

This user manual is provided as a free service by FixYourDLP.com. FixYourDLP is in no way responsible for the content of this manual, nor do we guarantee its accuracy. FixYourDLP does not make any claim of copyright and all copyrights remain the property of their respective owners.

About FixYourDLP.com

FixYourDLP.com (http://www.fixyourdlp.com) is the World's #1 resource for media product news, reviews, do-it-yourself guides, and manuals.

Informational Blog: http://www.fixyourdlp.com Video Guides: http://www.fixyourdlp.com/guides User Forums: http://www.fixyourdlp.com/forum

FixYourDLP's Fight Against Counterfeit Lamps: http://www.fixyourdlp.com/counterfeits

# Sponsors:

RecycleYourLamp.org – Free lamp recycling services for used lamps: http://www.recycleyourlamp.org

Lamp Research - The trusted 3rd party lamp research company: http://www.lampresearch.com

Discount-Merchant.com – The worlds largest lamp distributor: http://www.discount-merchant.com



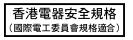
# **SHARP**

## OPERATION MANUAL MODEL XG-PH50X (Standard zoom lens attached)

XG-PH50X-NL (No lens attached)

## MULTIME DIA PROJECTOR Discount-Merchant com 1800 Conference Serres of Mars and





60

### IMPORTANT

For your assistance in reporting the loss or theft of your Projector, please record the Serial Number located on the bottom of the projector and retain this information. Before recycling the packaging, please ensure that you have checked the contents of the carton thoroughly against the list of "Supplied accessories" on page **11**.

Model No.:

Serial No.:

This apparatus complies with the requirements of Council Directives 89/336/EEC and 73/23/EEC as amended by Council Directive 93/68/EEC.

Dieses Gerät entspricht den Anforderungen der EG-Richtlinien 89/336/EWG und 73/23/EWG mit Änderung 93/68/EWG.

Ce matériel répond aux exigences contenues dans les directives 89/336/CEE et 73/23/CEE modifiées par la directive 93/68/CEE.

Dit apparaat voldoet aan de eisen van de richtlijnen 89/336/EEG en 73/23/EEG, gewijzigd door 93/68/EEG.

Dette udstyr overholder kravene i direktiv nr. 89/336/EEC og 73/23/EEC med tillæg nr. 93/68/EEC.

Quest' apparecchio è conforme ai requisiti delle direttive 89/336/EEC e 73/23/EEC, come emendata dalla direttiva 93/68/EEC.

Αυτή η συσκευή συμμορφώνεται με τις απαιτήσεις των οδηγιών του Συμβουλίου 89/336/EOK και 73/23/EOK όπως τροποποιήθηκαν από την οδηγία του Συμβουλίου 93/68/EOK.

Este equipamento obedece às exigências das directivas 89/336/CEE e 73/23/CEE, na sua versão corrigida pela directiva 93/68/CEE.

Este aparato satisface las exigencias de las Directivas 89/336/CEE y 73/23/CEE, modificadas por medio de la 93/68/CEE.

Denna utrustning uppfyller kraven enligt riktlinjerna 89/336/EEC och 73/23/EEC så som kompletteras av 93/68/EEC.

Dette produktet oppfyller betingelsene i direktivene 89/336/EEC og 73/23/EEC i endringen 93/68/EEC.

Tämä laite täyttää direktiivien 89/336/EEC ja 73/23/EEC vaatimukset, joita on muutettu direktiivillä 93/68/EEC.

Bu cihaz Konsey Direktifi 93/68/EEC tarafından düzeltilen 89/336/EEC ve 73/23/EEC Konsey Direktiflerinin gerekliliklerine uygundur.

Tento přístroj je v souladu s požadavky směrnic rady 89/336/EEC a 73/23/EEC, tak jak byly upraveny směrnicí rady 93/68/EEC.

See seade on vastavuses Nõukogu Direktiivis nr 89/336/EEC ja 73/23/EEC esitatud nõuetega, vastavalt Nõukogu Direktiivis nr 93/68/EEC esitatud parandustele

Ez a készülék megfelel a Tanács által kiadott, 89/336/EGK és 73/23/EGK Irányelveknek és az utóbbit módosító 93/68/EGK Irányelvnek

Ši jevice atbilst tehniskam prasibam pec 89/336/EEC un 73/23/EEC direktivam papildinats ar direktivu 93/68/EEC.

Šis prietaisas atitinka ES Tarybos direktyvu 89/336/EEC ir 73/23/EEC patikslintos direktyvos 93/68/EEC reikalavimus.

To urządzenie spełnia wymagania dyrektyw 89/336/EEC i 73/23/EEC wraz z poprawkami dyrektywy 93/68/EEC.

Tento prístroj je v súlade s požiadavkami smerníc rady 89/336/EEC a 73/23/EEC tak ako boli upravené smernicou rady 93/68/EEC.

Ta aparat je v skladu z zahtevami Direktiv Sveta 89/336/EEC in 73/23/EEC kot je navedeno v dopolnilu k Direktivi Sveta 93/68/EEC.

### SPECIAL NOTE FOR USERS IN THE U.K.

The mains lead of this product is fitted with a non-rewireable (moulded) plug incorporating a 13A fuse. Should the fuse need to be replaced, a BSI or ASTA approved BS 1362 fuse marked  $\bigotimes$  or  $\bigotimes$  and of the same rating as above, which is also indicated on the pin face of the plug, must be used.

Always refit the fuse cover after replacing the fuse. Never use the plug without the fuse cover fitted. In the unlikely event of the socket outlet in your home not being compatible with the plug supplied, cut off the mains plug and fit an appropriate type.

### DANGER:

The fuse from the cut-off plug should be removed and the cut-off plug destroyed immediately and disposed of in a safe manner.

Under no circumstances should the cut-off plug be inserted elsewhere into a 13A socket outlet, as a serious electric shock may occur.

To fit an appropriate plug to the mains lead, follow the instructions below:

#### WARNING:

THIS APPARATUS MUST BE EARTHED.

### **IMPORTANT:**

The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow	: Earth
Blue	: Neutral
Brown	: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

- The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  $\perp$  or coloured green or green-and-yellow.
- The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
- The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

IF YOU HAVE ANY DOUBT, CONSULT A QUALIFIED ELECTRICIAN.



