		Off	CL0	_	_	-	_	_	-	0
	Gain adjustment	Increase	CGU	_	_	_	<u> </u>	_	-	0
		Decrease	CGD	_	_	_	7	_	-	0
	Save picture		CSV	_	_	_	-	_	_	0



### **Specifications**

#### Main unit

			mini jack
Power consumption	No camera model: 320W (Standby: 18W) With camera model: 330W (Standby: 18W)	CONTROL	Mini DIN 8
Mass	No camera model: 5.3kg With camera model: 6.2kg	USB output	Туре В
Dimensions (Except the protrusion parts)	No camera model: 345 x 104 x 281 (mm) (W/H/D) With camera model:	Liquid crystal disp	•
	345 x 104 x 336 (mm) (W/H/D)	Projection system Panel size	3-panels tra 1.3 inches
Cabinet Material	ABS resin		TFT active
Ambient environment	Temperature : 0°C to 35°C Humidity : 30% to 70% RH	Driving system Picture elements	786,432 pi
Lamp	High pressure mercury lamp 210W		
Projection screen size	25 to 250 inches	Projection lens	
Projection distance	1.14 to 9.11m	Lens	Zooming le
Speaker	2W (monaural)	Focusing	Manual ope
Card slot	PC Card Standard TYPE II	Zooming	Manual ope
Connectors		Document imaging	g camera
COMPUTER IN 1	Mini D-sub 15-pin Analog RGB/Y/PB/PR (combination)	Lens	F = 3.1, f =
COMPUTER IN 2	DVI ANALOG & DIGITAL connector Analog RGB input/Digital RGB input (combination)	Focus	Manual ope
MONITOR OUT	Mini D-sub 15-pin Analog RGB	Zoom	None (adju
S-VIDEO IN		Iris	Auto./Manu
VIDEO IN	1V(p-p), 75Ω, RCA pin jack -Merchant	Image element 00) 2	1/2 inch CO
AUDIO (L/R)	1V(p-p), more than $22k\Omega$ , RCA pin jack x 2	Effective pixels for pickup	5 section ES 1,447,680
AUDIO IN	1V(p-p), more than 22k $\Omega$ , ø3.5mm stereo mini jack	Lighting	LED light

AUDIO OUT	1V(p-p), less than 2.2k $\Omega,$ ø3.5mm stereo mini jack
CONTROL	Mini DIN 8-pin (RS-232C)
USB output	Туре В

#### olay

Projection system	3-panels transmission
Panel size	1.3 inches
Driving system	TFT active matrix
Picture elements	786,432 pixels (1024 x 768 dots) (H./V.) x 3

#### Zooming lens F = 2.2 to 2.5 f = 47 to 61mm Manual operation Manual operation g camera (With camera model) F = 3.1, f = 6.4mmManual operation None (adjusted by distance to subject) Auto./Manual 1/2 inch CCD section ES 1,447,680 pixels (1392 x 1040 dots) (H./V.)

### **Specifications (continued)**

#### Accessories

Owner's manual (Getting started)	1
Owner's manual (CD-ROM)	1
Remote control	1
R6 (AA) size battery	2
Power cord	1
RGB cable 1 (	(3m)
Adapter for Macintosh computers	1
AV cable 1 (	(3m)
Audio cable (for Computer) 1 (	(3m)
Control cable 1 (1.	8m)
USB cable 1 (	2m)

• The design and specifications are subject to change without notice.

#### Sold separately

Replacement lamp

TLPLX10

FixYourDLP.com

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### LIMITED WARRANTY

## TOSHIBA 3LCD Data Projector (TLP-X10/X20 Series)

Toshiba America Consumer Products, Inc. (TACP) makes the following limited warranties.

These limited warranties extend to the original end-user purchaser.

#### Limited two (2) Years Warranty of Parts and Labor

TACP warrants this product and its parts against defects in materials or workmanship for a period of two years after the date of original retail purchase.

For a period of two years after the date of original retail purchase, TACP will repair a defective product or a part, without charge to you.

This warranty also covers accessories of 3LCD Data Projector. This warranty period of the lamp is ninety (90) days.

#### Your Responsibility

The above warranties are subject to the following conditions.

- 1. You must retain your bill of sale or provide other proof of purchase.
- 2. You must make a written notification within thirty (30) days after your discovery of a defective product or part.
- 3. All warranty servicing of this Such or parts must be made by TACP or a service facility authorized by TACP.
- These warranties are effective only if the product is purchased project prepaid by you, accessories and operated in the USA.
- 5. Labor service charges for installation and adjustment of customer controls are not covered by this warranty.

- 6. Warranties extend only to defects in materials or workmanship as limited above and do not extend to any product or parts which have been lost or discarded by you or to damage to products or parts caused by misuse, accident, improper installation, improper maintenance or use in violation of instructions furnished by us; or to units which have been altered or modified without authorized of TACP or to damage to product or parts thereof which have had the serial number removed, altered, defaced or rendered illegible.
- 7. If it is determined after investigation that the claimed problem was not covered with this warranty, you shall pay the cost of investigation at prevailing rate.

#### Step-by-step procedure how to obtain warranty service

To obtain warranty servicing, you should:

- 1. Read the owners manual thoroughly before operating.
- 2. Please contact your dealer for an immediate service and an advice.
- 3. If your dealer is not able to assist you, please contact TACP Service Center listed below or a servicing facilities authorized by TACP for a warranty service within thirty (30) days after you find a defective product or part.
- 4. Arrange for a delivery of the product to TACP Service Center or a servicing facilities authorized by TACP.
- The shipment of the product must be insured, safely and securely packed, preferably in the original carton or a carton with an equivalent protection. A letter explaining the defect and also a copy of the bill of sale or other proof of purchase must be enclosed. All transportation and insurance charges must be prepaid by you.

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### LIMITED WARRANTY (Continued)

- 6. The repaired product is returned freight prepaid to the purchaser after warranty servicing.
- 7. If you have any questions about service, please contact the following TACP Service Center.

TACP is not obligated to provide purchasers with a substitute unit during the warranty period.

82 Totowa Rd., Wayne, NJ 07470, U.S.A. Phone: (973) 628-8000 Fax: (973) 628-1875 Toll Free for Service Call: 1-800-631-3811

#### TOSHIBA AMERICA CONSUMER PRODUCTS, INC.





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