

NEC

Micro-Portable Projector

LT75Z

User's Manual



English

Deutsch

Français

Italiano

Español

Svenska

LIMITED WARRANTY

Except as specified below, the warranty that may be provided by the dealer covers all defects in material or workmanship in this product. The following are not covered by the warranty:

1. Any product on which the serial number has been defaced, modified or removed.
2. Damage, deterioration or malfunction resulting from;
 - a. Accident, misuse, abuse, neglect, fire, water, dust, smoke, lightning or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - b. Repair or attempted repair by non-authorized persons.
 - c. Any shipment of product (claim must be presented to the carrier).
 - d. Removal or installation of the product.
 - e. Any other causes which do not relate to a product defect.
3. Cartons, carrying cases, batteries, external cabinets, CDROM, or any accessories used in connection with the product.
4. Removal or installation charges.
5. Cost of initial technical adjustments (set-up), including adjustment of user controls. These costs are the responsibility of the dealer from whom the product was purchased.
6. Payment of shipping charges.

GARANTIE LIMITEE

Mis à part les points indiqués ci-dessous, la garantie pouvant être couverte par le revendeur comporte l'ensemble des défauts se rapportant au matériel ou aux travaux d'assemblage sur ce produit. Les points suivants ne sont pas couverts par la garantie:

1. Les produits dont le numéro de série a été effacé, modifié ou retiré.
2. Dommages, dégâts ou dysfonctionnement suite à;
 - a. Un accident, mauvaise utilisation, abus, négligences, incendies, dégâts dus aux eaux, à la poussière, à la fumée, aux éclairs ou autres phénomènes naturels, à une modification non autorisée du produit, ou à la non-conformité aux instructions fournies avec le produit.
 - b. Réparation ou tentative de réparation par des personnes non autorisées.
 - c. Toute expédition du produit (les plaintes doivent être adressées à la société de fret).
 - d. Démontage ou installation du produit.
 - e. Toute autre cause ne se rapportant pas à un défaut du produit.
3. Les cartons, boîtes, piles, caissons externes, CDROM, ou tout autre accessoire utilisé avec ce produit.
4. Prix de démontage ou d'installation.
5. Coût des réglages techniques de base (mise au point), incluant les réglages des commandes utilisateurs. Ces coûts sont placés sous la responsabilité du revendeur auprès duquel le produit a été acheté.
6. Paiement des frais de transport.

BESCHRÄNKTE GARANTIE

Außer in den unten beschriebenen Fällen deckt die vom Händler unter Umständen gewährte Garantie alle Material- oder Herstellungsfehler dieses Produktes ab. In den folgenden Fällen wird keine Garantie gewährt:

1. Wenn die Seriennummer des Produktes unleserlich gemacht, geändert oder entfernt worden ist.
2. Bei einer Beschädigung, Beeinträchtigung oder Funktionsstörung, die aus folgenden Fällen resultiert:
 - a. Unfall, falscher Gebrauch, Missbrauch, Fahrlässigkeit, Feuer, Wasser, Staub, Rauch, Blitzeinschlag oder andere Naturereignisse, nicht autorisierte Veränderungen des Produktes oder die Missachtung der dem Produkt beigefügten Anleitung.
 - b. Reparatur oder der Versuch einer Reparatur durch nicht autorisierte Personen.
 - c. Jeglicher Transport des Produktes (die Haftung liegt in diesem Fall bei der den Transport durchführenden Person).
 - d. Entfernung oder Installation des Produktes.
 - e. Jegliche andere Ursachen, die nicht mit einem Defekt dieses Produktes zusammenhängen.
3. Verwendung von Kartons, Transportkisten, Batterien, Außengehäusen, CD-ROMs oder anderem Zubehör zusammen mit diesem Produkt.
4. Entfernung- oder Installationsforderungen und -kosten.
5. Kosten der technischen Anfangseinstellungen (Setup), einschließlich der Einstellungen der Benutzersteuerungen. Diese Kosten sind vom Händler zu tragen, von dem das Produkt erworben wurde.
6. Bezahlung von Transportkosten.

GARANZIA LIMITATA

A parte la specificazione seguente, la garanzia che potrebbe essere fornita dal rivenditore copre tutti i difetti di materiali o nella lavorazione in questo prodotto. I seguenti non sono coperti dalla garanzia:

1. Ogni prodotto che ha il numero seriale difettoso, modificato o rimosso.
2. Danni, deterioramento o malfunzionamento risultanti da;
 - a. Incidenti, abuso, cattivo uso, negligenza, fuoco, acqua, polvere, fumo, fulmini o altri atti naturali di tipo naturale, modifiche inautorizzate del prodotto, o errori nel seguire le istruzioni fornite con il prodotto.
 - b. Riparazioni o tentativi di riparazioni effettuati da persona non autorizzate.
 - c. Qualsiasi trasporto del prodotto (i reclami devono essere presentati dal corriere).
 - d. Rimozione o installazione del prodotto.
 - e. ogni altra causa non relativa ad un deficit del prodotto.
3. Cartoni, scatole di trasporto, batterie, armadietti esterni, CDROM, o qualsiasi altro accessorio annesso al prodotto.
4. Carichi di rimozione o installazione.
5. Costi di aggiustamenti tecnici iniziali (set-up), includendo i comandi di regolazione. Il rivenditore dal quale avete acquistato il prodotto è responsabile di ciò.
6. Pagamento delle spese di consegna.

GARANTÍA LIMITADA

A excepción de lo que se especifica abajo, la garantía que puede ser suministrada por el distribuidor cubre todos los defectos en material o elaboración en este producto. Lo siguiente no es cubierto por la garantía:

1. Cualquier producto en el cual el número serial haya sido desfigurado, modificado o removido.
2. Daños, deterioro o malfuncionamiento resultado de;
 - a. Accidente, mal manejo, abuso, negligencia, fuego, agua, polvo, humo, relámpagos u otros fenómenos naturales, modificaciones del producto sin autorización, fallas en el seguimiento de las instrucciones suministradas con el producto.
 - b. Reparación o intentos de reparación por personas no autorizadas.
 - c. Cualquier envío del producto (el reclamo debe presentarse al transportador).
 - d. Remoción o instalación del producto.
 - e. Cualquier otra causa que no este relacionada con un defecto del producto.
3. Cartones, estuches de transporte, pilas, gabinetes externos, CDROM, o cualquier accesorio utilizado en conexión con el producto.
4. Costos por instalación o remoción.
5. Costo de los ajustes técnicos iniciales (configuración), incluyendo el ajuste de los controles de usuario. Estos costos son responsabilidad del distribuidor donde se adquirió el producto.
6. Pago de los costos de envío.

BEGRÄNSAD GARANTI

Garantin som ges av återförsäljaren täcker alla brister i material och utförande med undantag av vad som anges nedan. Följande täcks inte av garantin:

1. Produkter vars serienummer har blivit oläsligt, modifierats eller tagits bort.
2. Skador, försämring eller felfunktion som beror på:
 - a. Olyckor, fel bruk, missbruk, vanskötsel, brand, vatten, rök, stoft, åska eller annan orsak som beror på naturen, icke auktoriserad modifikation av produkten samt underlåtenhet att följa anvisningarna som lämnas med produkten.
 - b. Reparationer eller försök på reparation av icke auktoriserade personer.
 - c. Transportskador (dessa bör riktas till transportföretaget).
 - d. Avmontering eller installation av produkten.
 - e. Övriga orsaker som inte har något samband med produktens fel.
3. Förpackningslådor, bärväskor, batterier, externa höljen, CD-ROM-skivor samt andra tillbehör som används tillsammans med produkten.
4. Avmonterings- och installationskostnader.
5. Kostnader för tekniska justeringar (inställning), inklusive justering av användarreglagen. Dessa kostnader är återförsäljarens ansvar där produkten köpts.
6. Betalning för transportkostnader.

NEC Technologies Projectors

Product Registration Card



*TravelCare*SM



NEC Technologies
Solutions with Vision

PLACE
CORRECT
POSTAGE
HERE

**ATTN: CUSTOMER SERVICE & SUPPORT
NEC TECHNOLOGIES, INC.
VISUAL SYSTEMS DIVISION
1250 N. ARLINGTON HEIGHTS RD.
ITASCA, IL 60143-1248**



REGISTRATION CARD FOR NEC TECHNOLOGIES PROJECTORS

THANK YOU

Thank you for your purchase of an NEC Technologies projector. By purchasing an NEC projector, you are able to access the best limited warranty and service programs available in the industry today.

InstaCare® service provides for the repair and return of your projector within three business days. For the ultimate in hassle free service, NEC pays for the round-trip shipping.

When time matters most and overnight replacement is not fast enough, **InstaCare XpressSM**, available for a nominal fee, provides for a "next available flight" replacement option*.

TravelCareSM allows projector customers to receive service on their projector when traveling internationally, regardless of where the projector was originally purchased.

With a full compliment of warranty and service programs from NEC, you'll never be stranded at work or on the road!



Register your projector!!

In order to qualify for the One Business Day replacement coverage portion of InstaCare:

Visit our website at www.nectech.com, click on product registration, then on presentation products and submit your completed form online, or return this completed registration card.

Upon receipt, we'll send a confirmation letter with all the details you'll need to take advantage of fast, reliable warranty and service programs from the company that provides:
Solutions with Vision, NEC Technologies.



NEC Technologies
Solutions with Vision

NEC Technologies, the NEC Technologies Spirit icon and InstaCare are registered trademarks, and InstaCare Xpress and TravelCare are service marks of NEC Technologies Inc. NEC is a registered trademark of NEC Corporation. SMARTer Kids is a trademark of the SMARTer Kids Foundation. DLP is a trademark of Texas Instruments Inc. GT Series projectors are covered by InstaCare three-day repair/return service only. InstaCare and InstaCare Xpress service is available only in the U.S. and Canada. *Airline restrictions and flight availability may apply for InstaCare Xpress service.

Mr. Ms. Mrs.

First Name _____ **Initial** _____ **Last Name** _____

Title _____

Company Name _____

Street Address _____ **Apt. #** _____

City _____ **St./Prv. Zip+4/Postal Code** _____

Day Phone _____ **E-Mail** _____

AREA CODE _____

Date of Purchase _____

MONTH _____ DAY _____ YEAR _____

Please indicate which product was purchased

Model # _____

Serial # _____

Which segment most closely identifies the market that you will use the product in

Corporate Government Education Other _____

State Federal Local K-12 Higher Ed Fill in Blank

If your market segment is Education, did you purchase through the SMARTer KidsSM Foundation? Yes No

Please indicate the # of employees at your company <100 100-999 >1000

Can we contact you about new product offerings in the future? Yes No

via E-Mail Mail

What types of products do you currently use and what products are you interested in within the next 12 months?

| | Currently Use | Interested | | Currently Use | Interested |
|-------------------------------------|--------------------------|--------------------------|---------------------------------|--------------------------|--------------------------|
| LCD Projectors | <input type="checkbox"/> | <input type="checkbox"/> | Plasma Monitors | <input type="checkbox"/> | <input type="checkbox"/> |
| DLPSM Projectors | <input type="checkbox"/> | <input type="checkbox"/> | CRT Monitors | <input type="checkbox"/> | <input type="checkbox"/> |
| High Light Output Projectors | <input type="checkbox"/> | <input type="checkbox"/> | Handheld Computers | <input type="checkbox"/> | <input type="checkbox"/> |
| CRT Projectors | <input type="checkbox"/> | <input type="checkbox"/> | Notebook Computers | <input type="checkbox"/> | <input type="checkbox"/> |
| Home Theatre | <input type="checkbox"/> | <input type="checkbox"/> | Desktop Computers | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | Single/Multi CPU Servers | <input type="checkbox"/> | <input type="checkbox"/> |

Check this box if you do not want to receive special offers from carefully selected vendors.

LIMITED WARRANTY (USA and Canada only)

NEC SOLUTIONS' PROJECTOR PRODUCTS

NEC Solutions (America), Inc. (hereafter NEC Solutions) warrants this product to be free from defects in material and workmanship under the following terms.

HOW LONG IS THE WARRANTY

NEC Solutions' LT75Z projectors are covered by a three (3) year limited parts and labor warranty from the date of the first customer purchase. The lamp when used under normal operating conditions is warranted for 1000 hours or six months, whichever comes first.

WHO IS PROTECTED

This warranty may be enforced only by the first purchaser, and is not transferable.

WHAT IS COVERED AND WHAT IS NOT COVERED

Except as specified below, this warranty covers all defects in material or workmanship in this product.

NEC SOLUTIONS' LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCT AT NEC SOLUTIONS' OPTION. REPLACEMENT PRODUCTS MAY BE NEW OR 'LIKE NEW'. The following are not covered by the limited warranty and NEC Solutions shall not be liable for:

1. Any product which is not distributed in the U.S.A. or Canada by NEC Solutions or which is not purchased, installed, and operated in the U.S.A or Canada.
2. Any product on which the serial number has been defaced, modified or removed.
3. Normal decrease in lamp light output over time.
4. Damage, deterioration or malfunction resulting from:
 - a. Accident, misuse, abuse, neglect, improper ventilation, fire, dust, smoke, water, lightning or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - b. Repair or attempted repair by anyone other than a NEC Solutions authorized service center.
 - c. Any shipment of the product (claims must be presented to the carrier).
 - d. Removal or installation of the product.
 - e. Any other cause which does not relate to a product defect.
 - f. Use of the product beyond normal operating conditions. Normal operating conditions are defined as product use not in excess of 5 hours per day and 260 days per year.
5. Cartons, carrying cases, shipping cases, batteries, external cabinets, magnetic tapes, or any accessories used in connection with the product.
6. Service required as a result of third party components.

WHAT NEC SOLUTIONS WILL PAY FOR

NEC Solutions will pay labor and material expenses for covered items, but NEC Solutions will not pay for the following:

1. Removal or installation charges.
2. Costs of technical adjustments, set-up, maintenance, or adjustment of user controls.
3. Payment of shipping and related charges incurred in returning the product for warranty repair.

HOW YOU CAN GET WARRANTY SERVICE

1. To obtain service on your product, consult the dealer from whom you purchased the product.
2. Whenever warranty service is required, the original dated invoice (or a copy) must be presented as proof of warranty coverage. In order to obtain warranty service, you may be required to describe and demonstrate the problem to your dealer or to NEC Solutions.
3. All products returned to NEC Solutions for service MUST have prior approval. To receive approval or for the name of the nearest NEC Solutions authorized service center, call NEC Solutions at 800-836-0655.
4. It shall be your obligation and expense to ship the product, freight prepaid, or to deliver it to a NEC Solutions authorized service center, in either the original package or a similar package affording an equal degree of protection.
5. In the event a product is returned to NEC Solutions for warranty service, and it is determined that there is no product defect or that the product condition is not covered by this limited warranty, a diagnostic service fee may be charged to the customer.

LIMITATION OF IMPLIED WARRANTIES

EXCEPT AS EXPRESSLY SET FORTH IN THIS LIMITED WARRANTY, NEC SOLUTIONS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED TO THE TERMS AND DURATION OF THIS LIMITED WARRANTY.

EXCLUSION OF DAMAGES

NEC SOLUTIONS' LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCT AT NEC SOLUTIONS' OPTION. NEC SOLUTIONS SHALL NOT BE LIABLE FOR:

1. DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THIS PRODUCT, DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, COMMERCIAL LOSS; OR
2. ANY OTHER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE.

HOW STATE LAW RELATES TO THE WARRANTY

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

FOR MORE INFORMATION, CONTACT:

NEC SOLUTIONS (AMERICA), INC.
1250 N. Arlington Heights Road, Suite 500
Itasca, Illinois 60143-1248
TELEPHONE 800-836-0655
www.necvisualsystems.com

Customers are cautioned that product performance is affected by system configuration, software, the application, customer data, and operator control, among other factors. While NEC Solutions' products are considered to be compatible with many systems, the specific functional implementation by the customers of the product may vary. Therefore, the suitability of a product for a specific purpose or application must be determined by the customer and is not warranted by NEC Solutions.

DECLARATION OF CONFORMITY

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions. (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

| | |
|--------------------------------|---------------------------------------|
| U.S. Responsible Party: | NEC Technologies, Inc. |
| Address: | 1250 N. Arlington Heights Road |
| | Itasca, Illinois 60143 |
| Tel. No.: | (630) 467-5000 |

Type of Product: Projector
Equipment Classification: Class B Peripheral
Models: LT75Z

*We hereby declare that the equipment specified above
conforms to the technical standards as specified in the FCC Rules.*



Micro-Portable Projector

LT75Z

User's Manual

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IMPORTANT INFORMATION

Precautions

Please read this manual carefully before using your NEC LT75Z Projector and keep the manual handy for future reference. Your serial number is located on the bottom of your LT75Z. Record it here:

CAUTION



To turn off main power, be sure to remove the plug from power outlet. The power outlet socket should be installed as near to the equipment as possible, and should be easily accessible.

CAUTION



TO PREVENT SHOCK, DO NOT OPEN THE CABINET. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED NEC SERVICE PERSONNEL.



This symbol warns the user that uninsulated voltage within the unit may be sufficient to cause electrical shock. Therefore, it is dangerous to make any kind of contact with any part inside of the unit.



This symbol alerts the user that important information concerning the operation and maintenance of this unit has been provided. The information should be read carefully to avoid problems.

WARNING

TO PREVENT FIRE OR SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE. DO NOT USE THIS UNIT'S GROUNDED PLUG WITH AN EXTENSION CORD OR IN AN OUTLET UNLESS ALL THREE PRONGS CAN BE FULLY INSERTED. DO NOT OPEN THE CABINET. THERE ARE HIGH-VOLTAGE COMPONENTS INSIDE. ALL SERVICING MUST BE DONE BY QUALIFIED NEC SERVICE PERSONNEL.

DOC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

3. GSGV Acoustic Noise Information Ordinance:

The sound pressure level is less than 70 dB (A) according to ISO 3744 or ISO 7779.

RF Interference

WARNING

The Federal Communications Commission does not allow any modifications or changes to the unit EXCEPT those specified by NEC Technologies in this manual. Failure to comply with this government regulation could void your right to operate this equipment.

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

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

In UK, a BS approved power cable with moulded plug has a Black (five Amps) fuse installed for use with this equipment. If a power cable is not supplied with this equipment please contact your supplier.

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- Macintosh and PowerBook are registered trademarks of Apple Computer, Inc.
- Other product and company names mentioned in this user's manual may be the trademarks of their respective holders.

Important Safeguards

These safety instructions are to ensure the long life of your projector and to prevent fire and shock. Please read them carefully and heed all warnings.

Installation

1. For best results, use your projector in a darkened room.
2. Place the projector on a flat, level surface in a dry area away from dust and moisture.
3. Do not place your projector in direct sunlight, near heaters or heat radiating appliances.
4. Exposure to direct sunlight, smoke or steam can harm internal components.
5. Handle your projector carefully. Dropping or jarring can damage internal components.
6. Do not place heavy objects on top of the projector.
7. If you wish to have the projector installed on the ceiling:
 - a. Do not attempt to install the projector yourself.
 - b. The projector must be installed by qualified technicians in order to ensure proper operation and reduce the risk of bodily injury.
 - c. In addition, the ceiling must be strong enough to support the projector and the installation must be in accordance with any local building codes.
 - d. Please consult your dealer for more information.