The supplied CD-ROM contains operation instructions in English, German, French, Swedish, Spanish, Italian, Dutch, Portuguese, Chinese (Traditional Chinese and Simplified Chinese), Korean and Japanese. Carefully read through the operation instructions before operating the projector.

Die mitgelieferte CD-ROM enthält Bedienungsanleitungen in Englisch, Deutsch, Französisch, Schwedisch, Spanisch, Italienisch, Niederländisch, Portugiesisch, Chinesisch (Traditionelles Chinesisch und einfaches Chinesisch), Koreanisch und Japanisch. Bitte lesen Sie die Bedienungsanleitung vor der Verwendung des Projektors sorgfältig durch.

Le CD-ROM fourni contient les instructions de fonctionnement en anglais, allemand, français, suédois, espagnol, italien, néerlandais, portugais, chinois (chinois traditionnel et chinois simplifié), coréen et japonais. Veuillez lire attentivement ces instructions avant de faire fonctionner le projecteur.

Den medföljande CD-ROM-skivan innehåller bruksanvisningar på engelska, tyska, franska, svenska, spanska, italienska, holländska, portugisiska, kinesiska (traditionell kinesiska och förenklad kinesiska), koreanska och japanska. Läs noga igenom bruksanvisningen innan projektorn tas i bruk.

El CD-ROM suministrado contiene instrucciones de operación en inglés, alemán, francés, sueco, español, italiano, holandés, portugués, chino (chino tradicional y chino simplificado), coreano y japonés. Lea cuidadosamente las instrucciones de operación antes de utilizar el proyector.

Il CD-ROM in dotazione contiene istruzioni per l'uso in inglese, tedesco, francese, svedese, spagnolo, italiano, olandese, portoghese, cinese (cinese tradizionale e cinese semplificato), coreano e giapponese. Leggere attentamente le istruzioni per l'uso prima di usare il proiettore.

De meegeleverde CD-ROM bevat handleidingen in het Engels, Duits, Frans, Zweeds, Spaans, Italiaans, Nederlands, Portugees, Chinees (Traditioneel Chinees en Vereenvoudigd Chinees), Koreaans en Japans. Lees de handleiding zorgvuldig door voor u de projector in gebruik neemt.

O CD-ROM fornecido contém instruções de operação em Inglês, Alemão, Francês, Sueco, Espanhol, Italiano, Holandês, Português, Chinês, (Chinês Tradicional e Chinês Simplificado), Coreano e Japonês. Leia cuidadosamente todas as instruções de operação antes de operar o projetor.

附送之CD-ROM光碟中,有用英文、德文、法文、瑞典文、西班牙文、意大利文、荷蘭文、葡萄牙文、中文(繁體中文 和簡體中文)、韓國文和日文所寫的使用說明書。在操作本投影機之前,請務必仔細閱讀整本使用說明書。

附送之CD-ROM光碟中,有用英文、德文、法文、瑞典文、西班牙文、意大利文、荷兰文、葡萄牙文、中文(繁体中文 和简体中文)、韩国文和日文所写的使用说明书。在操作本投影机之前,请务必仔细阅读整本使用说明书。

제공된 CD-ROM에는 영어, 독일어, 프랑스어, 스웨덴어, 스페인어, 이탈리아어, 네덜란드어, 포르투갈어, 중국 어(번체자와 간체자), 한국어, 일본어로 작성된 조작 설명서가 수록되어 있습니다. 프로젝터를 조작하기 전에 조 작 지침을 상세하게 숙지하십시오.

本機に付属のCD-ROMには、英語・ドイツ語・フランス語・スウェーデン語・スペイン語・イタリア語・オラ ンダ語・ポルトガル語・中国語(繁体字・簡体字)・韓国語・日本語の取扱説明書が収録されています。本機 をご使用の前に、この取扱説明書をよくお読みください。



ENGLISH

## Introduction

There are two important reasons for prompt warranty registration of your new SHARP Projector, using the REGISTRATION CARD packed with the projector.

### 1. WARRANTY

This is to assure that you immediately receive the full benefit of the parts, service and labor warranty applicable to your purchase.

#### 2. CONSUMER PRODUCT SAFETY ACT To ensure that you will promptly receive any safety notification of inspection, modification, or recall that SHARP may be required to give under the 1972 Consumer Product Safety Act. PLEASE

recall that SHARP may be required to give under the 1972 Consumer Product Safety Act, PLEASE READ CAREFULLY THE IMPORTANT "LIMITED WARRANTY" CLAUSE.

**WARNING:** High brightness light source. Do not stare into the beam of light, or view directly. Be especially careful that children do not stare directly into the beam of light.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.

See bottom of projector.



CAUTION RISK OF ELECTRIC SHOCK. DO NOT REMOVE SCREWS EXCEPT SPECIFIED USER SERVICE SCREW.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS EXCEPT LAMP UNIT. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



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

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

WARNING: FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

 U.S.A. ONLY

 U.S.A. ONLY

### INFORMATION

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the operation manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

### FixYourDLP.com

The enclosed computer cable must be used with the device. The cable is provided to ensure that the device complies with FCC Class A verification.

**WARNINGSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES** This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

### WARNING:

The cooling fan in this projector continues to run for about 90 seconds after the projector enters the standby mode. During normal operation, when putting the projector into standby mode always use the STANDBY button on the projector or on the remote control. Ensure the cooling fan has stopped before disconnecting the power cord. DURING NORMAL OPERATION, NEVER TURN THE PROJECTOR OFF BY DISCONNECTING THE POWER CORD. FAILURE TO OBSERVE THIS WILL RESULT IN PREMATURE LAMP FAILURE.

### PRODUCT DISPOSAL

This projector utilizes tin-lead solder, and a pressurized lamp containing a small amount of mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or, if you are located in the United States of America, the Electronic Industries Alliance: www.eiae.org.

### **Caution Concerning Lamp Replacement**

See "Replacing the Lamp" on page 93.

This SHARP projector uses a DMD panel. This very sophisticated panel contains 786,432 pixels (micromirrors). As with any high technology electronic equipment such as large screen TVs, video systems and video cameras, there are certain acceptable tolerances that the equipment must conform to.

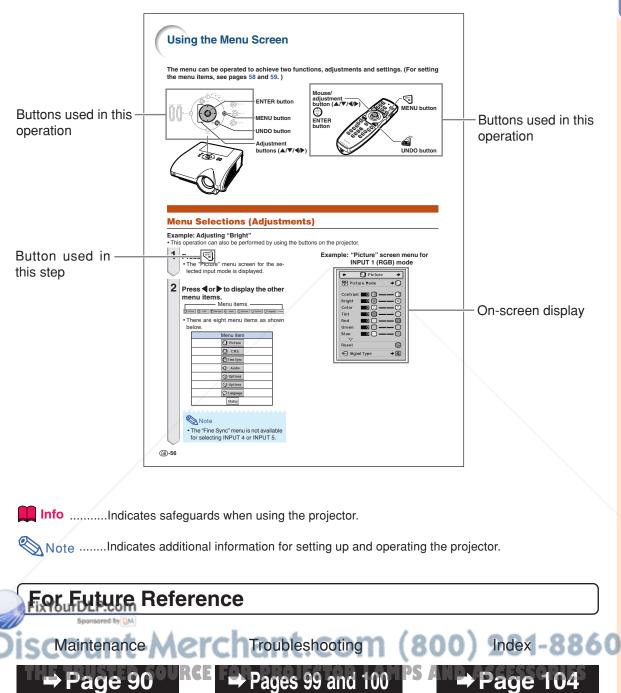
This unit has some inactive pixels within acceptable tolerances which may result in inactive dots on the picture screen. This will not affect the picture quality or the life expectancy of the unit.

- DLP<sup>™</sup> (Digital Light Processing) and DMD<sup>™</sup> (Digital Micromirror Device) are trademarks of Texas Instruments, Inc.
- Microsoft<sup>®</sup> and Windows<sup>®</sup> are registered trademarks of Microsoft Corporation in the United States and/or other countries.
- PC/AT is a registered trademark of International Business Machines Corporation in the United States.
- Adobe® Reader® is a trademark of Adobe Systems Incorporated.
- Macintosh® is a registered trademark of Apple Computer, Inc. in the United States and/or other countries.
- All other company or product names are trademarks or registered trademarks of their respective companies.
- Some IC chips in this product include confidential and/or trade secret property belonging to Texas Instruments. Therefore you may not copy, modify, adapt, translate, distribute, reverse engineer, reverse assemble or discompile the contents thereof.



## How to Read This Operation Manual

• In this operation manual, the illustrations and on-screen displays are simplified for explanation. This may differ from the actual on-screen display.



## Contents

## Preparing

## Introduction

How to Read This Operation Manual	3
Contents	4
IMPORTANT SAFEGUARDS	7
How to Access the PDF Operation Manuals 1	0
Accessories 1	1
Part Names and Functions 1	3

Using the Remote Control 17
Usable Range 17
Inserting the Batteries 17
Using the Remote Control with a Signal Cable 18
Switching the Remote Control Mode 18
Using the Remote Control as a Wireless
Computer Mouse 19

### **Quick Start**

Quick Start	20	
-------------	----	--

### Setup

Setting Up the Projector	22
Setting Up the Projector	22
Projecting a Reversed Image	23

### Connections

Connections 24	
INPUT/OUTPUT Terminals and Connectable	
Main Equipment24	
Samples of Cables for Connection 25	
Connecting to a Computer 27	
Connecting with the RGB Cable	
Connecting with a 5 BNC to 15-pin D-sub	
Cable	
Connecting with a DVI Digital Cable	
Connecting to Video Equipment	
Connecting to Video Equipment That Has	
an HDMI Output Terminal with a DVI to	
YourDLP.com 30	

Connecting to Video Equipment That Has a DVI Output Terminal with a DVI Digital Cable 31
Connecting to RGB Video Equipment with a 5
RCA RGB Cable
Connecting to Video Equipment That Has
Component Output Terminals
Connecting with an S-video Cable or a Compos-
ite Video Cable
Controlling the Projector by a Computer 35
Connecting to a Monitor That Has an RGB
Input Terminal 36
Connecting to an Amplifier or Other
Audio Equipment 36

## Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

## Using

## **Basic Operation**

Turning the Projector On/Off	37
Image Projection	38
Shifting the Lens	38
Using the Adjustment Feet	39
Adjusting the Focus	40
Adjusting the Projected Image Size	40
Correcting Trapezoidal Distortion	41
Switching the Input Mode	45

## **Useful Features**

Me	nu Items	51
Us	ing the Menu Screen	56
	Menu Selections (Adjustments)	
	Menu Selections (Settings)	58
Pic	ture Adjustment ("Picture" menu)	60
	Selecting the Picture Mode	
	Adjusting the Image	
	Adjusting the Color Temperature	
	Emphasizing the Contrast	
	Selecting the Progressive Mode	
	Reducing Image Noise (DNR)	
0-	Signal Type Setting	63
Co	Ior Management System	~ ~
	("C. M. S." menu)	
	Selecting the Color Reproduction Mode	
	Selecting the Target Color	
	Setting the Brightness of the Target Color	
	Setting the Chromatic Value of the Target Color	
	Setting the Hue of the Target Color Resetting User-defined Color Settings	
	Overview of All Color Settings	
Co	mputer Image Adjustment	.01
00	("Fine Sync" menu)	68
	Adjusting the Computer Image	
	Saving Adjustment Settings	
	Selecting Adjustment Settings	
FixYou	Blda Adde Setting	69
-10	Checking the Input Signal	70
Diago	Auto Sync Adjustment	
JISCO	Auto Sync Display Function	71
Au	dio Adjustment ("Audio" menu) Adjusting the Audio	72 (
	Setting the Audio Output Type	
	Speaker Setting	
	opeaner dettilly	10

Adjusting the Volume	46
Turning off the Sound Temporarily	46
Displaying an Enlarged Portion of an Image	46
Freezing a Moving Image	. 47
Selecting the Picture Mode	47
Resize Mode	48
Displaying the Black Screen	50
Displaying and Setting the Break Timer	50