Power Supply

1. The projector is designed to operate on a power supply of 100-120 or 200-240 V 50/60 Hz AC. Ensure that your power supply fits this requirement before attempting to use your projector.
2. Handle the power cable carefully and avoid excessive bending. A damaged cord can cause electric shock or fire.
3. If the projector is not to be used for an extended period of time, disconnect the plug from the power outlet.

Cleaning

1. Unplug the projector before cleaning.
2. Clean the cabinet periodically with a damp cloth. If heavily soiled, use a mild detergent. Never use strong detergents or solvents such as alcohol or thinner.
3. Use a blower or lens paper to clean the lens, and be careful not to scratch or mar the lens.

CAUTION

Do not turn off the main power or unplug the power cable from the wall outlet under any one of the following circumstances. Doing so can cause damage to the projector:

- Immediately after the power cable is plugged into the wall outlet (when the POWER indicator has not changed to a steady orange glow).
- Immediately after the cooling fan stops working (The cooling fan continues to work for 90 seconds after the projector is turned off with the POWER button).

Lamp Replacement

- To replace the lamp, follow all instructions provided on page E-36.
- Be sure to replace the lamp when the message "The lamp has reached the end of its usable life. Please replace the lamp." appears. If you continue to use the lamp after the lamp has reached the end of its usable life, the lamp bulb may shatter, and pieces of glass may be scattered in the lamp case. Do not touch them as the pieces of glass may cause injury. If this happens, contact your NEC dealer for lamp replacement.
- Allow a minimum of 90 seconds to elapse after turning off the projector. Then disconnect the power cable and allow 60 minutes to cool the projector before replacing the lamp.

Fire and Shock Precautions

1. Ensure that there is sufficient ventilation and that vents are unobstructed to prevent the build-up of heat inside your projector. Allow at least 3 inches (10cm) of space between your projector and a wall.
2. Prevent foreign objects such as paper clips and bits of paper from falling into your projector. Do not attempt to retrieve any objects that might fall into your projector. Do not insert any metal objects such as a wire or screwdriver into your projector. If something should fall into your projector, disconnect it immediately and have the object removed by a qualified NEC service personnel.
3. **Do not place any liquids on top of your projector.**
 - Do not look into the lens while the projector is on. Serious damage to your eyes could result.
 - Keep any items such as magnifying glass out of the light path of the projector. The light being projected from the lens is extensive, therefore any kind of abnormal objects that can redirect light coming out of the lens, can cause unpredictable outcome such as fire or injury to the eyes.
 - Do not cover the lens with the supplied lens cap or equivalent while the projector is on. Doing so can lead to melting of the cap and possibly burning your hands due to the heat emitted from the light output.

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1. INTRODUCTION

Introduction to the LT75Z Projector

This section introduces you to your new LT75Z Projector and describes the features and controls.

Congratulations on Your Purchase of The LT75Z Projector

The LT75Z is one of the very best projectors available today. The LT75Z enables you to project precise images up to 200 inches across (measured diagonally) from your PC or Macintosh computer (desktop or notebook), VCR, DVD player, document camera or a laser disc player.

You can use the projector on a tabletop or cart, you can use the projector to project images from behind the screen, and the projector can be permanently mounted on a ceiling*¹. The remote control can be used wirelessly.

Features you'll enjoy:

- Simple set up and operation.
- A high-performance 135 watt NSH lamp.
- The supplied wireless remote control that operates the projector from the front or rear.
- The image can be projected between 30 and 200 inches (measured diagonally).
- Keystone correction allows you to correct trapezoidal distortion so that the image is square.
- You can choose between video modes depending on your source:
"normal" for a typical picture, "natural" for true color reproduction.
- An image can be projected from in front or behind a screen, and the projector can even be installed on the ceiling.
- NEC Technologies' exclusive Advanced AccuBlend intelligent pixel blending technology - an extremely accurate image compression technology - offers a crisp image with UXGA (1600 × 1200) resolution*².
- Supports most IBM VGA, SVGA, XGA*², SXGA*², UXGA*² Macintosh, component signal (YCbCr / YPbPr) or any other RGB signals within a horizontal frequency range of 15 to 100 kHz and a vertical frequency range of 50 to 120Hz. This includes NTSC, PAL, PAL-N, PAL-M, PAL60, SECAM and NTSC4.43 standard video signals.

NOTE: Composite video standards are as follows:

NTSC: U.S. TV standard for video in U.S. and Canada.

PAL: TV standard used in Western Europe.

PAL-M: TV standard used in Brazil.

PAL-N: TV standard used in Argentina, Paraguay and Uruguay.

PAL60: TV standard used for NTSC playback on PAL TVs.

SECAM: TV standard used in France and Eastern Europe.

NTSC4.43: TV standard used in Middle East countries.

- You can use the supplied wireless remote control and remote mouse receiver to operate your PC mouse wirelessly from across the room.

The remote mouse receiver supports almost any PC using a USB connection or the supplied USB-to-PS/2 adapter.

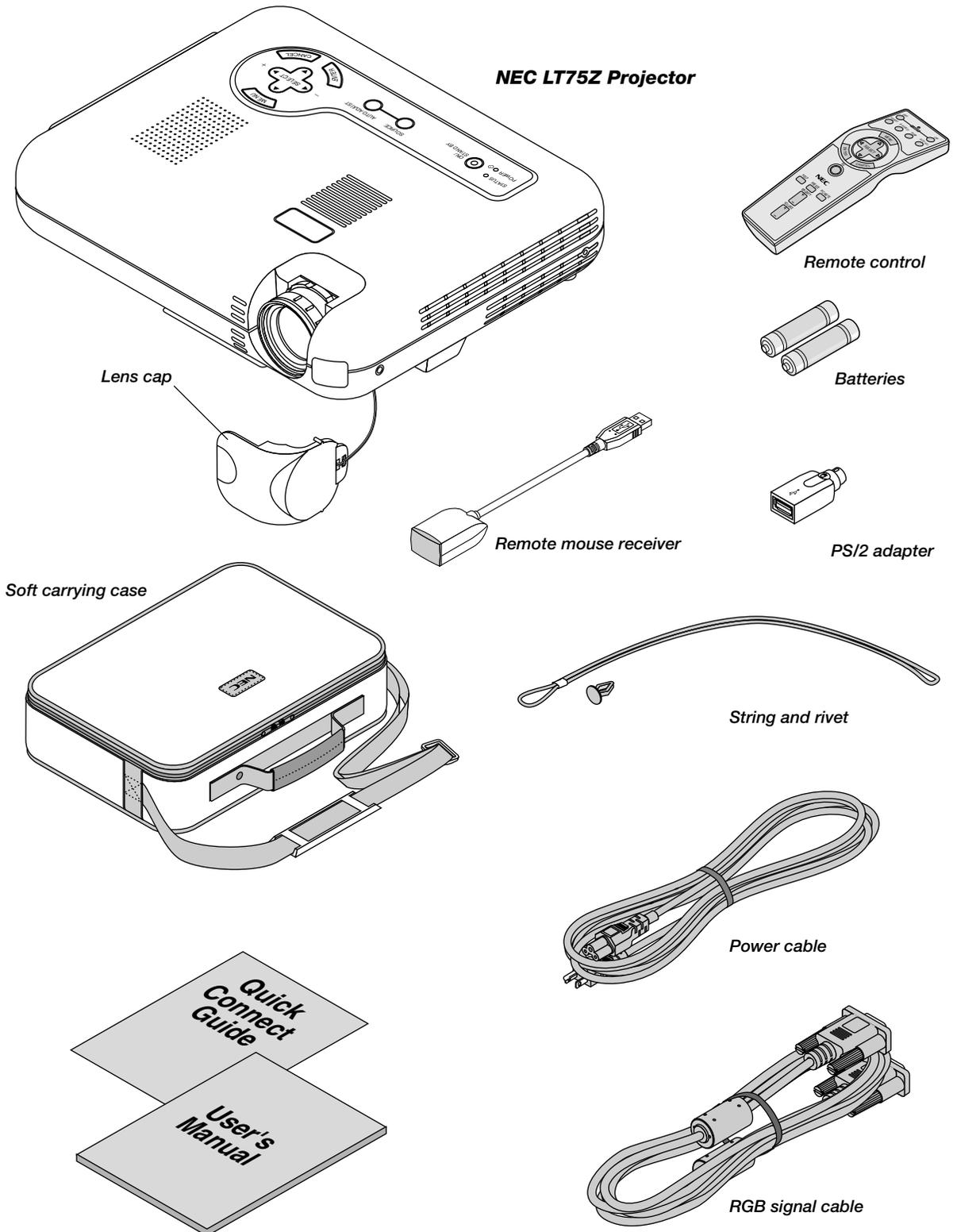
- You can control the projector with a PC using the PC Control port.
- The contemporary cabinet design is light, compact, easy to carry, and complements any office, boardroom or auditorium.

Getting Started

The fastest way to get started is to take your time and do everything right the first time. Take a few minutes now to review the user's manual. This may save you time later on. At the beginning of each section of the manual you'll find an overview. If the section doesn't apply, you can skip it.

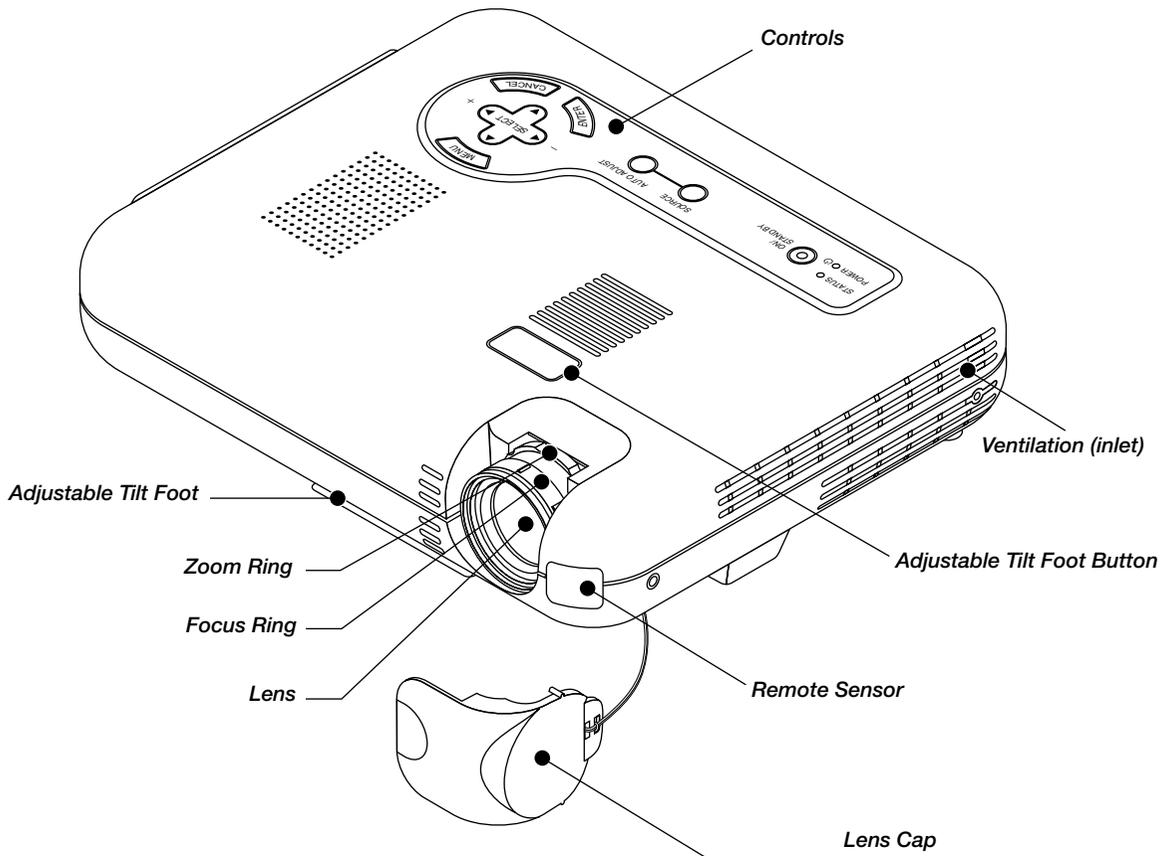
What's in the Box?

Make sure your box contains everything listed. If any pieces are missing, contact your dealer.
Please save the original box and packing materials if you ever need to ship your LT75Z Projector.



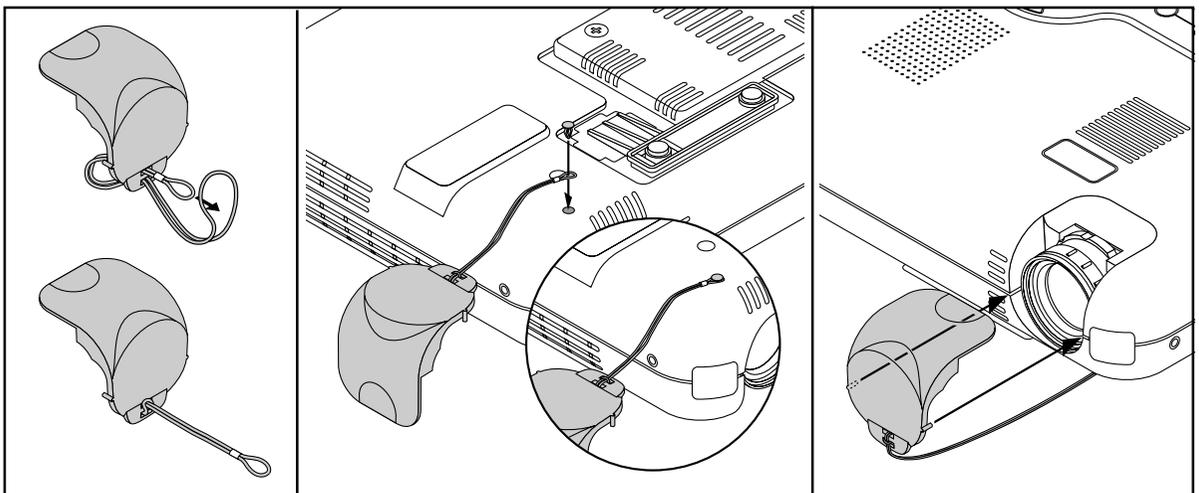
Getting to Know Your LT75Z Projector

Front/Side Features

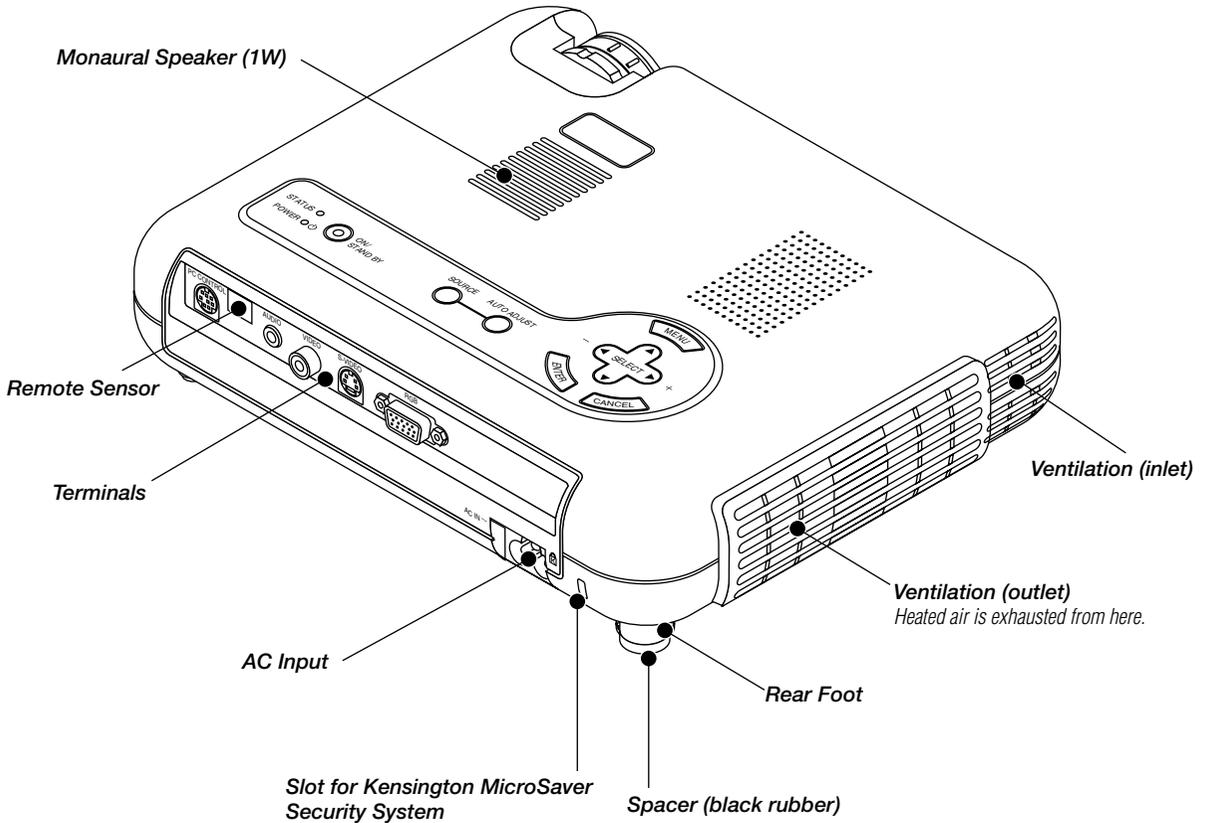


Attaching the lens cap to the bottom with the supplied string and rivet

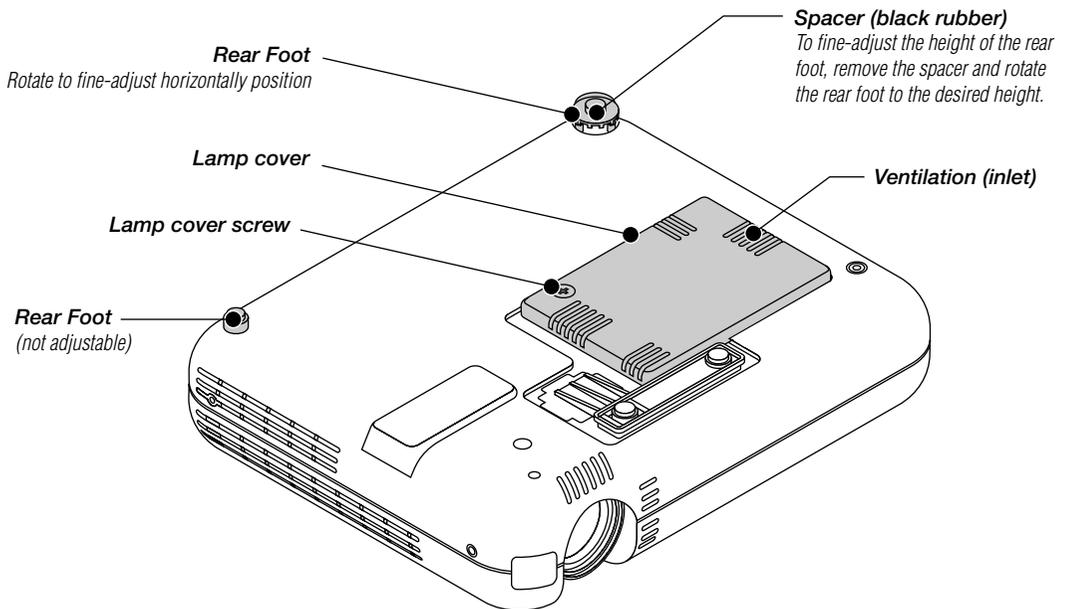
1. Thread the string through the hole on the lens cap and then tie a knot in the string.
2. Use the rivet to attach the string to the bottom of the projector.