Using the "Options (1)" Menu	74
Displaying Dual Pictures (Pict in Pict)	74
Setting the Resize Mode	74
Shifting the Projected Image Vertically	
(Digital Shift)	75
Setting On-screen Display	75
Setting the Video System	76
Capturing Projected Images	
Selecting the Background Image	77
Selecting the Startup Image	77
Eco Mode	
Detecting the Input Signals Automatically	78
Auto Power Off Function	
System Lock Function	79
Helpful Functions Set during Installation	
("Options (2)" menu)	82
Setting a Password	82
Checking the Lamp Life Status	83
Setting the Lamp Mode	83
Reversing/Inverting Projected Images	84
Controlling Multiple Projectors with the One	
Remote Control	
Shortcut to Make Projector Stack Settings	85
Locking the Operation Buttons on the Projector	
Bypassing Unused Input Selections	
Selecting the Transmission Speed (RS-232C)	
Monitor Output Settings	
LAN/RS232C Setting	
Service Mode	88
Returning to the Default Settings	88
Using the Other Menus ("Language" and	_
CTOR "Status" menus) D. ACCESSORIES	89
Selecting the On-screen Display Language	
Overview of All Menu Settings	89

### Contents

## Reference

## Appendix

Maintenance	
Maintenance Indicators Regarding the Lamp	
Lamp	
Caution Concerning the Lamp	. 93
Replacing the Lamp	. 93
Removing and Installing the Lamp Unit	94
Resetting the Lamp Timer	. 96

Computer Compatibility Chart	97
Troubleshooting	99
For SHARP Assistance	101
Specifications	102
Glossary	103
Index	104

The optional lenses are introduced on page 12. Please purchase the lens for your desired usage.



## **IMPORTANT SAFEGUARDS**

### CAUTION: Please read all of these instructions before you operate this product and save these instructions for later use.

Electrical energy can perform many useful functions. This product has been engineered and manufactured to assure your personal safety. BUT IMPROPER USE CAN RESULT IN POTENTIAL ELECTRICAL SHOCK OR FIRE HAZARDS. In order not to defeat the safeguards incorporated in this product, observe the following basic rules for its installation, use and servicing.

#### **1. Read Instructions**

All the safety and operating instructions should be read before the product is operated.

#### 2. Retain Instructions

The safety and operating instructions should be retained for future reference.

#### 3. Heed Warnings

All warnings on the product and in the operating instructions should be adhered to.

#### 4. Follow Instructions

All operating and use instructions should be followed.

#### 5. Cleaning

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

### 6. Attachments

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

#### 7. Water and Moisture

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

#### 8. Accessories

Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

#### 9. Transportation

A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



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

outlet.

 Power Sources
 This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the

This product is provided with one of the following types of plugs. If the plug should fail to fit into the power outlet, please contact your electrician.

Do not defeat the safety purpose of the plug.

- Two-wire type (mains) plug.
- b. Three-wire grounding type (mains) plug with a grounding terminal. This plug will only fit into a grounding type power

#### 13. Power-Cord Protection

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

#### 14. Liahtnina

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

#### 15. Overloading

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

#### 16. Object and Liquid Entry

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

#### 17. Servicing

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

#### 18. Damage Requiring Service

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

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

#### 19. Replacement Parts

When replacement parts are required, ensure that the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

#### 20. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to operating instructions. 12. Grounding or Polarization URCE FOR PROJECT21 Wall or Ceiling Mounting

#### This product should be mounted to a wall or ceiling only as recommended by the manufacturer.

#### 22. Heat

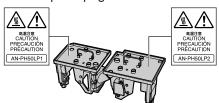
This product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

### **IMPORTANT SAFEGUARDS**

## Ensure that you read the following safeguards when setting up your projector.

### Caution concerning the lamp unit

Potential hazard of glass particles if lamp ruptures. In case of lamp rupture, contact your nearest Sharp Authorized Projector Dealer or Service Center for replacement. See "Replacing the Lamp" on page 93.



### Caution concerning the setup of the projector

■ For minimal servicing and to maintain high image quality, SHARP recommends that this projector be installed in an area free from humidity, dust and cigarette smoke. When the projector is subjected to these environments, the vents and lens must be cleaned more often. As long as the projector is regularly cleaned, use in these environments will not reduce the overall operation life of the unit. Internal cleaning should only be performed by a Sharp Authorized Projector Dealer or Service Center.

## Do not set up the projector in places exposed to direct sunlight or bright light.

Position the screen so that it is not in direct sunlight or room light. Light falling directly on the screen washes out the colors, making viewing difficult. Close the curtains and dim the lights when setting up the screen in a sunny or bright room.

FixYourDLP.com

## The projector may be safely tilted to a maximum angle of 9 degrees.

Placement should be within 9 degrees of horizontal.

If you have application requiring tilt angle exceeding 9 degrees, please check with your local Sharp sales office.



## Warning about placing the projector in a high position

When placing the projector in a high position, ensure to secure it carefully to avoid personal injury caused by the projector falling down.

## Do not subject the projector to hard impact and/or vibration.

Take care with the lens so as not to hit or damage the surface of the lens.

### Rest your eyes occasionally.

Continuously watching the screen for long hours will cause eye strain. Ensure to occasionally rest your eyes.

## Avoid locations with extremes of temperature.

- The operating temperature of the projector is from 41°F to 104°F (+5°C to +40°C).
- The storage temperature of the projector is from -4°F to 140°F (-20°C to +60°C).

Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

## Do not block the intake and exhaust vents.

- Allow at least 11 <sup>13</sup>/<sub>16</sub> inches (30 cm) of space between the exhaust vent and the nearest wall or obstruction.
- Ensure that the intake vents and the exhaust vent are not obstructed.
- If the cooling fan becomes obstructed, a protection circuit will automatically put the projector into standby mode to prevent overheat damage. This does not indicate a malfunction (See pages 91 and 92.). Remove the projector power cord from the wall outlet and wait at least 10 minutes. Place the projector where the intake and exhaust vents are not blocked, plug the power cord back in and turn on the projector. This will return the projector to the normal operating condition.