Rear/Side Features

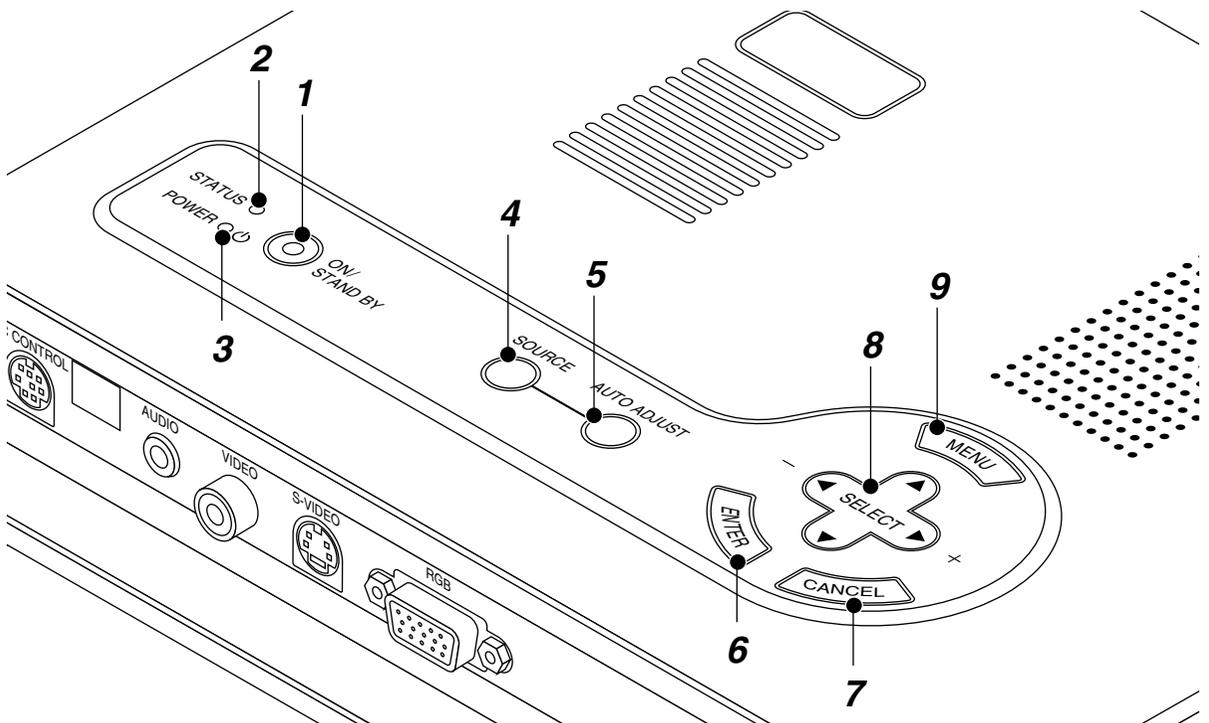


Bottom



NOTE: The projector has an internal temperature sensor. The sensor controls the speed of the fan to keep constant temperature in the inside. When the internal temperature rises, the built-in fan automatically runs at a high speed (high-speed mode). During this time, the sound of exhaust may be heard. This is not a malfunction.

Top Features



1. Power Button (ON / STAND BY)

Use this button to turn the power on and off when the power is supplied and the projector is in standby mode.

NOTE: To turn off the projector, press and hold this button for a minimum of two seconds.

2. Status Indicator

When this is lit red continually, it's warning you that the projection lamp has exceeded 1000 hours (1500 hours in Eco mode) of service. After this light appears, it is advisable to replace the projection lamp as soon as possible. (See page E-36). In addition the message **"The lamp has reached the end of its usable life. Please replace the lamp."** appears continually until the lamp is replaced.

If this light blinks red rapidly, it indicates that the lamp cover is not attached properly or the projector is overheated.

See the Power/Status Light Messages on page E-37 for more details.

3. Power Indicator (⏻)

When this indicator is green, the projector is on; when the indicator is orange, it is in standby mode.

4. Source Button

Use this button to select a video source such as a PC, VCR or DVD player.

Each time this button is pressed, the input source will change as follows:



If no input signal is present, the input will be skipped.

5. Auto Adjust Button (RGB only)

Use this button to adjust Position-H/V and Pixel Clock/Phase for an optimal picture. Some signals may not be displayed correctly or take time to switch between sources.

6. Enter Button

Executes your menu selection and activates items selected from the menu.

7. Cancel Button

Press this button to close the menu.

8. Select (▲▼◀▶) Buttons

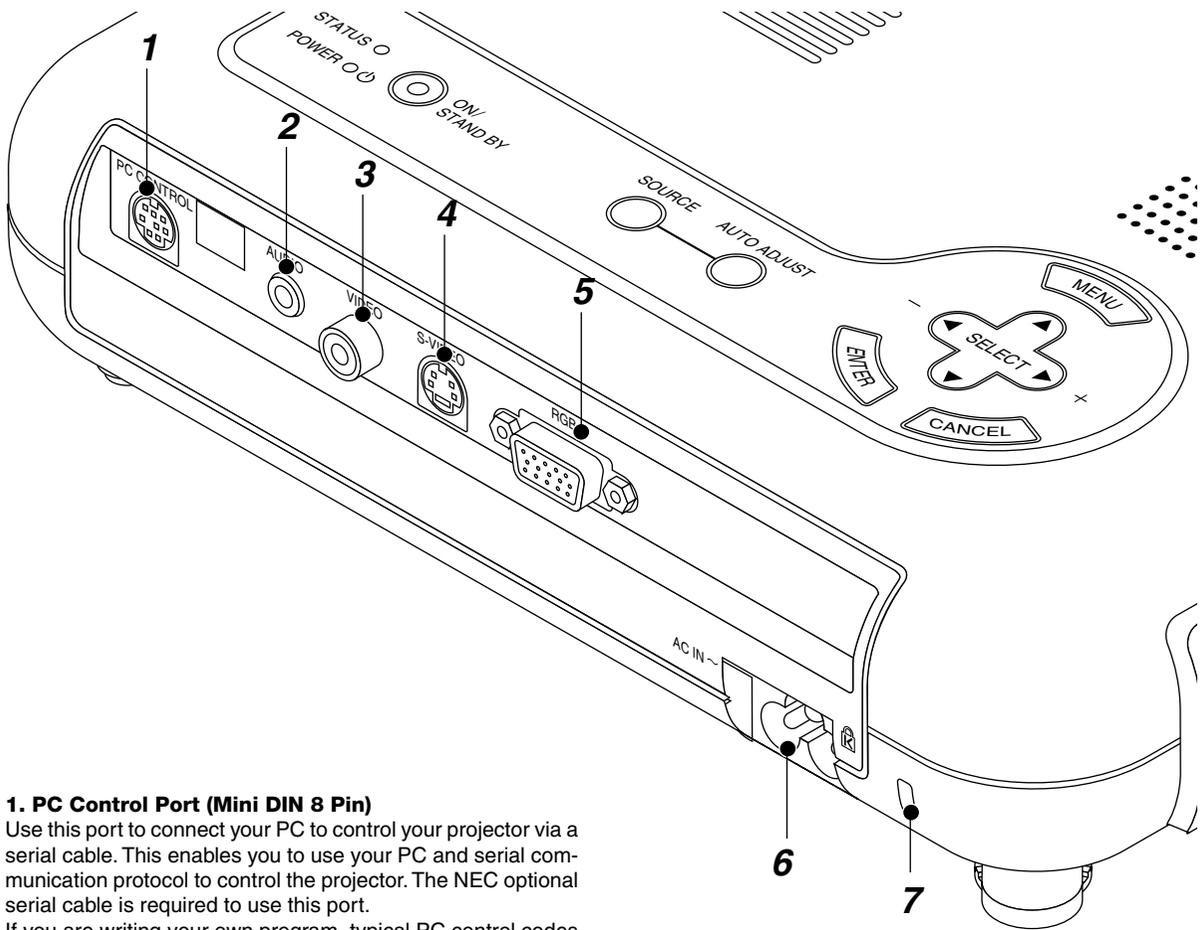
▲▼: Use these buttons to select the menu of the item you wish to adjust.

◀▶: Use these buttons to change the level of a selected menu item.

9. Menu Button

Displays the menu.

Terminal Panel Features



1. PC Control Port (Mini DIN 8 Pin)

Use this port to connect your PC to control your projector via a serial cable. This enables you to use your PC and serial communication protocol to control the projector. The NEC optional serial cable is required to use this port.

If you are writing your own program, typical PC control codes are on page E-42.

A cap is put on the port at the factory. Remove the cap when using the port.

2. Audio Input Mini Jack (3.5 mm \varnothing)

This is where you connect audio output from your computer, VCR, DVD player or laser disc player.

A commercially available audio cable is required.

3. Video Input (RCA)

Connect a VCR, DVD player, laser disc player, or document camera here to project video.

4. S-Video Input (Mini DIN 4 Pin)

Here is where you connect the S-Video input from an external source like a VCR.

NOTE: S-Video provides more vivid color and higher resolution than the traditional composite video format.

5. RGB Input/Component Input Connector (Mini D-Sub 15 pin)

Connect your PC or other RGB equipment such as IBM or compatible computers. Use the supplied RGB cable to connect to a PC. Or connect a Macintosh computer here using the supplied RGB cable. This also serves as a component input connector that allows you to connect a component video output of component equipment such as a DVD player.

6. AC Input

Connect the supplied power cable's three-pin plug here. When you plug the other end into an active wall outlet, the POWER indicator turns orange and the projector is in standby mode.

7. Built-in Security Slot (K)

This security slot supports the MicroSaver® Security System. MicroSaver® is a registered trademark of Kensington Microware Inc.

The logo is trademarked and owned by Kensington Microware Inc.

Remote Control Features

NOTE: If you are using a Macintosh computer, you can click either the right-click or left-click button to activate the mouse.

NOTE: If any one of the buttons is pressed and held for 60 seconds or more, the button operations will cease to operate. This is not a malfunction, rather it is a feature used to prolong battery power. To cancel this feature, press any one of the buttons other than the SELECT button.

1. Infrared Transmitter

Direct the remote control toward the remote sensor on the projector cabinet.

2. LED

Flashes when any button is pressed.

3. Power ON Button

If the main power is applied, you can use this button to turn your projector on.

4. Power OFF Button

If the main power is applied, you can use this button to turn your projector off.

NOTE: To turn off the projector, press and hold the POWER OFF button for a minimum of two seconds.

5. VIDEO Button

Press this button to select a video source from a VCR, DVD player, laser disc player or document camera.

6. S-VIDEO Button

Press this button to select an S-Video source from a VCR.

7. RGB Button

Press this button to select an RGB source from computer or component equipment connected to your RGB port.

8. Auto Adjust Button

Use this button to adjust Position-H/V and Pixel Clock/Phase for an optimal picture. Some signals may not be displayed correctly, or in some cases it may take some time for a source to switch between sources.

9. Menu Button

Displays the menu.

10. Select ▲▼◀▶ (mouse) Buttons

When you are in the Computer mode, these buttons work as a computer mouse.

When you are in the Projector mode, which is indicated by lighting the PJ button:

▲▼ : Use these buttons to select the menu of the item you wish to adjust.

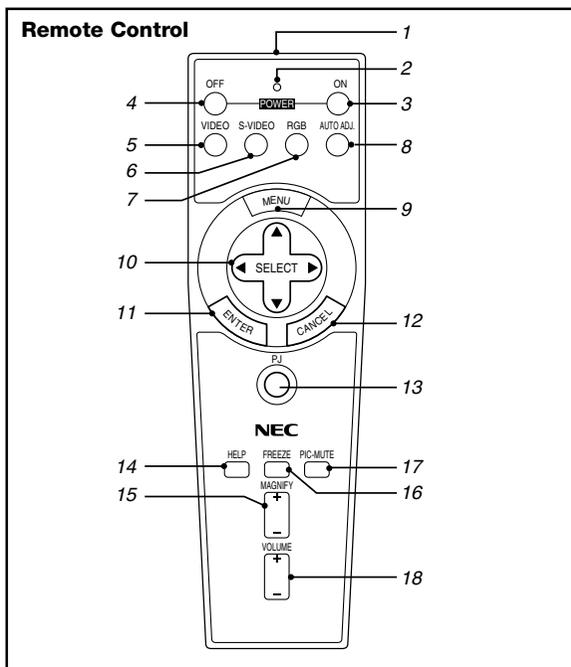
◀▶ : Use these buttons to change the level of a selected menu item.

11. Enter (Left click) Button

When you are in the Computer mode, this button works as the mouse left button.

When you are in the Projector mode, which is indicated by lighting the PJ button:

Use this button to enter your menu selection. It works the same way as the "Enter" button on the cabinet.



12. CANCEL Button

When you are in the Computer mode, this button works as the mouse right button.

When you are in the Projector mode, which is indicated by lighting the PJ button:

Press this button to exit "Menus". It works the same way as the "Cancel" button on the cabinet.

13. PJ Button

Press this button to switch the Select, Cancel, and Enter buttons between the Projector mode (lit red) and the Computer mode. Press this button or any one of the Power ON/OFF, Menu, Help and Magnify buttons to switch to the Projector mode and the PJ button lights red. To switch back to the Computer mode, press the PJ button again.

14. HELP Button

Provides information about the current signal and the status of the projector.

15. Magnify Button

Use this button to adjust the image size up to 400%.

16. Freeze Button

This button will freeze a picture. Press again to resume motion.

17. Picture Mute Button

This button turns off the image and sound for a short period of time. Press again to restore the image and sound.

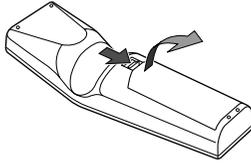
18. Volume Button

Press (+) to increase the volume and (-) to decrease it.

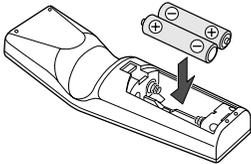
NOTE: The default is the Computer mode, which allows you to use the Select, Cancel, and Enter buttons as your computer mouse. When the Power ON/OFF, MENU, HELP and MAGNIFY button is pressed, the PJ button lights red to indicate that you are in the Projector mode. If no buttons are pressed within 10 seconds, the light goes out and the Projector mode is canceled.

Remote Control Battery Installation

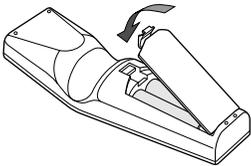
1. Push to open the battery cover.



2. Remove both old batteries and install new ones (AA). Ensure that you have the batteries' polarity (+/-) aligned correctly.



3. Put the battery cover back on.



Do not mix different types of batteries or new and old batteries.

Remote Control Precautions

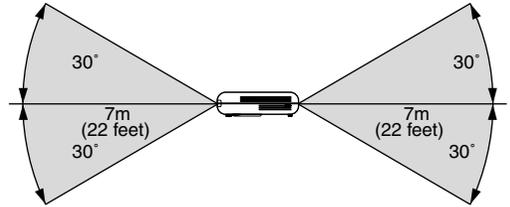
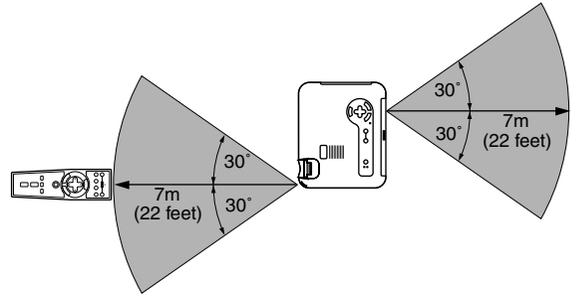
- Handle the remote control carefully.
- If the remote control gets wet, wipe it dry immediately.
- Avoid excessive heat and humidity.
- If you will not be using the remote control for a long time, remove the batteries.

Note on Remote Control Operation:

Pressing and holding the Select (▲▼◀▶)/ Mouse button while installing new batteries may cause malfunction or no operation.

Should this happen, remove the batteries and then install them again without touching the Select/Mouse button.

Operating Range



Using Remote Mouse Receiver

The remote mouse receiver enables you to operate your computer's mouse functions from the remote control (Computer mode). It is a great convenience for clicking through your computer-generated presentations. To return to the Projector mode, press the PJ button (lit red).

Connecting the remote mouse receiver to your computer

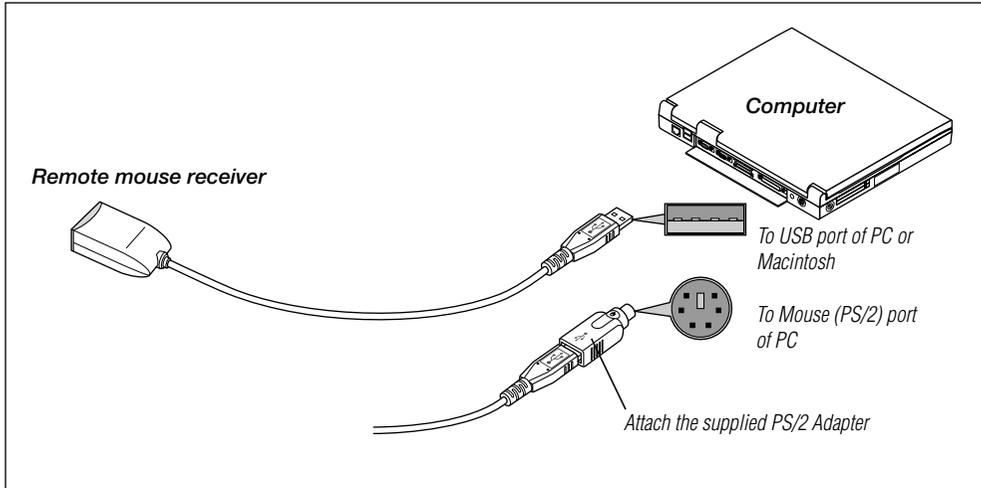
If you wish to use the remote mouse function, connect the mouse receiver and computer.

The mouse receiver can be connected directly to the computer using the USB terminal.

To connect it to the computer using the mouse (PS/2) terminal, do so using the PS/2 adapter.

NOTE: Depending on the type of connection or OS installed on your computer, you may have to restart your computer or change your computer settings.