### Caution regarding usage of the projector

- When using the projector, ensure not to subject it to hard impact and/or vibration, as this can result in damage. Take extra care with the lens. If you are not to use the projector for a long time, ensure to unplug the power cord from the wall outlet, and disconnect any other cables connected to it.
- Do not use the projector while holding the lens.
- When storing the projector, ensure to attach the lens cap to the projector. (See page 13.)
- Do not expose the projector to direct sunlight or near heat sources. The projector may change color or become deformed.

### Other connected equipment

 When connecting a computer or other audiovisual equipment to the projector, make the connections AFTER unplugging the power cord of the projector from the AC outlet and turning off the equipment to be connected.
 Please read the operation manuals of the projector and the equipment to be connected for instructions on how to make the connections.

### Using the projector in other countries

The power supply voltage and the shape of the plug may vary depending on the region or country you are using the projector in. When using the projector overseas, ensure to use an appropriate power cord for the country you are in.

### **Temperature monitor function**

If the projector starts to overheat due to setup problems or blockage of the air vents, "X" and "TEMP." will illuminate in



the lower left corner of the picture. If the temperature continues to rise, the lamp will turn off, the temperature warning indicator on the projector will blink, and after a 90-second coolingoff period the projector will enter the standby mode. Refer to "Maintenance Indicators" on page **91** for details.

📕 Info

- The cooling fan regulates the internal temperature, and its performance is automatically controlled. The sound of the fan may change during projector operation due to changes in the fan speed. This does not indicate malfunction.
- Do not unplug the power cord during projection or cooling fan operation. This can cause damage due to rise in internal temperature, as the cooling fan also stops.

### **Optional lens installation**

Be sure to have service personnel install the optional lenses.

Please read the operation manuals of the projector and the equipment to be connected for instructions on how to make the connections.
ECTOR LAMPS AND ACCESSORIES

## How to Access the PDF Operation Manuals

PDF operation manuals in several languages are included in the CD-ROM, so that you can work with the projector. To utilize these manuals, you need to install Adobe<sup>®</sup> Reader<sup>®</sup> on your computer (Windows<sup>®</sup> or Macintosh<sup>®</sup>).

Please download Adobe® Reader® from the Internet (http://www.adobe.com).

### Accessing the PDF manuals

### For Windows®:

- (1) Insert the CD-ROM in the CD-ROM drive.
- 2 Double click the "My Computer" icon.
- ③ Double click the "CD-ROM" drive.
- When you want to view the operation manual
  1) Double click the "MANUALS" folder.
  - 2) Double click the language (name of the folder) that you want to view.
  - 3) Double click the "PH50" pdf file to access the projector manuals.

#### When you want to view the setup guide

- 1) Double click the "SETUP" folder.
- 2) Double click the language (name of the folder) that you want to view.
- 3) Double click the "S\_PH5" pdf file to access the setup guide.

### For Macintosh®:

- 1 Insert the CD-ROM in the CD-ROM drive.
- 2 Double click the "CD-ROM" icon.
- When you want to view the operation manual
  1) Double click the "MANUALS" folder.
  - 2) Double click the language (name of the folder) that you want to view.
  - 3) Double click the "PH50" pdf file to access the projector manuals.

#### When you want to view the setup guide

- 1) Double click the "SETUP" folder.
- 2) Double click the language (name of the folder) that you want to view.
- Double click the "S\_PH5" pdf file to access the setup guide.

### 🛄 Info

• If the desired pdf file cannot be opened by double clicking the mouse, start Adobe<sup>®</sup> Reader<sup>®</sup> first, then specify the desired file using the "File", "Open" menu.

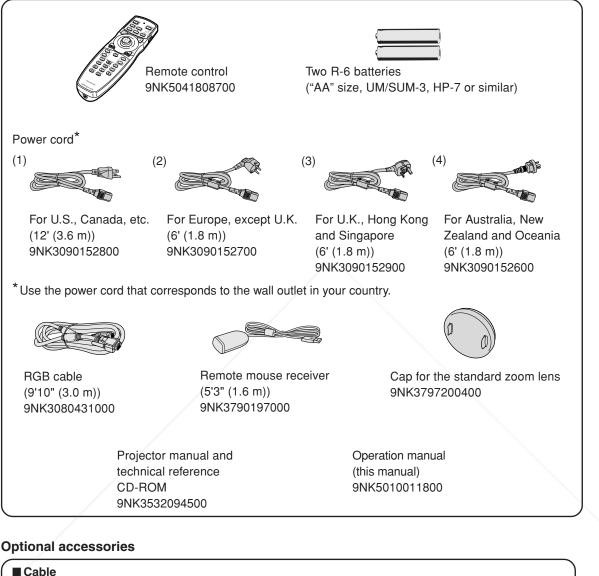
### **SETUP GUIDE**

Refer to the "SETUP GUIDE" contained on the supplied CD-ROM for details.

Setting up the Screen Screen Size and Projection Distance Connecting Pin Assignments	. 3 RS-232C or Telnet 24	8
RS-232C Specifications and Commands 1		1
etting up the Projector Network	Stack Projection	
Environment 1		
Controlling the Projector via LAN 2	23 Troubleshooting	360
THE TRUSTED SOURCE FOR F	PROJECTOR LAMPS AND ACCESSORIE	S



Supplied accessories





### Accessories

### **Optional lenses**

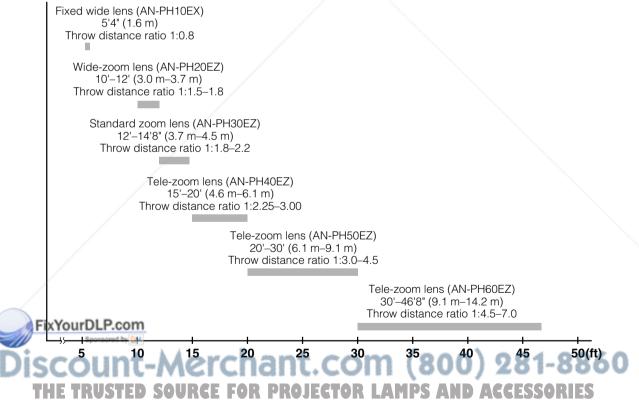
( ■Lens	Projectio	n distance for 100" screen size	
Fixed wide lens (× 0.8)	AN-PH10EX	5'4" (1.6 m)	
Wide-zoom lens $(\times 1.5 - 1.8)$	AN-PH20EZ	10' – 12' (3.0 m – 3.7 m)	
Standard zoom lens (× 1.8 – 2.2)	AN-PH30EZ	12' – 14'8" (3.7 m – 4.5 m)	
(attached to XG-PH50X)			
Tele-zoom lens (× 2.25 – 3.00)	AN-PH40EZ	15' – 20' (4.6 m – 6.1 m)	
Tele-zoom lens (× 3.0 – 4.5)	AN-PH50EZ	20' – 30' (6.1 m – 9.1 m)	
Tele-zoom lens (× 4.5 –7.0)	AN-PH60EZ	30' – 46'8" (9.1 m – 14.2 m)	

No lens is attached to XG-PH50X-NL. The standard zoom lens is attached to XG-PH50X. The optional lenses from Sharp are also available for specialized application. Please see your nearest Sharp Authorized Projector Dealer for details on all the lenses. (Refer to the lens operation manual when using a lens.) Also, ensure to have service personnel install the optional lenses.

### **Throw Distance**

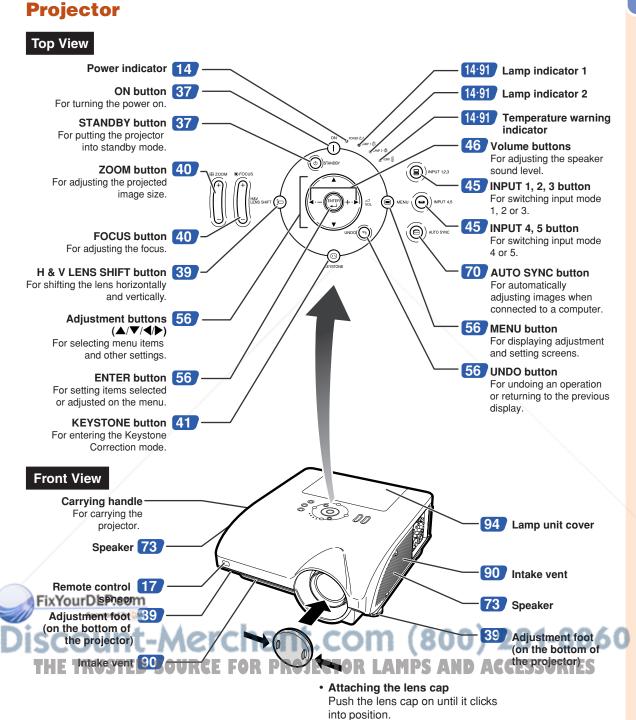
The graph below is for 100 inches (254 cm) screen with 4:3 normal mode.

### Screen



## Part Names and Functions

Numbers in prefer to the main pages in this operation manual where the topic is explained.

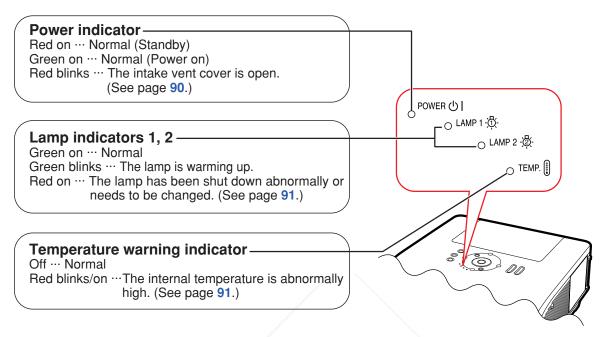


· Removing the lens cap

Pull the lens cap directly outward.

### **Part Names and Functions**

### **About the Indicators on the Projector**



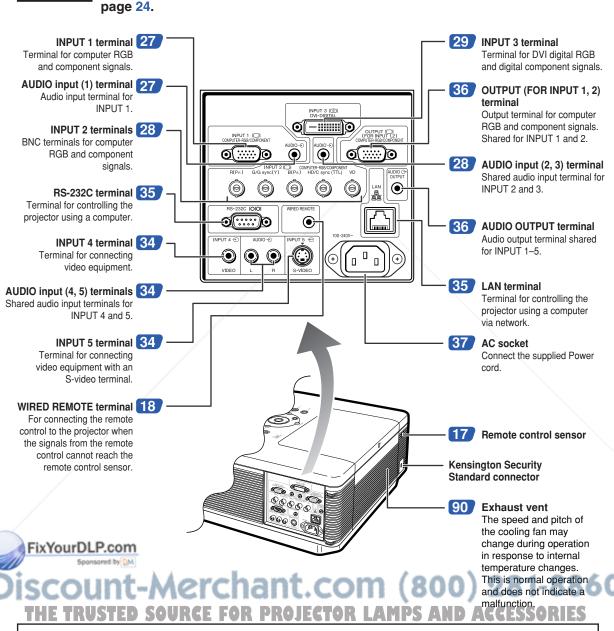


Numbers in prefer to the main pages in this operation manual where the topic is explained.

Refer to "INPUT/OUTPUT Terminals and Connectable Main Equipment" on

## **Projector (Side View)**

Terminals



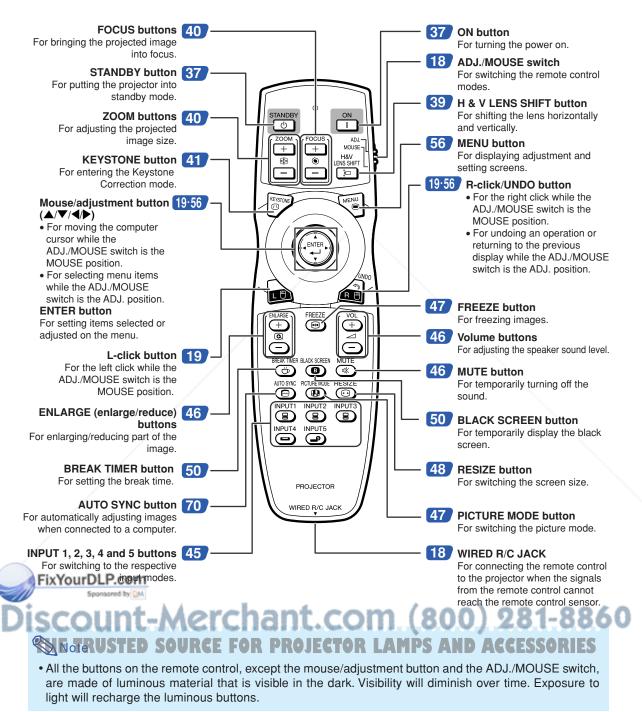
### Using the Kensington Lock

• This projector has a Kensington Security Standard connector for use with a Kensington MicroSaver Security System. Refer to the information that came with the system for instructions on how to use it to secure the projector.