When connecting using the USB terminal

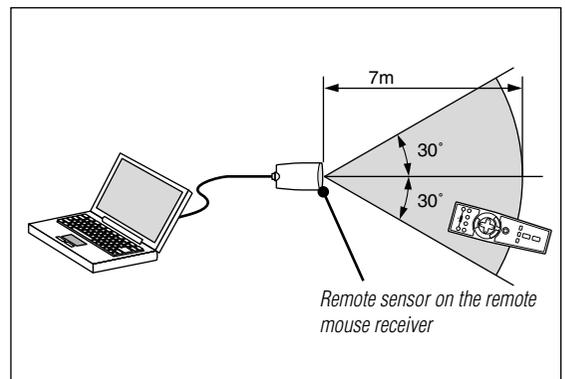


For PC, the mouse receiver can only be used with a Windows 98, Windows ME or Windows 2000 operating system.

NOTE:

- Wait at least 5 seconds after disconnecting the mouse receiver before reconnecting it and vice versa. The computer may not identify the mouse receiver if it is repeatedly connected and disconnected in rapid intervals.
- When using the PS/2 adapter, be sure to attach the PS/2 adapter to the remote mouse receiver first. Do not connect or disconnect the USB connector of the remote mouse receiver with the PS/2 adapter on the mouse (PS/2) port of your PC. Doing so can result in your PC failing to detect the remote mouse receiver.

When operating a computer via the remote mouse receiver

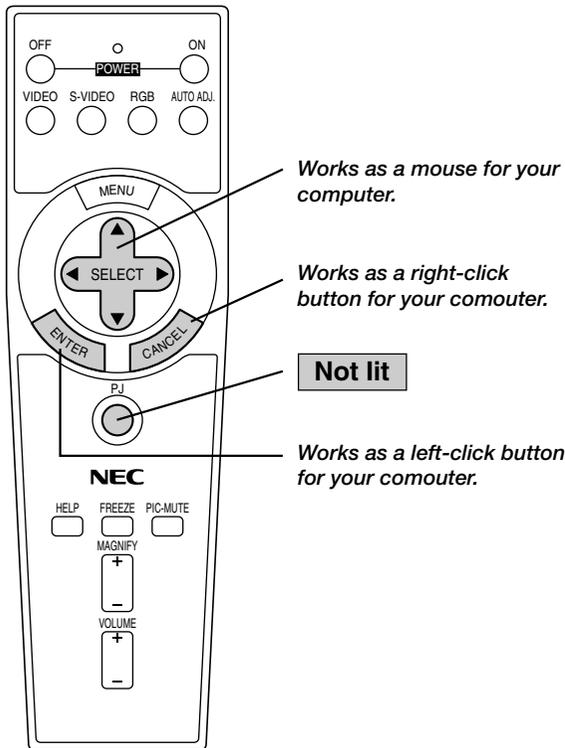


Switching operation mode between computer and projector

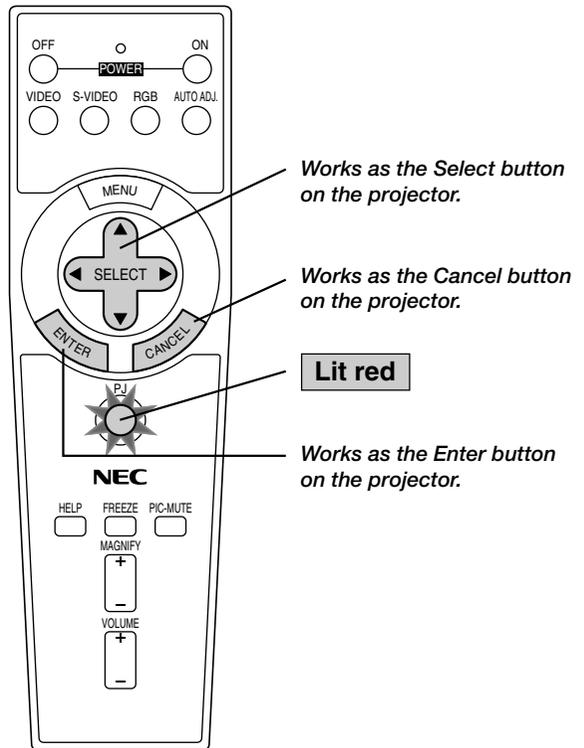
The SELECT, ENTER, and CANCEL buttons shown on the drawing work as a computer mouse in the Computer mode. In the Computer mode the PJ button is not lit.

- When any one of the POWER ON, OFF, MENU, HELP, or MAGNIFY button is pressed, the PJ button lights red to indicate that you are in the Projector mode, which allows the projector menu operation using the SELECT, ENTER or CANCEL buttons.
- If no buttons are pressed within 10 seconds, the PJ button's light goes out to indicate that you are in the Computer mode. To enable the projector menu operation again, press the PJ button to light red.
- When the PJ button is lit, if you want to use the mouse function immediately, press the PJ button to return to the Computer mode (not lit).

[Computer mode]



[Projector mode]



During Computer mode:

During Computer mode by pressing the ENTER button for 1.5 seconds or more then releasing, the drag mode is set and the drag operation can be performed simply by pressing the SELECT▲▼◀▶ (mouse) button. To cancel the drag mode, press the ENTER (left click) button again or press the CANCEL (right click) button.

2. INSTALLATION

This section describes how to set up your LT75Z projector and how to connect video and audio sources.

Setting up Your Projector

Your LT75Z Projector is simple to set up and use. But before you get started, you must first:

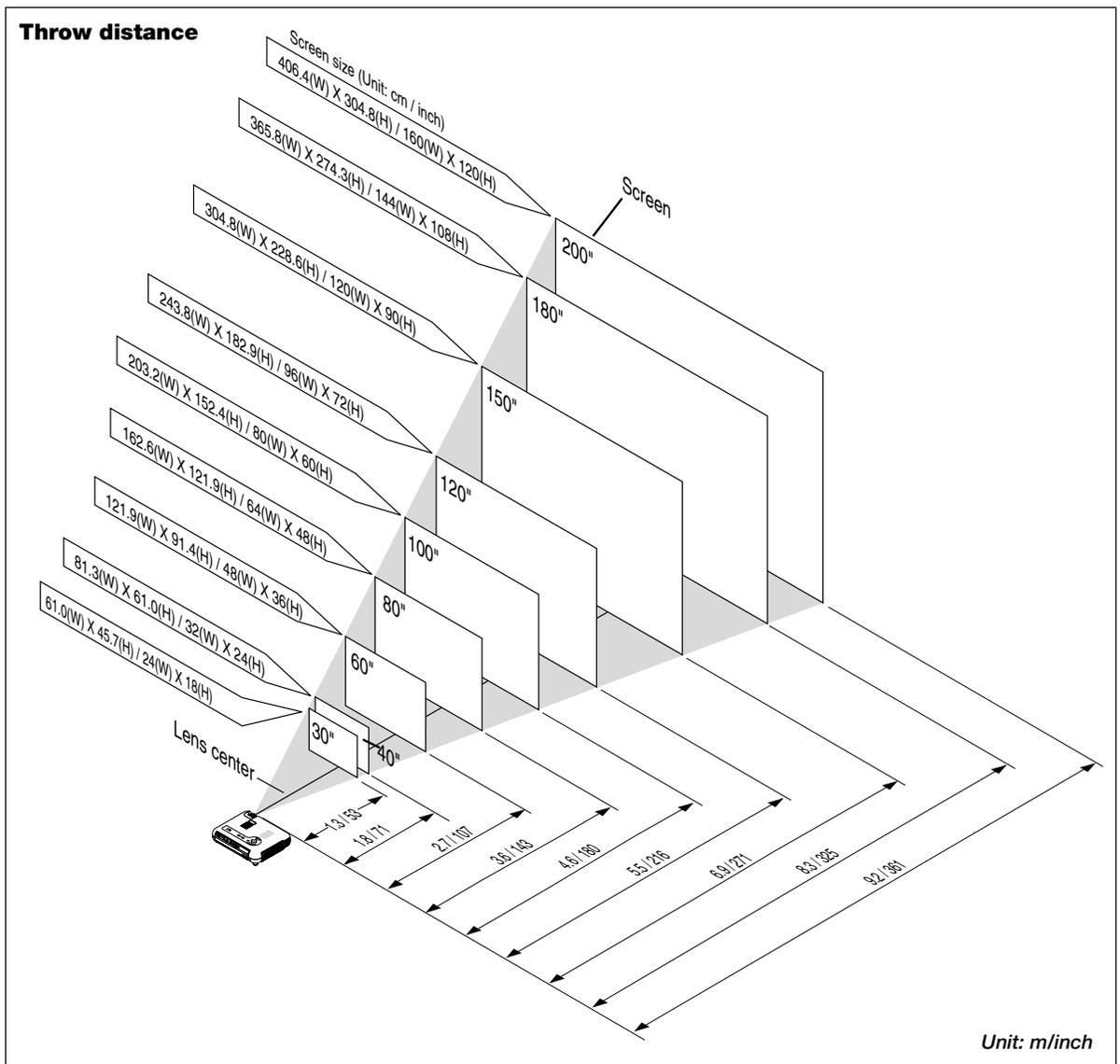
1. Determine the image size.
2. Set up a screen or select a non-glossy white wall onto which you can project your image.
 - Ensure that the power cable and any other cables connecting to video sources are disconnected before moving the projector.
 - When moving the projector or when it is not in use, cover the lens with the lens cap.

Selecting a Location

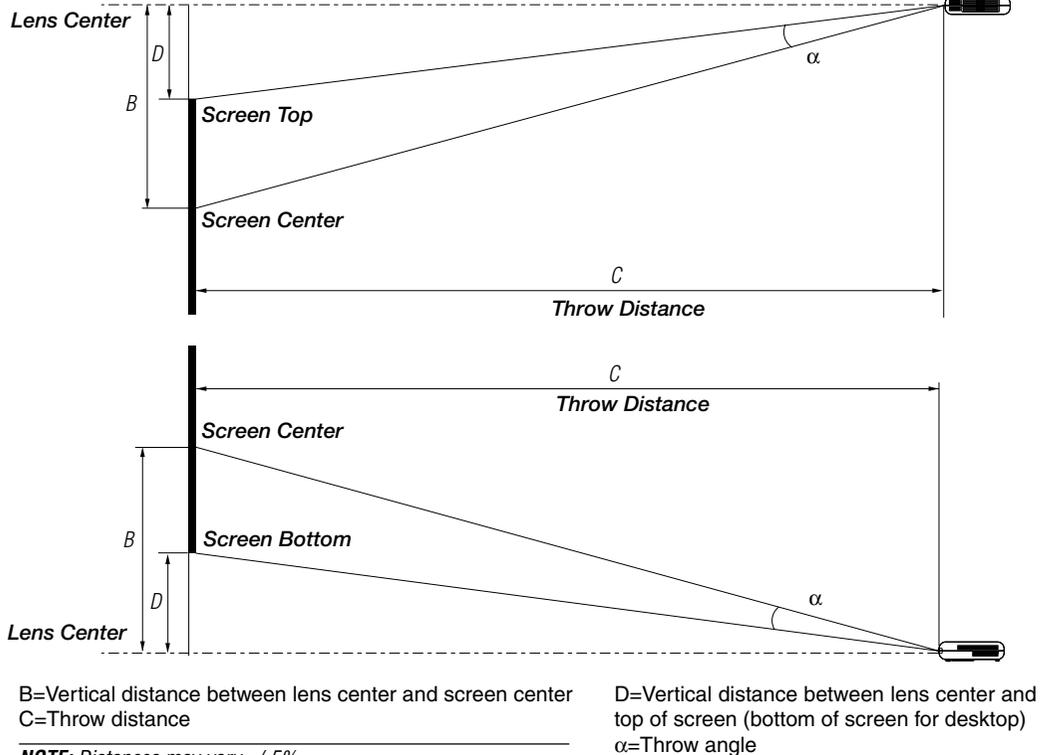
The further your projector is from the screen or wall, the larger the image. The minimum size the image can be is approximately 30" (0.8 m) measured diagonally when the projector is roughly 4 feet (1.3m) from the wall or screen. The largest the image can be is 200" (5.1 m) when the projector is about 30 feet (9.2m) from the wall or screen.

Screen and Projection Distance

The following shows the proper relative positions of the projector and screen. Refer to the table to determine the position of installation.



Distance Chart



| Screen Size | | | | | | B | C | | | | D | α | | | |
|-------------|------|-------|------|--------|------|------|------|------|------|------|-------|----------|--------|------|------|
| Diagonal | | Width | | Height | | | Wide | | Tele | | | Wide | Tele | | |
| inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | degree | degree | | |
| 30 | 762 | 24 | 610 | 18 | 457 | 13 | 319 | 48 | 1210 | 58 | 1470 | 4 | 90 | 14.8 | 12.2 |
| 40 | 1016 | 32 | 813 | 24 | 610 | 17 | 425 | 64 | 1620 | 78 | 1970 | 5 | 120 | 14.7 | 12.2 |
| 60 | 1524 | 48 | 1219 | 36 | 914 | 25 | 637 | 97 | 2460 | 117 | 2980 | 7 | 180 | 14.5 | 12.1 |
| 67 | 1702 | 54 | 1361 | 40 | 1021 | 28 | 712 | 108 | 2750 | 131 | 3340 | 8 | 201 | 14.5 | 12.0 |
| 72 | 1829 | 58 | 1463 | 43 | 1097 | 30 | 765 | 117 | 2960 | 141 | 3590 | 9 | 216 | 14.5 | 12.0 |
| 80 | 2032 | 64 | 1626 | 48 | 1219 | 33 | 850 | 130 | 3300 | 157 | 3990 | 9 | 240 | 14.4 | 12.0 |
| 84 | 2134 | 67 | 1707 | 50 | 1280 | 35 | 892 | 136 | 3460 | 165 | 4190 | 10 | 252 | 14.5 | 12.0 |
| 90 | 2286 | 72 | 1829 | 54 | 1372 | 38 | 956 | 146 | 3710 | 177 | 4500 | 11 | 270 | 14.5 | 12.0 |
| 100 | 2540 | 80 | 2032 | 60 | 1524 | 42 | 1062 | 163 | 4130 | 197 | 5000 | 12 | 300 | 14.4 | 12.0 |
| 120 | 3048 | 96 | 2438 | 72 | 1829 | 50 | 1275 | 196 | 4970 | 237 | 6010 | 14 | 360 | 14.4 | 12.0 |
| 150 | 3810 | 120 | 3048 | 90 | 2286 | 63 | 1593 | 245 | 6220 | 296 | 7530 | 18 | 450 | 14.4 | 11.9 |
| 180 | 4572 | 144 | 3658 | 108 | 2743 | 75 | 1912 | 294 | 7470 | 356 | 9040 | 21 | 541 | 14.4 | 11.9 |
| 200 | 5080 | 160 | 4064 | 120 | 3048 | 84 | 2125 | 327 | 8310 | 396 | 10050 | 24 | 601 | 14.3 | 11.9 |

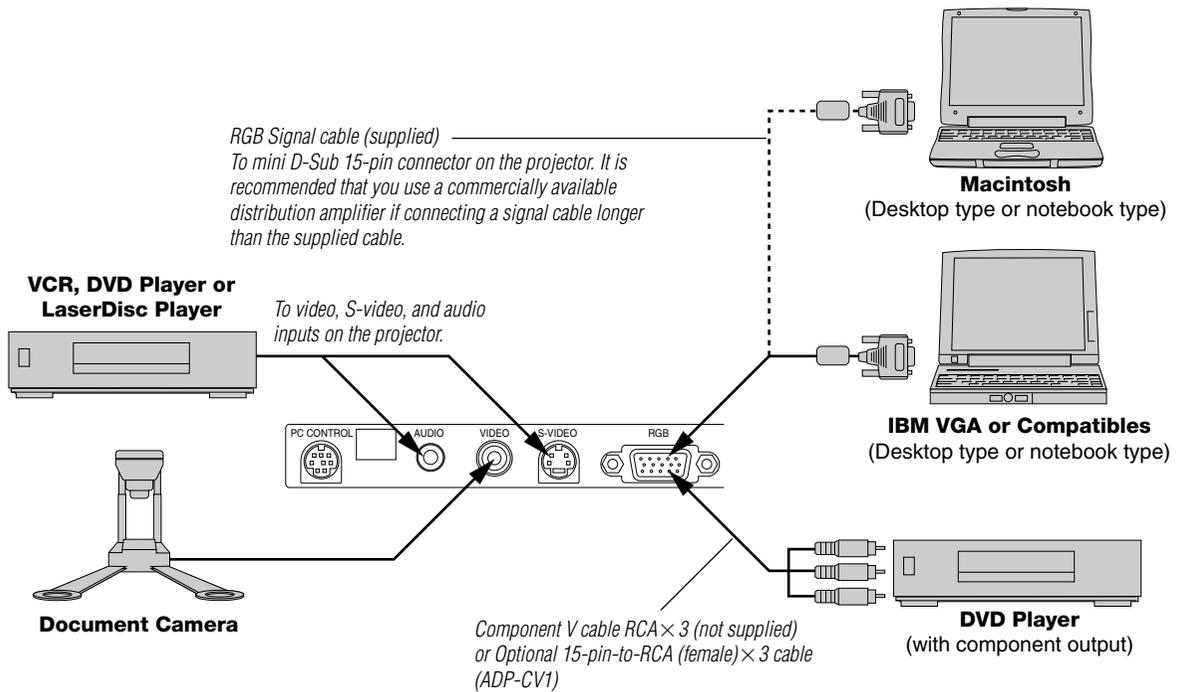
WARNING

- Installing your projector on the ceiling must be done by a qualified technician. Contact your dealer for more information.
- * Do not attempt to install the projector yourself.
- Only use your projector on a solid, level surface. If the projector falls to the ground, you can be injured and the projector severely damaged.
- Do not use the projector where temperatures vary greatly. The projector must be used at temperatures between 41°F (5°C) and 95°F (35°C).
- Do not expose the projector to moisture, dust, or smoke. This will harm the screen image.
- Ensure that you have adequate ventilation around your projector so heat can dissipate. Do not cover the vents on the side or the front of the projector.

Reflecting the Image

Using a mirror to reflect your projector's image enables you to enjoy a much larger image. Contact your NEC dealer if you need a mirror. If you're using a mirror and your image is inverted, use the "Menu" and "Select" buttons on your projector cabinet or ▲▼ buttons on your remote control to correct the orientation. (See page E-33.)

Wiring Diagram



NOTE: When using with a notebook PC, be sure to connect between the projector and the notebook PC before turning on the power to the notebook PC. In most cases signal cannot be output from RGB output unless the notebook PC is turned on after connecting with the projector.