### Part Names and Functions

Numbers in pages in this operation manual where the topic is explained.

### **Remote Control**



## **Using the Remote Control**

## **Usable Range**

The remote control can be used to control the projector within the ranges shown in the illustration.

## **Note**

• The signal from the remote control can be reflected off a screen for easy operation. However, the effective distance of the signal may differ depending on the screen material.

### When using the remote control:

- Ensure not to drop, expose to moisture or high temperature.
- The remote control may malfunction under a fluorescent lamp. In this case, move the projector away from the fluorescent lamp.

## **Inserting the Batteries**

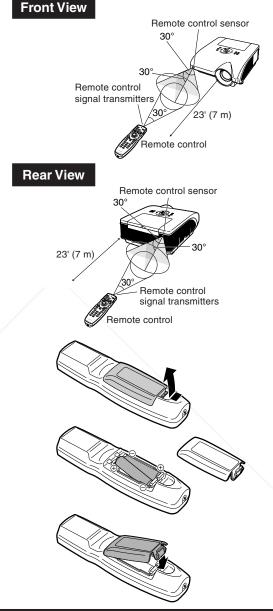
The batteries (two R-6 batteries ("AA" size, UM/SUM-3, HP-7 or similar)) are supplied in the package.

## Press the tab and lift open the battery cover in the direction of the arrow.

### Insert the batteries.

2

- Insert the batteries making sure the polarities correctly match the (+) and (-) marks inside the battery compartment.
- **3** Insert the tabs on the end of the battery cover into their slots and press the cover into position.

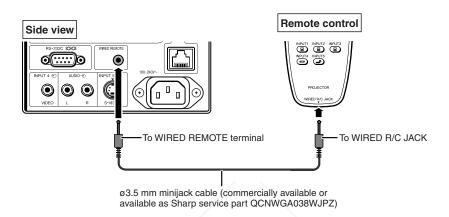


Incorrect use of the batteries may cause them to leak or explode. Please follow the precautions below.

- Insert the batteries making sure the polarities correctly match the + and marks inside the battery compartment.
  Batteries of different types have different properties, therefore do not mix batteries of different types.
  Do not mix new and old batteries.
- This may shorten the life of new batteries or may cause old batteries to leak. AND ACCESSOR
- Remove the batteries from the remote control once they have run out, as leaving them in can cause them to leak. Battery fluid from leaked batteries is harmful to skin, therefore ensure to first wipe them and then remove them using a cloth.
- The batteries included with this projector may run down in a short period, depending on how they are kept. Ensure to replace them as soon as possible with new batteries.
- Remove the batteries from the remote control if you will not be using the remote control for a long time.

### **Using the Remote Control with a Signal Cable**

When the signals from the remote control cannot be reached due to the range or positioning of the projector, you can connect the remote control to the projector with a ø3.5 mm minijack cable (commercially available or available as Sharp service part QCNWGA038WJPZ).



## **Switching the Remote Control Mode**

The remote control has two functions. One is projector control and the other is wireless computer mouse. Slide the ADJ./MOUSE switch on the remote control to other side compatible to the desired usage.

**Projector control** 



Wireless computer mouse



### 📕 Info

**FWhen FShe the remote** control as the wireless computer mouse, connect the supplied remote mouse receiver to the computer. (See page 19.)

THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

## **Using the Remote Control as a Wireless Computer Mouse**

ADJ.

MOUSE

When connecting the supplied remote mouse receiver to the computer, you can use the remote control as the wireless computer mouse.

- 1 Connect the supplied remote mouse receiver to the USB terminal on the computer.
- 2 Slide the ADJ./MOUSE switch on the remote control to the MOUSE position.
  - Point the remote control at the remote mouse receiver.
- When moving the cursor Press ▲/▼/◀/▶.
- When left-clicking Press .

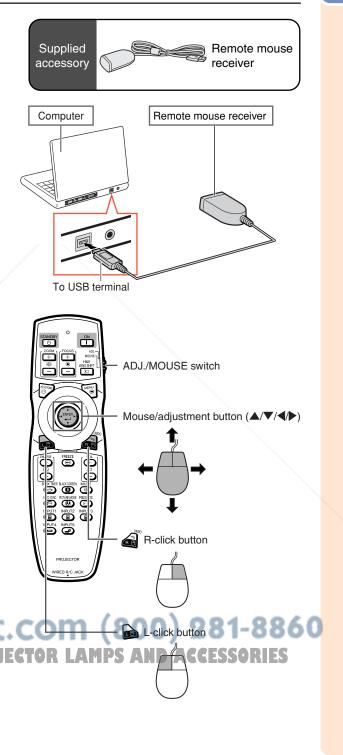
3

- When right-clicking Press
- When your computer supports only a one-click mouse (such as Macintosh®) Press or a. (mathemathic and a have common function.)



This function only works with the Microsoft<sup>®</sup> Windows<sup>®</sup> OS and Mac OS<sup>®</sup>. However, this function does not work with the following operation systems that do not support USB.
Versions earlier than Windows<sup>®</sup> 95.
Versions earlier than Windows<sup>®</sup> NT4.0.

- Versions earlier than Mac OS<sup>®</sup> 8.5.
- Confirm that the computer recognizes the USB connection.
- While the remote control is connected to the projector with a signal cable, you cannot use the wireless computer mouse function.