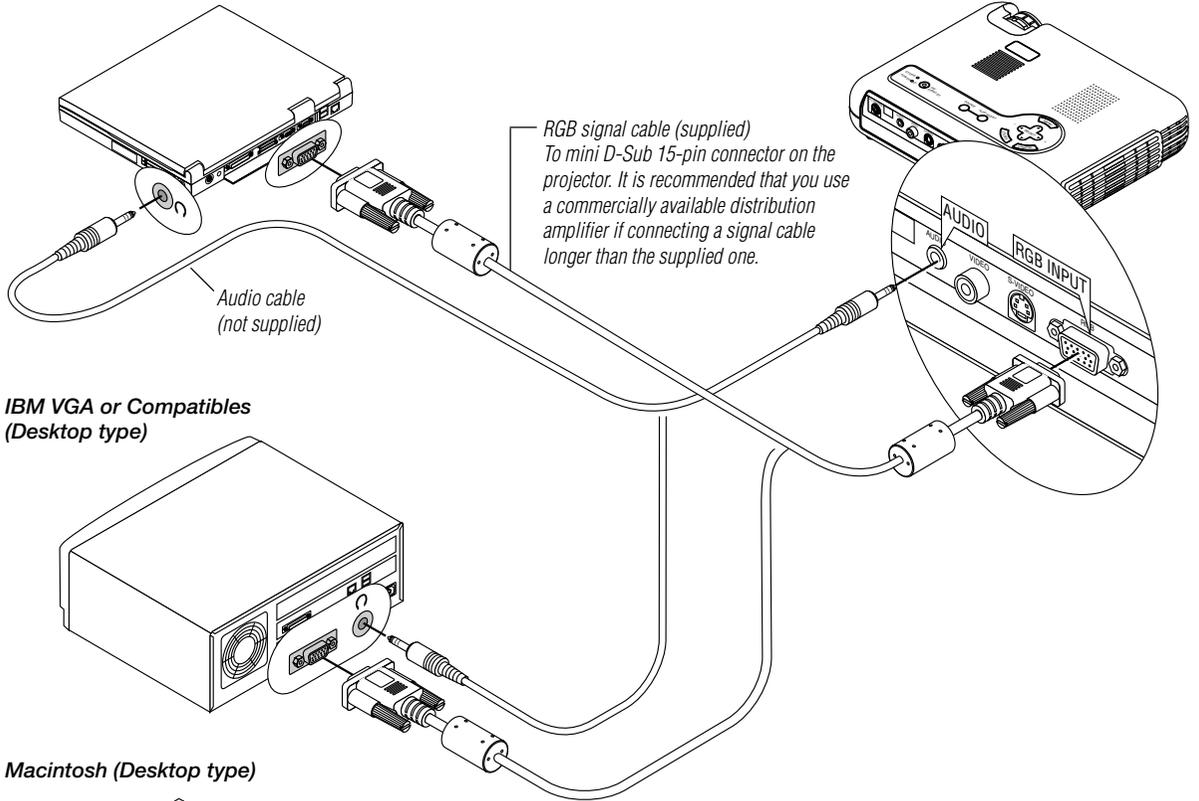
NOTE:

- * If the screen goes blank while using your remote control, it may be the result of the computer's screen-saver or power management software.
- * If you accidentally hit the POWER button on the remote control, wait 90 seconds and then press the POWER button again to resume.

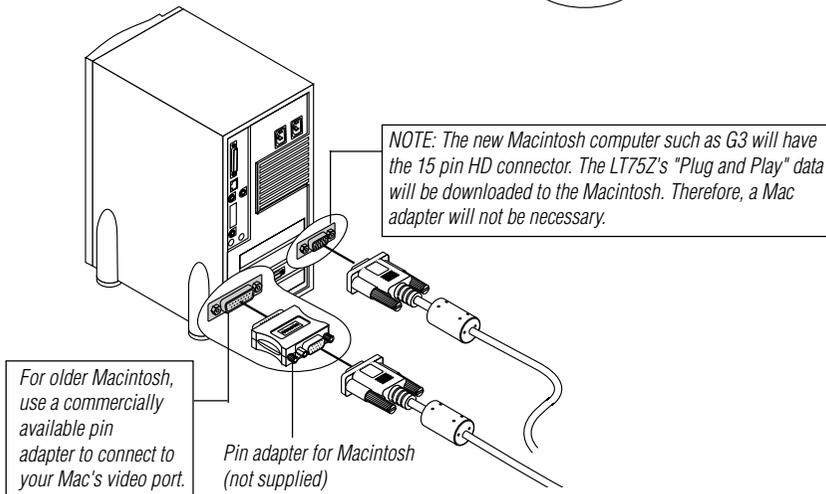
NOTE: If using video, S-video, or audio cables, the cables should be 3 m (9.8 feet) or shorter.

Connecting Your PC or Macintosh Computer

*IBM VGA or Compatibles (Notebook type)
or Macintosh (Notebook type)*



Macintosh (Desktop type)

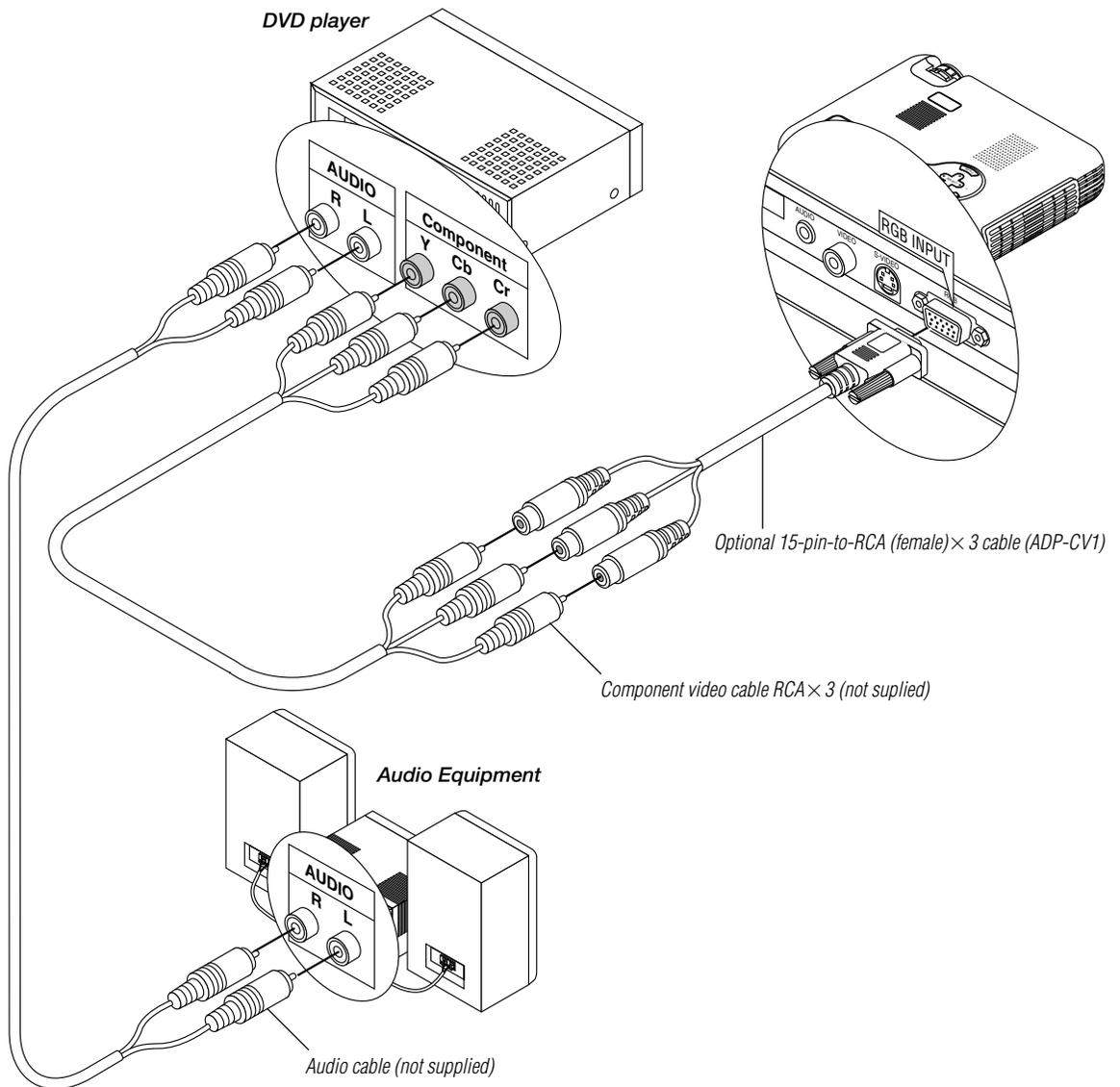


Connecting your PC to your LT75Z (SVGA) projector will enable you to project your computer's screen image for an impressive presentation.

To connect to a PC or Macintosh computer, simply:

1. Turn off the power to your projector and computer.
2. Use the supplied signal cable to connect your PC or Macintosh computer to the projector.
3. Turn on the projector and the computer.
4. If the projector goes blank after a period of inactivity, it may be caused by a screen saver installed on the computer you've connected to the projector.

Connecting Your DVD Player



You can connect your projector to a DVD player with component outputs or Video output. To do so, simply:

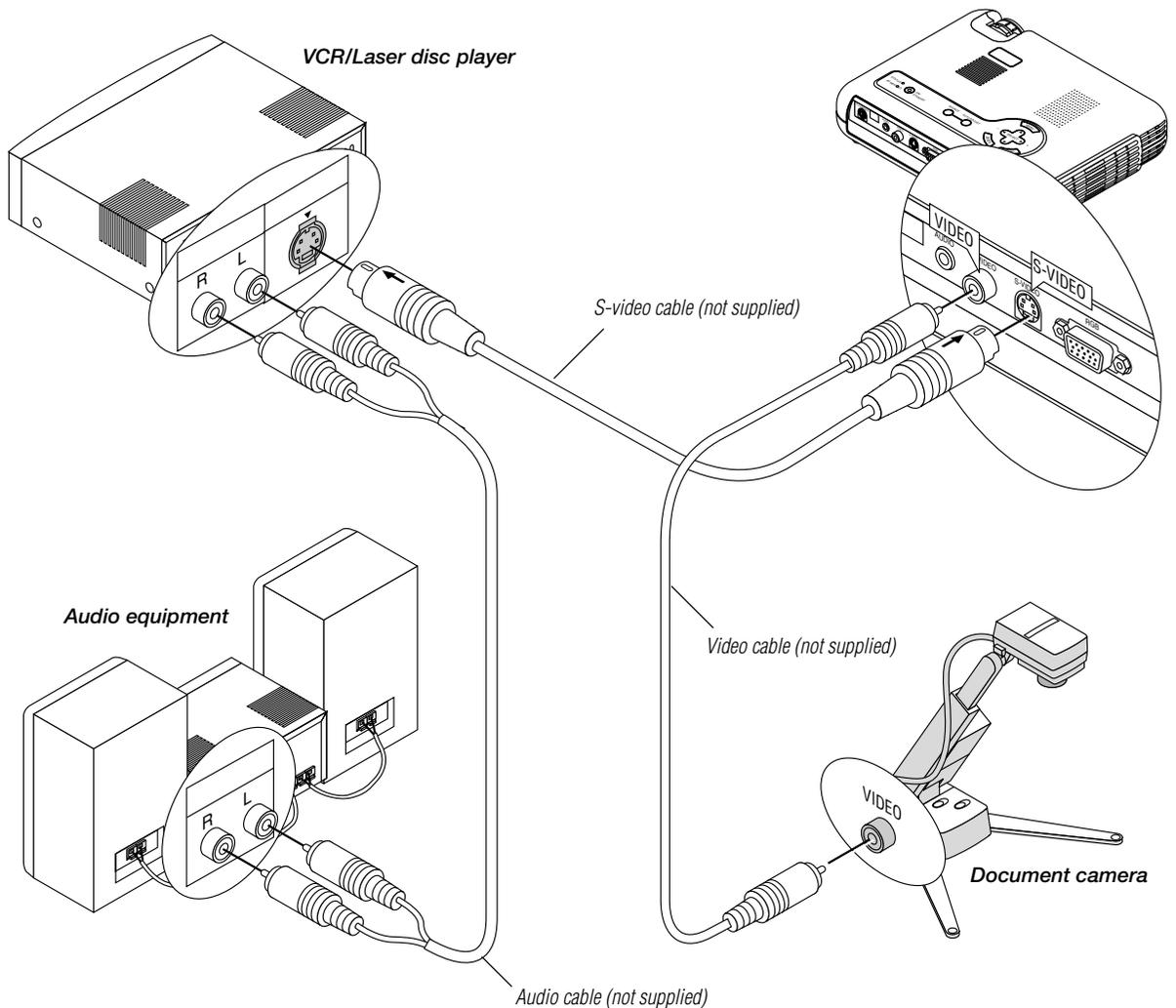
1. Turn off the power to your projector and DVD player.
2. Use a 15-pin cable to connect your monitor to the RGB Monitor Output (Mini D-Sub 15 pin) connector on your projector.

For a DVD player without component video (Y,Cb,Cr) outputs, use common RCA cables (not provided) to connect a composite VIDEO output of the DVD player to the Video Input of the projector.

3. Turn on the projector and DVD player.

NOTE: Refer to your DVD player's owner's manual for more information about your DVD player's video output requirements.

Connecting Your VCR or Laser Disc Player



Use common RCA cables (not provided) to connect your VCR, laser disc player or document camera to your projector.

To make these connections, simply:

1. Turn off the power to the projector and VCR, laser disc player or document camera.
2. Connect one end of your RCA cable to the video output connector on the back of your VCR or laser disc player, connect the other end to the Video input on your projector. Use an audio cable (not supplied) to connect the audio from your VCR or laser disc player to your audio equipment (if your VCR or laser disc player has this capability). Be careful to keep your right and left channel connections correct for stereo sound.
3. Turn on the projector and the VCR or laser disc player.

NOTE: Refer to your VCR or laser disc player owner's manual for more information about your equipment's video output requirements.

NOTE:

- The image from a video playback deck may not be correctly displayed when used with a scan converter before being input to the projector.
- This model does not support the NEC ISS-6010 and ISS-6020 switchers.

About Startup screen

(Menu Language Select screen)

When you first turn on the projector, you will get the Startup screen. This screen gives you the opportunity to select one of the seven menu languages: English, German, French, Italian, Spanish, Swedish and Japanese.

To select a menu language, follow these steps:

1. Use the ▲ or ▼ buttons to select one of the seven languages for the menu.

| Menu Language Select | |
|--|----------|
| Please select a menu language. | English |
| Wählen Sie bitte die Menü Sprache aus. | Deutsch |
| S'il vous plaît choisir la langue de menu. | Français |
| Per favore di scegliere la lingua di menu. | Italiano |
| Escoja por favor el idioma de menú. | Español |
| Välj menyn språken. | Svenska |
| メニュー言語を選択してください。 | 日本語 |
| Select "UP", "DOWN" & "ENTER" | |

2. Press the Enter button to execute the selection.
3. The Basic menu will be displayed in the language you have selected.

| Basic Menu | |
|-------------------|---|
| Source Select | ▶ |
| Picture | |
| Volume | |
| Image Options | ▶ |
| Projector Options | ▶ |
| Information | |

To close the menu, press the Cancel button.

After this has been done, you can proceed to the advanced menu operation.

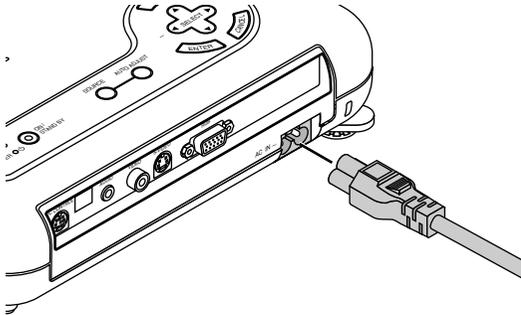
If you want, you can select the menu language later. See "Language" on page E-32.

3. OPERATION

Connecting the Power Cable and Turn on the Projector

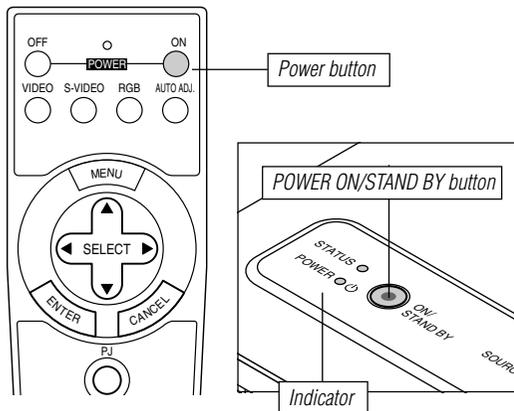
Before you turn on your projector, ensure that the computer or video source is turned on and that your lens cap is removed.

1 Connect the supplied power cable to the projector.



Plug the supplied power cable in the wall outlet. The projector will go into its standby mode and the power indicator will glow orange.

2 Turn on and off the Projector.



To turn on the projector:

Only after you press the Power "ON/STAND BY" button on the projector cabinet or the "POWER ON" button on the remote control will the power indicator turn to green and the projector become ready to use.

NOTE: To turn the projector on by plugging in the power cable, use the menu and enable the "Auto Start" feature. (See page E-34.)

NOTE: Immediately after turning on the projector, screen flicker may occur. This is not a fault. Wait 3 to 5 minutes until the lamp lighting is stabilized.

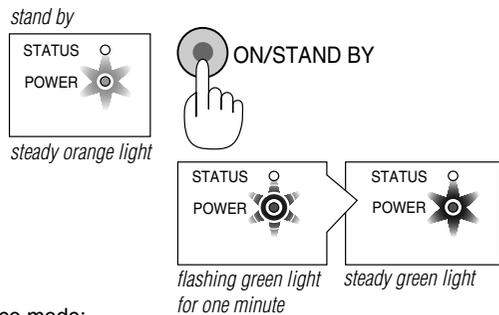
To turn off the projector:

First press the Power "ON/STAND BY" button on the projector cabinet or the "POWER OFF" button on the remote control for a minimum of two seconds. The power indicator will glow orange. After the projector turns off, the cooling fans keep operating for 90 seconds.

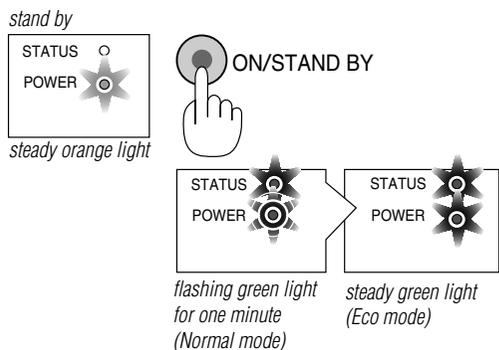
NOTE: Do not disconnect the power cable during this time. Then, unplug the power cable. The power indicator will go out.

Status of indicator light: turn on

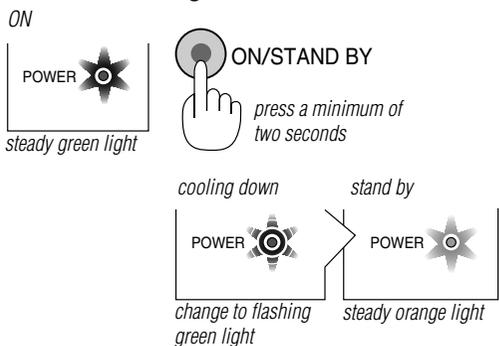
Normal mode:



Eco mode:

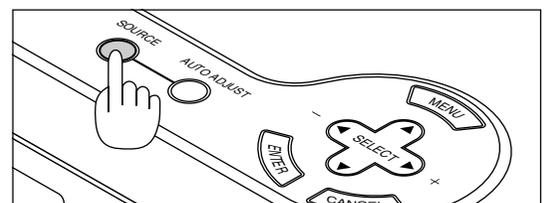


Status of indicator light: turn off



3 Adjust a Projected Image.

Select the Computer or Video Source



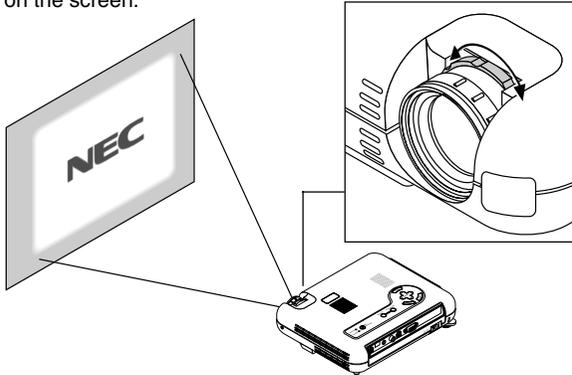
Press the Source button on the remote control or the projector cabinet to select "Video" (VCR, document camera, or laser disc player), "S-Video" or "RGB" (computer or DVD with component output).

Or press the "Menu" button on the remote control or the cabinet and use the menu to select your video source: "Video", "S-Video" or "RGB".

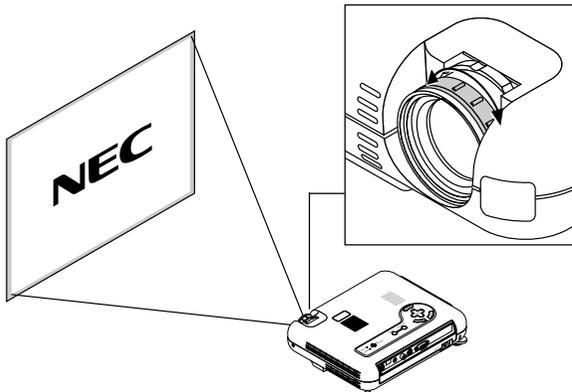
NOTE: If no input signal is available, the projector will display a blue background (factory preset).

Adjusting the Image Size and the Focus

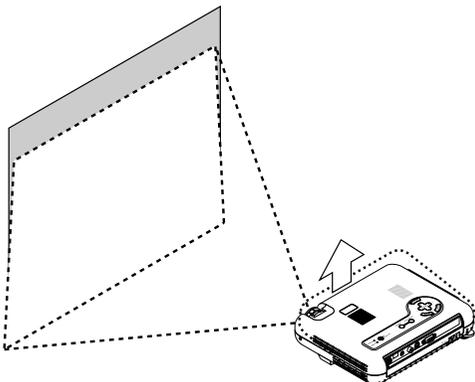
Move the projector back and forth to fine adjust the image size on the screen.



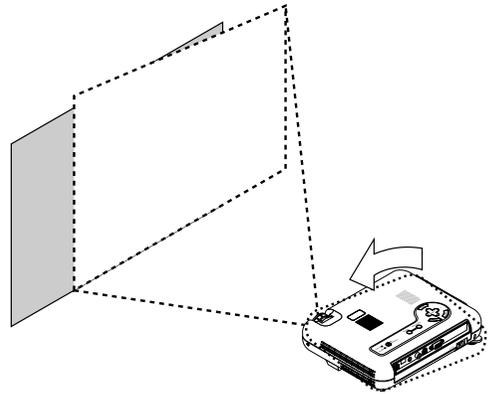
Use the Focus ring to obtain the best focus.



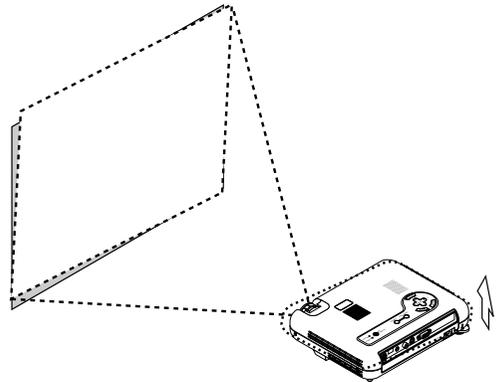
Place your projector on a flat level surface and ensure that the projector is square to the screen.



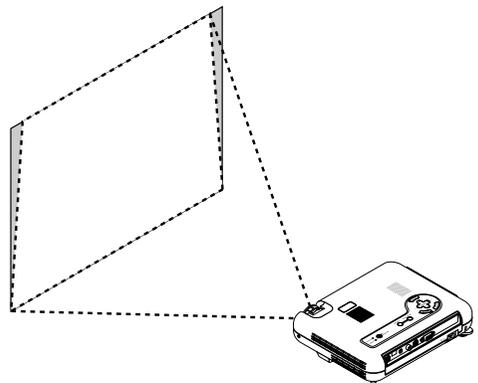
Lift the front edge of the projector to center the image vertically.



Move the projector left to center the image horizontally on the screen.



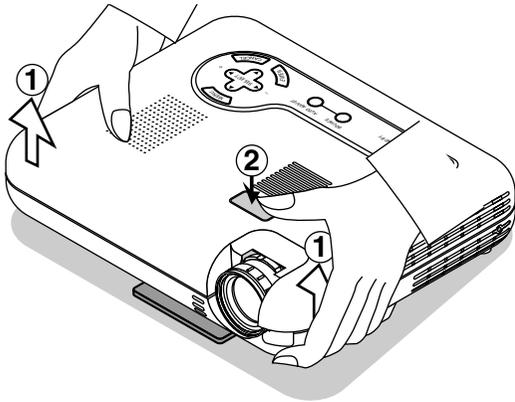
Rotate the rear foot to make the image square to the screen.



Use keystone correction for proper adjustment.

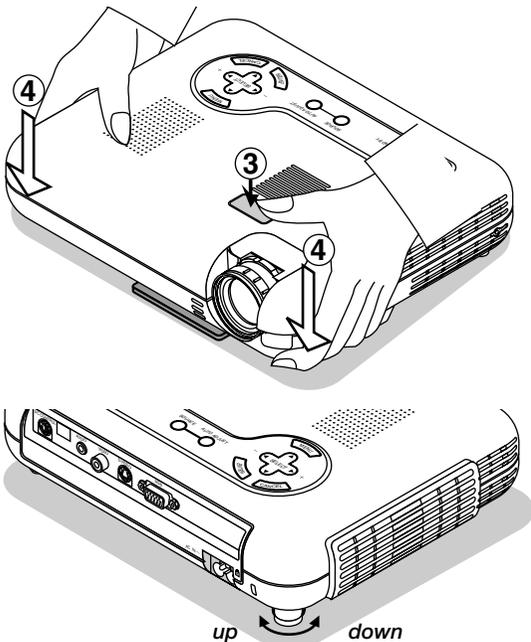
Adjusting the Tilt Foot

- 1) Lift the front edge of the projector.
- 2) Press the Tilt button on the top of the projector to extend the adjustable tilt foot (maximum height).



- 3) Press and hold the Tilt button.
 - 4) Lower the front of the projector to the desired height and release the button to lock the Adjustable tilt foot.
- There is approximately 5 degrees of up and down adjustment for the front of the projector. The rear foot height can be changed, but the vertical distance from the bottom to the desk or floor should be 0.14" (3.5mm) to make the projector horizontal on the flat surface. To fine-adjust the height of the rear foot, remove the spacer (black rubber) and rotate the rear foot to the desired height.

* If the projected image does not appear square to the screen then use keystone correction for proper adjustment.

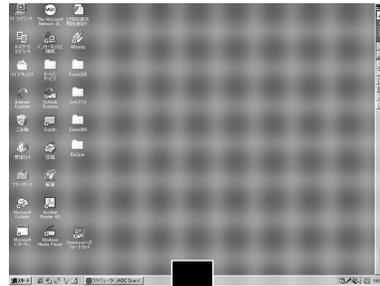


Do not use the tilt-foot for purposes other than originally intended. Misuses such as gripping the tilt-foot or hanging on the wall can cause damage to the projector.

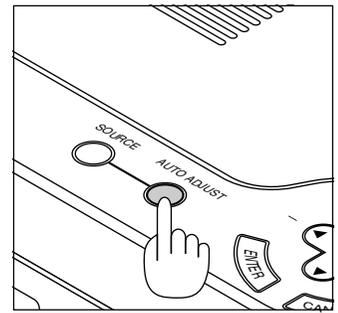
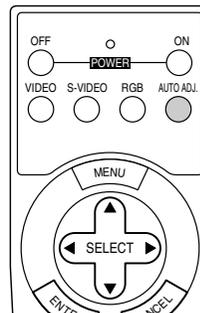
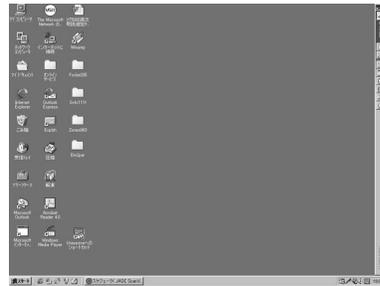
Adjusting the Image Using Auto Adjust

The Auto Adjust function automatically optimizes the image in RGB mode.

[Poor picture]



[Normal picture]



Press the Auto Adjust button to adjust Position-H/V and Pixel Clock/Phase for an optimal picture. Some signals may not be displayed correctly or take time to switch between sources.

NOTE: When using the Auto Adjust feature for the first time by pressing the "AUTO ADJUST" button or setting any adjustments to horizontal/vertical position, clock, or phase settings, the projector's micro-processor stores the adjusted data in memory.

The next time the source is selected, the projector will use this new data that is stored in memory.

Up to 10 presets can be stored in memory in a wraparound fashion. Once all 10 presets are used and new adjustments need to be stored, the oldest data will be deleted and the newest data will be stored.

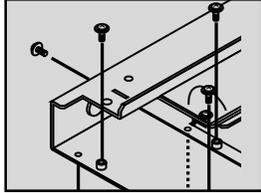
Enlarging and Moving a Picture

You can enlarge the area you want up to 400 percent.

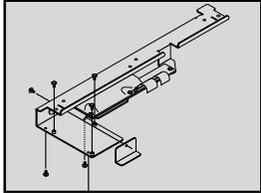
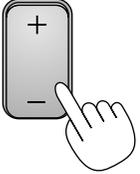
To do so:

Adjust the image size up to 400 percent.

MAGNIFY



MAGNIFY



While the picture is enlarged, you can move it using the “Select” ◀, ▶, ▲, or ▼ button.

Using the Menus

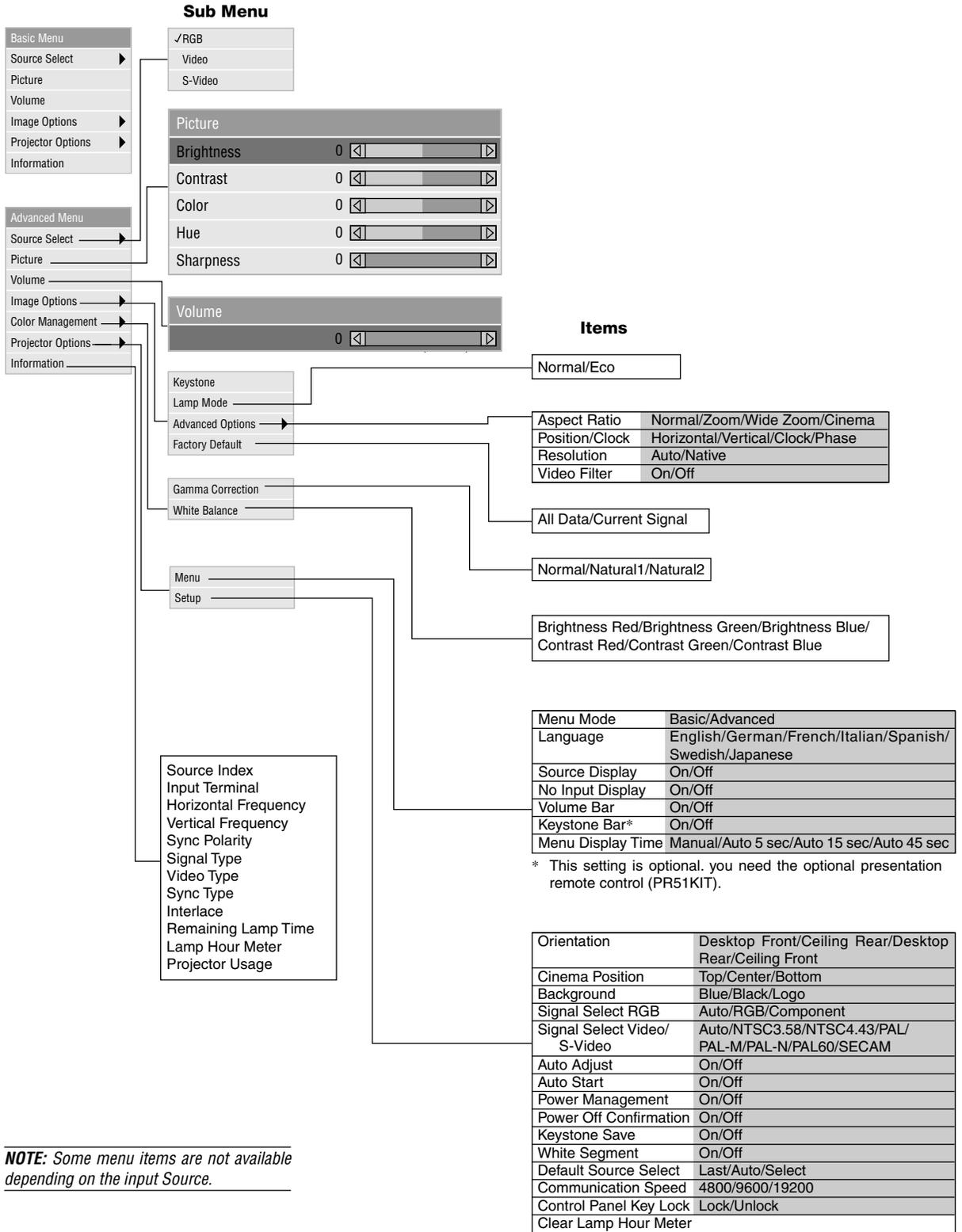
1. Press the “Menu” button on the remote control or the projector cabinet to display the Menu.
2. Press the ▲▼ buttons on the remote control or the projector cabinet to highlight the menu for the item you want to adjust or set.
3. Press the ▶ button or the “Enter” button on the remote control or the projector cabinet to select a submenu or item.
4. Adjust the level or turn the selected item on or off by using “Select” ◀ or ▶ buttons on the remote control or the projector cabinet. The on-screen slide bar will show you the amount of increase or decrease.
5. The change is stored until you adjust it again.

CANCEL: Return to the previous screen.

6. Repeat steps 2-5 to adjust an additional item, or press “Cancel” on the remote control or the projector cabinet to quit the menu display.

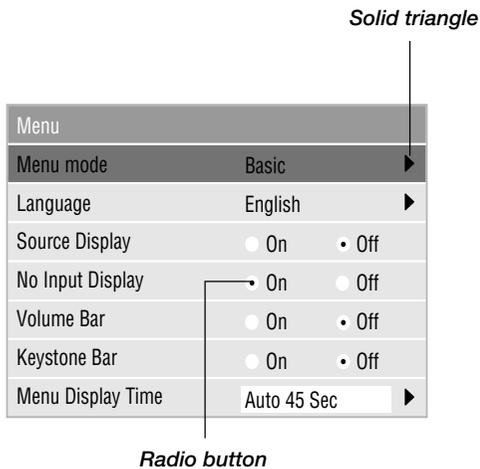
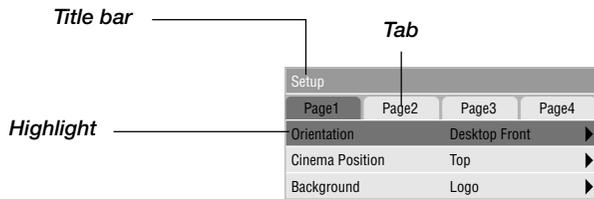
MENU Tree

Basic/Advanced Menu



NOTE: Some menu items are not available depending on the input Source.

Menu Elements



.....
 Menu windows or dialog boxes typically have the following elements:

- Title bar: Indicates the menu title.
- Highlight: Indicates the selected menu or item.
- Solid triangle: Indicates further choices are available. A highlighted triangle indicates the item is active.
- Tab: Indicates a group of features in a dialog box. Selecting on any tab brings its page to the front.
- Radio button: Use this round button to select an option in a dialog box.
- Slide bar: Indicates settings or the direction of adjustment.

Menu Descriptions & Functions

Source Select



Enables you to select a video source such as a VCR, DVD player, laser disc player, computer or document camera depending on what is connected to your inputs. Press the "Select" button on the projector cabinet or ▲▼ buttons on your remote control to highlight the menu for the item you want to adjust.

[RGB]

Selects the computer connected to your RGB or component signal.

NOTE: An optional component cable (Component V or ADP-CV1 cable) is needed for a component signal.

[Video]

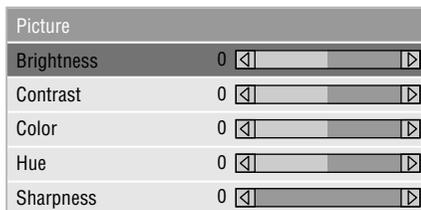
Selects what is connected to your Video input-VCR, laser disc player, DVD player or document camera.

[S-Video]

Selects what is connected to your S-Video input-VCR, DVD player, or laser disc player.

NOTE: A frame may freeze for a brief period of time when a video is played back in fast-forward or fast-rewind with a Video or S-Video source.

Picture



Provides access to controls for your image. Use the "Select" button on the projector cabinet or the remote control to highlight the menu for the item you want to adjust.

[Brightness]

Adjusts the brightness level or the back raster intensity.

[Contrast]

Adjusts the intensity of the image according to the incoming signal.

[Color]

Increases or decreases the color saturation level (not valid for RGB).

[Hue]

Varies the color level from +/- green to +/-blue. The red level is used as reference. This adjustment is only valid for Video and Component inputs (Not RGB).

[Sharpness]

Controls the detail of the image for Video (Not for RGB and Component).

Volume

Adjusts the sound level of the projector.



NOTE: You can display the volume bar without opening the menu. See "Volume Bar (Direct Button)" on page E-32 for more details.

Image Options

Basic Mode



Advanced Mode



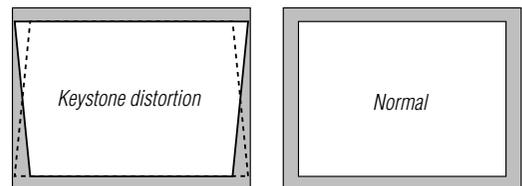
Provides optional controls such as Keystone Correction, Lamp Mode and Factory Default. When you select Advanced Mode, the following options are available: Aspect Ratio, Position/Clock, Resolution, and Video Filter.

Keystone



This feature corrects the keystone (trapezoidal) distortion to make the top of the screen longer or shorter to be the same as the bottom.

Use the ◀ or ▶ buttons on the slide bar to correct the keystone (trapezoidal) distortion.



NOTE: The keystone angle can be corrected between 15 degrees upward and 15 degrees downward at a 0 degree-projection angle. Depending on the type of graphics being used, the picture may get blurred or keystone correction may not be possible when excessive keystone correction is used. The idea is, the closer you are to native resolution, the better image you will see.

Lamp Mode



This feature enables you to select two brightness mode of the lamp:

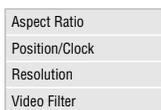
Normal and Eco modes. The lamp life can be extended up to 1500 hours by using the Eco mode.

Normal Mode This is the default setting.

Eco Mode Select this mode to increase the lamp life.

NOTE: If you have selected the Eco mode, the lamp lights in Normal mode for one minute after the projector is turned on. After one minute the lamp will change to Eco mode.

Advanced Options (Advanced mode)



Allows for adjustments of image position and stability.

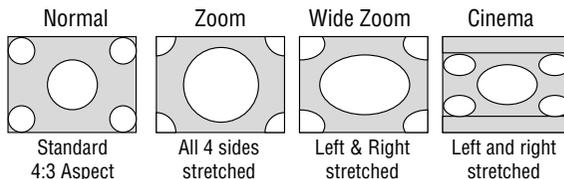
When you select Advanced Options in Advanced mode, the following options are available: Aspect Ratio, Position/Clock, Resolution, and Video Filter.

Aspect Ratio:

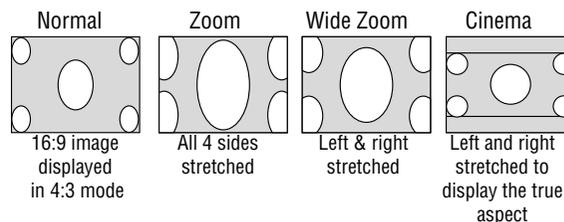


Aspect Ratio allows you to select the best Aspect mode to display your source image.

When 4:3 is selected from the source (i.e. DVD player), the following selections will display:



When 16:9 is selected from the source (i.e. DVD player), the following selections will display:



NOTE: You can select three image positions for Cinema: Top, center, and bottom. See page E-33 for setting Cinema position.

NOTE: Once the Aspect setting has been changed, the "Resolution" setting is automatically changed to "Auto".

Position/ Clock (when Auto Adjust is off):

| Position/Clock | |
|----------------|--------------------------|
| Horizontal | 100 <input type="text"/> |
| Vertical | 50 <input type="text"/> |
| Clock | 800 <input type="text"/> |
| Phase | 50 <input type="text"/> |

This allows you to manually adjust the image horizontally and vertically, and adjust Clock and Phase.

[Horizontal/Vertical Position]

Adjusts the image location horizontally and vertically using the ◀ and ▶ buttons.

This adjustment is made automatically when the Auto Adjust is turned on.

[Clock]

Use this item with the “Auto Adjust off” to fine tune the computer image or to remove any vertical banding that might appear. This function adjusts the clock frequencies that eliminate the horizontal banding in the image. Press the ◀ and ▶ buttons until the banding disappears. This adjustment may be necessary when you connect your computer for the first time. This adjustment is made automatically when the Auto Adjust is turned on.

[Phase]

Use this item to adjust the clock phase or to reduce video noise, dot interference or cross talk. (This is evident when part of your image appears to be shimmering.) Use the ◀ and ▶ buttons to adjust the image.

Use “Phase” only after the “Clock” is complete.

This adjustment is made automatically when the Auto Adjust is turned on.

See “Auto Adjust” on page E-34 for turning on or off the Auto Adjust feature.

Resolution (when Auto Adjust is off):

| Resolution | |
|---------------------------------------|------------------------------|
| <input checked="" type="radio"/> Auto | <input type="radio"/> Native |

This allows you to activate or deactivate the Advanced AccuBlend feature.

Auto Turns on the Advanced AccuBlend feature. The projector automatically reduces or enlarges the current image to fit the full screen.

Native Turns off the Advanced AccuBlend feature. The projector displays the current image in its true resolution.

See “Auto Adjust” on page E-34 for turning on or off the Auto Adjust feature.

NOTE: When an image with a resolution of SVGA, XGA, SXGA or UXGA is displayed, the Resolution is not available.

NOTE: Once the Resolution setting has been changed, the “Aspect” setting is automatically changed to “Normal”.

Video Filter (when Auto Adjust is off):

| Video Filter | |
|-------------------------------------|---------------------------|
| <input checked="" type="radio"/> On | <input type="radio"/> Off |

This function reduces video noise.

On The low-pass filter is applied.

Off The low-pass filter is not applied.

Screen adjustments are possible even when the filter is on.

Factory Default

| Factory Default | |
|---|--------------------------------------|
| <input checked="" type="radio"/> All Data | <input type="radio"/> Current Signal |

Changes all adjustments and settings to the factory preset.

[All Data]

Reset all the adjustments and settings for all the signals to the factory preset.

The items can be reset except Language, Communication Speed, Remaining Lamp Time, Lamp Hour Meter and Projector Usage. To reset the lamp usage time, see “Clear Lamp Hour Meter” page E-35.

| All Data Reset | |
|---------------------------|--------------------------|
| Are you sure ? | |
| <input type="radio"/> Yes | <input type="radio"/> No |

[Current Signal]

Resets the adjustments for the current signal to the factory preset levels.

The items that can be reset are: Brightness, Contrast, Color, Hue, Sharpness, Volume, Aspect, Horizontal Position, Vertical Position, Clock, Phase, Resolution, Video Filter, Gamma Correction, and White Balance.

| Current Signal Reset | |
|---------------------------|--------------------------|
| Are you sure ? | |
| <input type="radio"/> Yes | <input type="radio"/> No |

Color Management



Gamma Correction (Advanced mode)

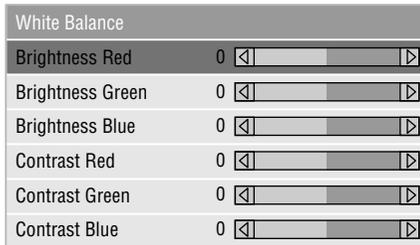


Use the ◀ or ▶ button to choose "Normal" when in a lighted room and "Natural 1&2" when in a darkened room. "Natural 1" for better flesh tone; "Natural 2" for true reproduction of middle tones.

Each mode is recommended for :

- Normal For the regular picture
- Natural 1 For true color reproduction of natural tones
- Natural 2 For dark portions of a picture

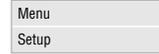
White Balance (Advanced mode)



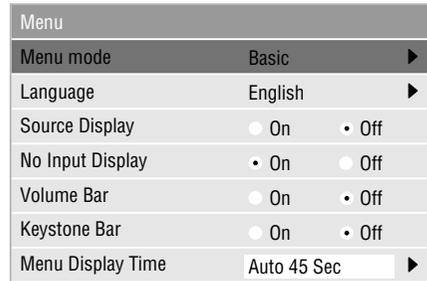
This allows you to adjust the white balance. Brightness for each color (RGB) is used to adjust the black level of the screen; Contrast for each color (RGB) to adjust the white level of the screen.

First use the ▲ or ▼ buttons to select R, G, or B for the brightness and the contrast. Next use the ◀ or ▶ buttons to adjust the level.

Projector Options



Menu



Allows you to set preferences for the on-screen menu.

[Menu Mode]

This feature allows you to select two menu modes: one has basic functionality and the other more advanced functionality.

Basic Mode This is the normal mode.

Advanced Mode This mode is used for advanced users.

[Language]

You can choose one of seven languages for on-screen instructions. The options are: English, German, French, Italian, Spanish, Swedish and Japanese.

NOTE: The "Language" setting cannot be reset back to "English" using the Factory Default function.

[Source Display]

You can turn on and off the information for input name such as VIDEO and RGB.

When this option is on, the current input will be displayed each time you switch sources or turn on the projector.

[No Input Display]

When this feature is turned on, the "No Input" message will appear if there is no signal present.

[Volume Bar]

This option turns on or off the volume bar when you adjust the sound volume using VOL+/- (up and down) button.

On You can increase or decrease the sound volume with the volume bar on screen.

NOTE: If no adjustments are performed within 3 seconds, the Volume bar will disappear.

Off You can increase or decrease the sound volume without having to use the volume bar.

[Keystone Bar]

This option is available on the optional presentation remote control (PR51KIT) only. This option turns on or off the keystone bar when you adjust the keystone using KEYSTONE +/- button on the optional presentation remote control.

On You can increase or decrease the level with the keystone bar on screen.

Off You can increase or decrease the level without having to use the keystone bar.

[Menu Display Time]

This option allows you to select how long the projector waits after the last touch of a button to turn off the menu.

The preset choices are "Manual", "Auto 5 sec", "Auto 15 sec", and "Auto 45 sec". The "Auto 45 sec" is the factory preset.

Manual The menu can be turned off manually.

Auto 5 sec The menu will automatically be turned off in 5 seconds if no buttons are pressed within 5 seconds.

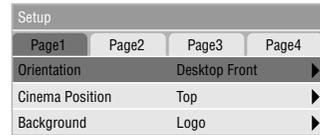
Auto 15 sec .. The menu will automatically be turned off in 15 seconds if no buttons are pressed within 15 seconds.

Auto 45 sec .. The menu will automatically be turned off in 45 seconds if no buttons are pressed within 45 seconds.

Setup

Enables you to set operating options.

[Page1]



[Orientation]

This reorients your image for your type of projection. The options are: desktop front projection, ceiling rear projection, desktop rear projection, and ceiling front projection.

[Cinema Position]

This feature selects the vertical position of the image when viewing video with Cinema aspect ratio selected. When Cinema aspect ratio is selected on earlier models, the image is displayed with black borders on the top and bottom. You can select the vertical position among three options:

Top Image position is at the top with a black border on bottom.

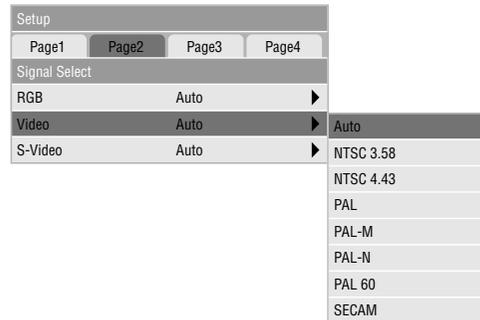
Center Image position is at the center with black borders on top and bottom.

Bottom Image position is at the bottom with a black border on top.

[Background]

Use this feature to display a black/ blue screen or logo when no signal is available.

[Page2] (Advanced mode)



Signal Select:

[RGB]

Allows you to choose "RGB" for an RGB source such as a computer, or "Component" for a component video source such as a DVD player. Normally select "Auto" and the projector automatically detects a component signal. However there may be some component signals that the projector is unable to detect. If this is the case, select "Component".

[Video & S-Video System Select]

This feature enables you to select composite video standards manually. Normally select "Auto".

When you select the video standard for Video and S-Video, select the video standard from the pull-down menu.

This must be done for Video and S-Video respectively.

| Setup | | | |
|------------------------|--------------------------|--------------------------------------|-------|
| Page1 | Page2 | Page3 | Page4 |
| Auto Adjust | <input type="radio"/> On | <input checked="" type="radio"/> Off | |
| Auto Start | <input type="radio"/> On | <input type="radio"/> Off | |
| Power Management | <input type="radio"/> On | <input type="radio"/> Off | |
| Power Off Confirmation | <input type="radio"/> On | <input type="radio"/> Off | |
| Keystone Save | <input type="radio"/> On | <input type="radio"/> Off | |
| White Segment | <input type="radio"/> On | <input type="radio"/> Off | |

[Auto Adjust]

When “Auto Adjust” is set to “On”, the projector automatically determines the best resolution for the current RGB input signal to project an image using NEC’s Advanced AccuBlend Intelligent Pixel Blending Technology. The image can be automatically adjusted for geometry and stability; “Horizontal Position”, “Vertical Position”, “Clock” and “Phase”.

- On Automatically adjusts image “Horizontal Position”, “Vertical Position”, “Clock” and “Phase”.
- Off User can adjust the image display functions (“Horizontal Position”, “Vertical Position”, “Clock” and “Phase”) manually.

[Auto Start]

Turns the projector on automatically when the power cable is inserted into an active power outlet and the main power switch is on. This eliminates the need to always use the “Power” button on the remote control or projector cabinet.

[Power Management]

When this option is on and there is no RGB input for five minutes or more, the projector will automatically turn itself off.

NOTE: This feature does not work with Video or S-Video sources.

[Power Off Confirmation]

This option determines whether a confirmation dialog for turning off the projector will appear or not.

NOTE: When the confirmation message is displayed, you must be in the Projector mode to operate your projector using the remote control. If not, press the PJ button on the remote control to change your projector to the Projector mode. The button lights to indicate that you are in the Projector mode.

[Keystone Save]

This option enables you to save your current keystone settings. Saving your change once affects all sources. The changes are saved when the projector is off.

[White Segment]

You can put emphasis on either brightness or color for a projected image. If you prefer putting emphasis on brightness, place a checkmark in the box to turn the option on. If you prefer an image in truer color, turn off this option.

| Setup | |
|------------------------|------------|
| Page1 | Page2 |
| Default Source Select | Select ▶ |
| Default Source | RGB ▶ |
| Communication Speed | 19200bps ▶ |
| Control Panel Key Lock | Unlocked ▶ |
| Clear Lamp Hour Meter | |

[Default Source Select]

You can set the projector to default to any one of its inputs each time the projector is turned on.

- Last Sets the projector to default to the previous or last active input each time the projector is turned on.
- Auto Searches for an active source in order of RGB → Video → S-Video and displays the first found source.
- Select Displays the selected source input every time the projector is started up. Select an input from the pull-down menu.

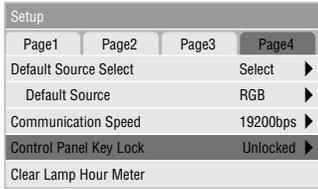
[Communication Speed]

This feature sets the baud rate of the PC Control port (Mini DIN 8 Pin).

It supports data rates from 4800 to 19200 bps.

The default is 19200 bps. Select the appropriate baud rate for your equipment to be connected.

[Control Panel Key Lock]



This option turns on or off the Control Panel Key Lock function.

NOTE:

- When the cabinet buttons are not locked, "Control Panel Key Lock - Unlock" will be displayed. When the cabinet buttons are locked, "Control Panel Key Lock - Locked" will be displayed.
- This Control Panel Key Lock does not affect the remote control and the PC Control functions.

To lock the cabinet buttons:

- 1) Use the Select ▲ or ▼ button to select "Control Panel Key Lock" and press the ENTER button. The submenu will be displayed.
- 2) Use the Select ▲ or ▼ button to select "Lock" and press the ENTER button. The following confirmation screen will be displayed.

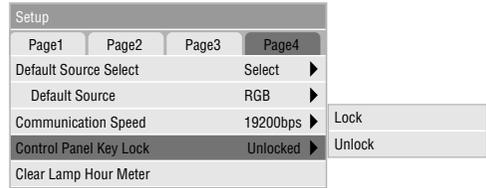


- 3) Use the Select ▲ or ▼ button to select "Yes" and press the ENTER button. The display will be changed to "Control Panel Key Lock - Lock" and be returned to the previous menu screen.

NOTE: When "No" is selected and the ENTER button is pressed, the display will not be changed and will be returned to the previous menu screen.

To unlock the cabinet buttons:

- 1) Use the Select ▲ or ▼ button on the remote control to select "Control Panel Key Lock" and press the ENTER button on the remote control. The submenu will be displayed.



- 2) Use the Select ▲ or ▼ button on the remote control to select "Unlock" and press the ENTER button on the remote control. This change will take effect immediately.

NOTE:

- The confirmation screen will not be displayed.
- When the cabinet buttons are locked, pressing and holding the CANCEL button for about 10 seconds will change the setting from Locked to Unlocked.

[Clear Lamp Hour Meter]

Resets the lamp clock back to zero. Selecting this option displays submenu for a confirmation. To reset the lamp usage hour meter, use the ▲ or ▼ button to select "Yes".

NOTE: The projector will turn off and go into standby mode after 1100 hours (up to 1600 hours in Eco mode) of service. If this happens, press the "Help" button on the remote control for ten seconds to reset the lamp clock back to zero. Do this only after replacing the lamp.

Information

Displays the status of the current signal and lamp usage. This dialog box has three pages. The information included are as follows:

| | |
|----------------------|--------------------------|
| [Page 1] | [Page 3] |
| Source Index | Remaining Lamp Time (%)* |
| Input Terminal | Lamp Hour Meter (H) |
| Horizontal Frequency | Projector Usage (H) |
| Vertical Frequency | |
| Sync Polarity | |

* When the remaining lamp time reaches 0, the Remaining Lamp Time bar indicator changes from 0% to 100 Hours and starts counting down. If the remaining lamp time reaches 0 hours, the projector will not turn on regardless of whether the lamp mode is set to Normal or Eco.

[Page 2]

| |
|-------------|
| Signal Type |
| Video Type |
| Sync Type |
| Interlace |

NOTE: The progress indicator shows the percentage of remaining bulb life. The value informs you of the amount of lamp and projector usage respectively.

4. MAINTENANCE

This section describes the simple maintenance procedures you should follow to replace the lamp.

Replacing the Lamp

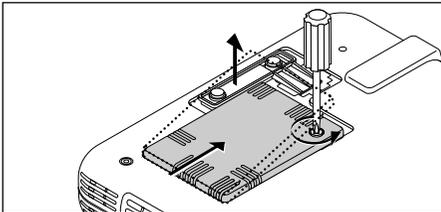
After your lamp has been operating for 1000 hours (1500 hours: Eco mode) or longer, the "Status" indicator in the cabinet will go on and the message will appear. Even though the lamp may still be working, replace it at 1000 hours (1500 hours: Eco mode) to maintain optimal projector performance.

CAUTION

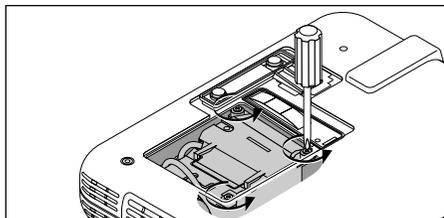
- **DO NOT TOUCH THE LAMP** immediately after it has been used. It will be extremely hot. Turn the projector off, wait 90 seconds, and then disconnect the power cable. Allow at least one hour for the lamp to cool before handling.
- **DO NOT REMOVE ANY SCREWS** except the lamp cover screw and three lamp case screws. You could receive an electric shock.
- The projector will turn off and go into stand by mode after 1100 hours (1600 hours: Eco mode) of service. If this happens, be sure to replace the lamp. If you continue to use the lamp after 1000 hours (1500 hours: Eco mode) of use, the lamp bulb may shatter, and pieces of glass may be scattered in the lamp case. Do not touch them as the pieces of glass may cause injury. If this happens, contact your NEC dealer for lamp replacement.

To replace the lamp:

- 1 Loosen the lamp cover screw until the screwdriver goes into a freewheeling condition and remove the lamp cover. The lamp cover screw is not removable.

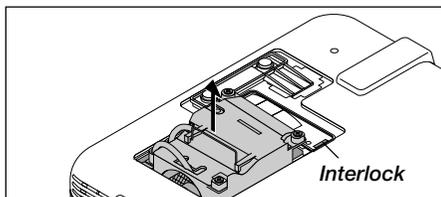


- 2 Loosen the three screws securing the lamp housing until the screwdriver goes into a freewheeling condition. The three screws are not removable.



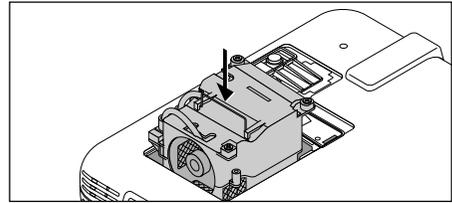
- 3 Remove the lamp housing by pulling out the handle.

NOTE: There is an interlock on this case to prevent the risk of electrical shock. Do not attempt to circumvent this interlock.

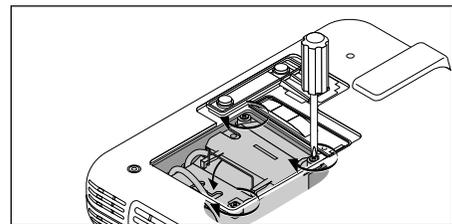


- 4 Insert a new lamp housing until the lamp housing is plugged into the socket.

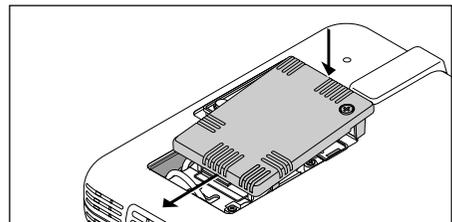
CAUTION: Do not use a lamp other than the NEC replacement lamp (LT51LP). Order this from your NEC dealer.



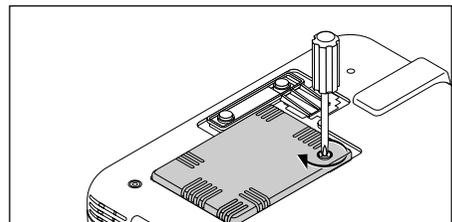
- 5 Secure it in place with the three screws. Be sure to tighten the screws.



- 6 Reattach the lamp cover.



- 7 Tighten the lamp cover screw. Be sure to tighten the screw.



- 8 After you install a new lamp, select the [Advanced Menu] → [Projector Options] → [Setup] → [Page 4] → [Clear Lamp Hour Meter] to reset the lamp usage hours. If the projector will not be turned on after using 1100 hours (1600 hours: Eco mode) of service, press and hold the [Help] button on the remote control for ten seconds or longer to reset the lamp time clock to zero.

5. TROUBLESHOOTING

This section helps you resolve problems you may encounter while setting up or using the projector.

Power/Status Light Messages

| Condition | Power Indicator | Status Indicator | Note |
|--|-----------------|--|--|
| Standby | Steady orange | – | – |
| Cooling down | Blinking green | – | Blinks green for 90 seconds |
| Lamp in Normal mode | Steady green | – | – |
| Lamp in Eco mode | Steady green | Steady green | – |
| Retrying to turn on lamp | Steady green | Blinking orange | The projector retries 3 times at an interval of 15 sec for max. 45 sec) |
| One minute after lamp is turned on | Blinking green | No light in Normal mode / Steady green in Eco mode | – |
| Lamp has reached its end of life (Normal: 1000 hours or over) (Eco: 1500 hours or over) | Steady green | Steady red | Message appears on screen during 1000-1100 hours (1500-1600 hours: Eco mode) of lamp usage. The projector reaches its end of life. Please replace the lamp as soon as possible |
| Lamp life has reached its end of life (Normal: 1100 hours or over) (Eco: 1600 hours or over) | Steady orange | Steady red | The projector is in standby mode and cannot be turned on. |
| Lamp cover error | Steady orange | Blinking red (1 sec interval) | The projector is in standby mode and cannot be turned on. |
| Temperature error | Steady orange | Blinking red (4 sec interval) | The projector is in standby mode and cannot be turned on. |
| Fan error | Steady orange | Blinking red (8 sec interval) | The projector is in standby mode and cannot be turned on. |
| Lamp error | Steady orange | Blinking red (12 sec interval) | The projector is in standby mode and cannot be turned on. |

Common Problems & Solutions

| Problem | Check These Items |
|---|---|
| Does not turn on | <ul style="list-style-type: none"> Check that the power cable is plugged in and that the power button on the projector cabinet or the remote control is on. Ensure that the lamp cover is installed correctly. See page E-36. Check to see if the projector has overheated or the lamp usage exceeds 1100 hours. If there is insufficient ventilation around the projector or if the room where you're presenting is particularly warm, move the projector to a cooler location. |
| No picture | <ul style="list-style-type: none"> Use the menu to select your source (Video, S-Video or RGB). See page E-29. Ensure your cables are connected properly. Use menus to adjust the brightness and contrast. See page E-29. Remove the lens cap. Reset the settings or adjustments to factory preset levels using the Factory Default in the Adjustment Menu. See page E-31. |
| Image isn't square to the screen | <ul style="list-style-type: none"> Reposition the projector to improve its angle to the screen. See page E-24. Use the Keystone in the Adjustment Menu to correct the trapezoid distortion. See page E-29. |
| Picture is blurred | <ul style="list-style-type: none"> Adjust the focus. See page E-24. Reposition the projector to improve its angle to the screen. See page E-24. Ensure that the distance between the projector and screen is within the adjustment range of the lens. See page E-16. |
| Image is scrolling vertically, horizontally or both | <ul style="list-style-type: none"> Use menus or Source button on the remote control or the cabinet to select the source you want to input. |
| Remote control does not work | <ul style="list-style-type: none"> Install new batteries. See page E-13. Make sure there are no obstacles between you and the projector. Stand within 22 feet (7 m) of the projector. See page E-13. Make sure that you are in the Projector mode or the PJ button lights in red. If not, press the PJ button. |
| Status indicator is lit or blinking | <ul style="list-style-type: none"> See the Status Light messages above. |
| Cross color in RGB mode | <ul style="list-style-type: none"> If Auto Adjust is off, turn it on. If Auto Adjust is on, turn it off and balance the image with the Position/Clock in the Image Options. See page E-31 or E-34. |

6. SPECIFICATIONS

This section provides technical information about the LT75Z Projector's performance

Model Number **LT75Z**

Optical

| | |
|---------------------|--|
| DMD™ | Single Chip Digital Micromirror Device(DMD™), 800×600 dots |
| Lens | Manual Zoom, Manual focus: F2.6 – 2.8 f = 28.3 – 34.0 mm |
| Lamp | 135W NSH lamp (The lamp is warranted for 1000 hours of operation time within 6 months.) |
| Image Size | 30 - 200 inches (0.8 - 5.1 m) diagonal |
| Projection Distance | 4.13 - 32.97ft (1.26 - 10.05m) |

Electrical

| | |
|-----------------------|--|
| Inputs | Video (NTSC/PAL/PAL-N/PAL-M/PAL60/SECAM/NTSC4.43) Horizontal Frequency : 15 -100 kHz (RGB : 24 kHz or over) Vertical Frequency : 50 -120Hz |
| Video Bandwidth | RGB: 80 MHz (-3dB) |
| Color Reproduction | Full color, 16.7 million colors simultaneously. |
| Horizontal Resolution | 550 TV lines: NTSC/PAL/YCbCr 300 TV lines: SECAM RGB: 800 dots horizontal, 600 dots vertical |
| Power Requirement | 100 - 120/200 - 240V AC, 50 / 60 Hz |
| Input Current | 2.1A (100 - 120V AC) / 1.0A (200 - 240V AC) |

Mechanical

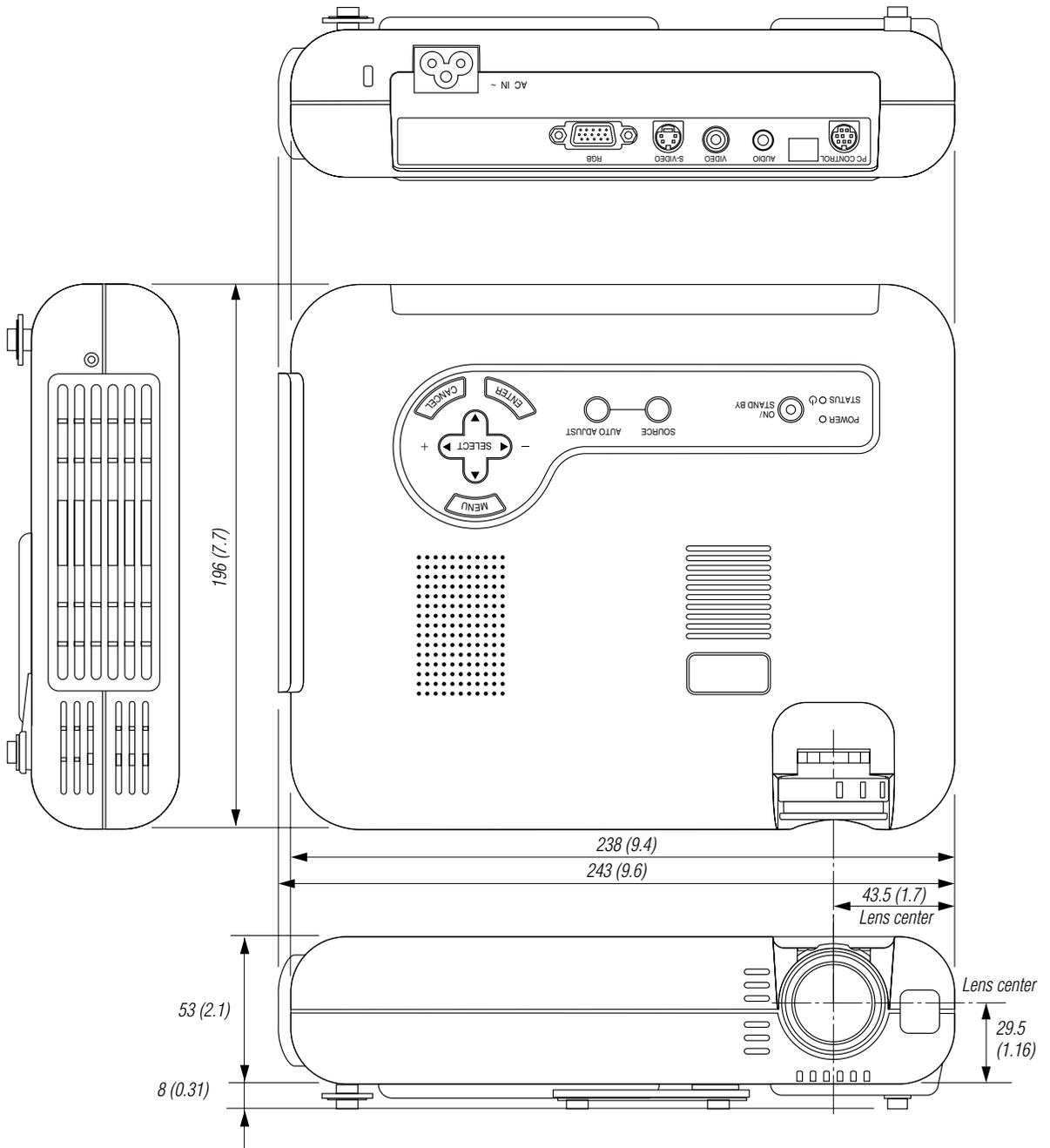
| | |
|------------------------------|---|
| Dimensions | 9.6" (W) x 2.1" (H) x 7.7" (D) / 243mm (W) x 53mm (H) x 196mm (D) (not including protrusions) |
| Net Weight | 3.3 lbs / 1.5 kg |
| Environmental Considerations | Operational Temperatures: 41° to 95°F (5° to 35°C), 20 to 80% humidity Storage Temperatures: 14° to 122°F (-10° to 50°C), 20 to 80% humidity |
| Regulations | UL Approved (UL 1950, CSA 950) Meets DOC Canada Class B requirements Meets FCC Class B requirements Meets AS/NZS3548 Class B Meets EMC Directive (EN55022, EN55024, EN61000-3-2, EN61000-3-3) Meets Low Voltage Directive (EN60950, TUV GS Approved) |



We provide information about our projectors through the World Wide Web at <http://www.nec-pj.com/>

Digital Light Processing, DLP, Digital Micromirror Device and DMD are trademarks of Texas Instruments. The specifications are subject to change without notice.

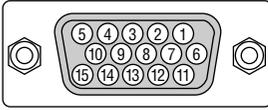
Cabinet Dimensions



Unit = mm (inch)

D-Sub Pin Assignments

Mini D-Sub 15 Pin Connector



Signal Level
Video signal : 0.7Vp-p (Analog)
Sync signal : TTL level

| Pin No. | RGB Signal (Analog) | YCbCr Signal |
|---------|-----------------------------------|--------------|
| 1 | Red | Cr |
| 2 | Green or Sync on Green | Y |
| 3 | Blue | Cb |
| 4 | Ground | |
| 5 | Ground | |
| 6 | Red Ground | Cr Ground |
| 7 | Green Ground | Y Ground |
| 8 | Blue Ground | Cb Ground |
| 9 | No Connection | |
| 10 | Sync Signal Ground | |
| 11 | | |
| 12 | Bi-directional DATA (SDA) | |
| 13 | Horizontal Sync or Composite Sync | |
| 14 | Vertical Sync | |
| 15 | Data Clock | |

Compatible Input Signal List

| Signal | Resolution (Dots) | Frequency H. (kHz) | Refresh Rate (Hz) | Dot Clock (MHz) |
|-----------------------|------------------------|-------------------------|------------------------|----------------------|
| NTSC | – | 15.734 | 60 | - |
| PAL | – | 15.625 | 50 | - |
| SECAM | – | 15.625 | 50 | - |
| VESA | 640 × 480 | 31.47 | 59.94 | 25.175 |
| IBM | 640 × 480 | 31.47 | 60 | 25.175 |
| MAC | 640 × 480 | 31.47 | 60 | 25.175 |
| MAC | 640 × 480 | 34.97 | 66.67 | 31.334 |
| MAC | 640 × 480 | 35 | 66.67 | 30.24 |
| VESA | 640 × 480 | 37.86 | 72.81 | 31.5 |
| VESA | 640 × 480 | 37.5 | 75 | 31.5 |
| IBM | 640 × 480 | 39.375 | 75 | 31.49 |
| VESA | 640 × 480 | 43.269 | 85.01 | 36 |
| IBM | 720 × 350 | 31.469 | 70.09 | 28.322 |
| VESA | 720 × 400 | 37.927 | 85.04 | 40 |
| IBM | 720 × 350 | 39.44 | 87.85 | 35.5 |
| IBM | 720 × 400 | 39.44 | 87.85 | 35.5 |
| VESA | 800 × 600 | 35.16 | 56.25 | 36 |
| VESA | 800 × 600 | 37.879 | 60.32 | 40 |
| VESA | 800 × 600 | 48.077 | 72.19 | 50 |
| VESA | 800 × 600 | 46.88 | 75 | 49.5 |
| VESA | 800 × 600 | 53.674 | 85.06 | 56.25 |
| # MAC | 832 × 624 | 49.725 | 74.55 | 57.283 |
| # VESA | 1024 × 768 | 35.5 | 43 Interlaced | 44.9 |
| # VESA | 1024 × 768 | 48.363 | 60 | 65 |
| # VESA | 1024 × 768 | 57.476 | 70.07 | 75 |
| # MAC | 1024 × 768 | 60.241 | 74.93 | 80 |
| # VESA | 1024 × 768 | 60.023 | 75.03 | 78.75 |
| # VESA | 1024 × 768 | 68.677 | 85 | 94.5 |
| # VESA | 1152 × 864 | 67.5 | 75 | 108 |
| # MAC | 1152 × 870 | 68.681 | 75.6 | 100 |
| # SUN | 1152 × 900 | 61.796 | 65.95 | 92.94 |
| # SGI | 1152 × 900 | 71.736 | 76.05 | 105.6 |
| # VESA | 1280 × 960 | 60 | 60 | 108 |
| # VESA | 1280 × 1024 | 64.286 | 60.02 | 108 |
| # MAC | 1280 × 1024 | 65.2 | 69.89 | 118.5 |
| # HP | 1280 × 1024 | 78.125 | 72.01 | 135 |
| # SUN | 1280 × 1024 | 81.13 | 76.11 | 135 |
| # VESA | 1280 × 1024 | 79.976 | 75.03 | 135 |
| # VESA | 1280 × 1024 | 91.146 | 85.02 | 157.5 |
| # HDTV (1080i)(1125i) | 1920 × 1080 | 33.75 | 60 Interlace | 74.25 |
| # HDTV (1080i)(1125i) | 1920 × 1080 | 28.13 | 50 Interlace | 74.25 |
| # HDTV (720p)(750p) | 1280 × 720 | 45 | 60 Progressive | 74.25 |
| # SDTV (480p)(525p) | – | 31.47 | 59.94 Progressive | 27 |
| # SDTV (480i)(525i) | – | 15.73 | 59.9 Interlace | – |
| # VESA | 1600 × 1200 | 75.0 | 60 | 162 |
| # VESA | 1600 × 1200 | 81.3 | 65 | 175.5 |
| # VESA | 1600 × 1200 | 87.5 | 70 | 189 |
| # VESA | 1600 × 1200 | 93.75 | 75 | 202.5 |

#: Images in above flagged with # are compressed with Advanced AccuBlend.

NOTE1: Some composite sync signals may not be displayed correctly.

NOTE2: Signals other than those specified in the table above may not be displayed correctly. If this should happen, change the refresh rate or resolution on your PC. Refer to Display Properties help section of your PC for procedures.

NOTE3: UXGA (1600× 1200) is supported for separate sync signal only.

PC Control Codes

| Function | Code Data |
|----------------------|---------------------------------|
| POWER ON | 02H 00H 00H 00H 00H 02H |
| POWER OFF | 02H 01H 00H 00H 00H 03H |
| INPUT SELECT RGB | 02H 03H 00H 00H 02H 01H 01H 09H |
| INPUT SELECT VIDEO | 02H 03H 00H 00H 02H 01H 06H 0EH |
| INPUT SELECT S-VIDEO | 02H 03H 00H 00H 02H 01H 0BH 13H |
| PICTURE MUTE ON | 02H 10H 00H 00H 00H 12H |
| PICTURE MUTE OFF | 02H 11H 00H 00H 00H 13H |
| SOUND MUTE ON | 02H 12H 00H 00H 00H 14H |
| SOUND MUTE OFF | 02H 13H 00H 00H 00H 15H |

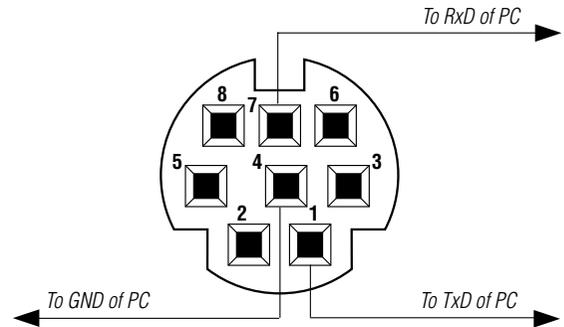
NOTE: Contact your local dealer for a full list of PC Control Codes if needed.

Cable Connection

Communication Protocol

Baud rate: 19200 bps
 Data length: 8 bits
 Parity: No parity
 Stop bit: One bit
 X on/off: None
 Communications procedure: Full duplex

PC Control Connector (DIN-8P)



NOTE: Pins 2, 3, 5, 6 and 8 are used inside the projector.

NEC