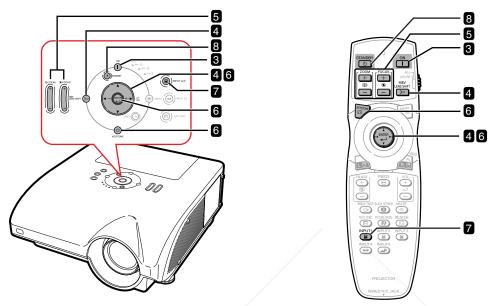


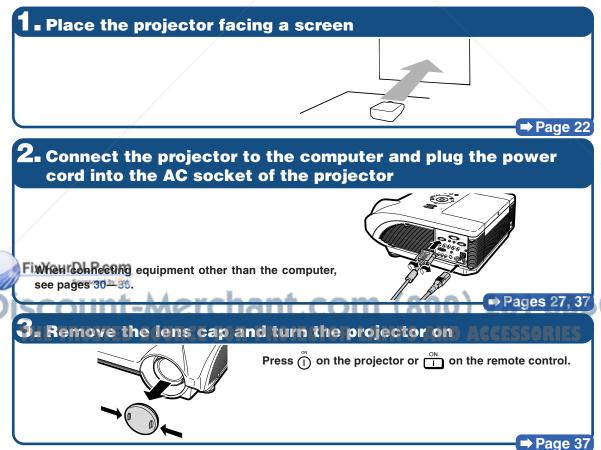
## **Quick Start**

This section shows the basic operation (projector connecting with the computer). For details, see the page described below for each step.

### **Setup and Projection**

In this section, connection of the projector and the computer is explained using one example.





## **4** Adjust the angle

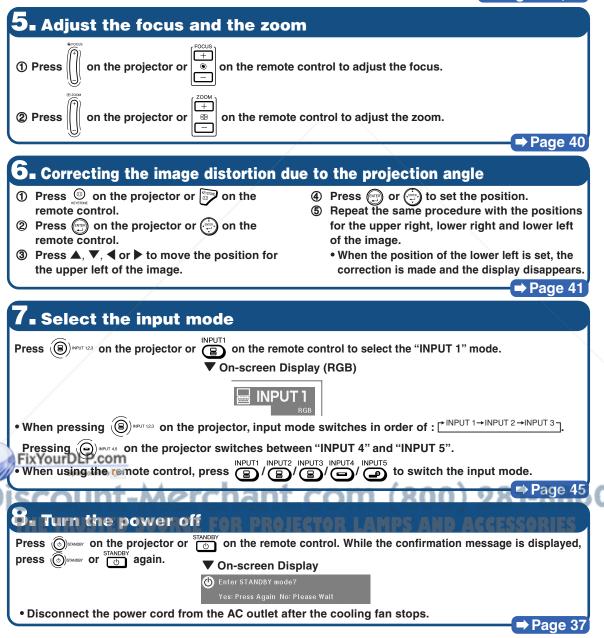
#### Adjust the projector angle

- Shift the lens horizontally and vertically.
- Press 

   in on the projector or
   in on the remote control.
- ② Press ▲, ▼, ◀ or ▶ on the projector or the remote control.
- Adjust the projector angle by rotating the adjustment feet.



### ⇒ Pages 38, 39



## **Setting Up the Projector**

## **Setting Up the Projector**

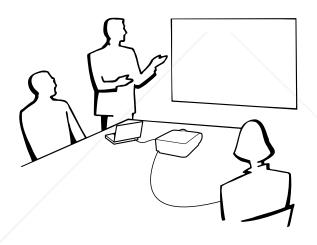
Position the projector perpendicular to the screen with the projector's feet flat and level to achieve an optimal image.

## Note 📎

- The projector lens should be centered in the middle of the screen. If the horizontal line passing through the lens center is not perpendicular to the screen, the image will be distorted, making viewing difficult.
- For an optimal image, position the screen so that it is not in direct sunlight or room light. Light falling directly on the screen washes out the colors, making viewing difficult. Close the curtains and dim the lights when setting up the projector in a sunny or bright room.

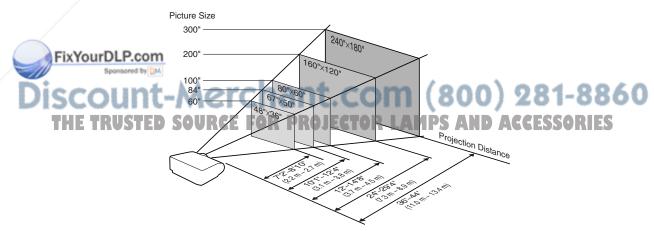
### **Standard Setup (Front Projection)**

Place the projector at the required distance from the screen according to the desired picture size. (For details, refer to "SETUP GUIDE" contained on the supplied CD-ROM.)



### Indication of the Projection Image Size and Projection Distance

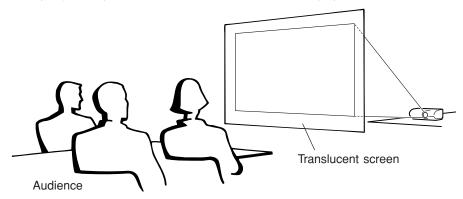
For details, refer to "SETUP GUIDE" contained on the supplied CD-ROM. Example : NORMAL Mode (4:3) for the standard zoom lens (AN-PH30EZ)



## **Projecting a Reversed Image**

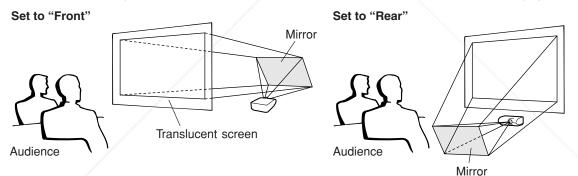
### **Projection from behind the Screen**

- Place a translucent screen between the projector and the audience.
- Reverse the image by setting "Rear" in the "PRJ Mode" menu. (See page 84.)



### **Projection Using a Mirror**

- Place a mirror (normal flat type) in front of the lens.
- When the translucent screen is placed between the mirror and audience, set to "Front" in the "PRJ Mode" menu. (See page 84.)
- When the mirror is placed on the audience side, set to "Rear" in the "PRJ Mode" menu. (See page 84.)



### 🛄 Info

• When using a mirror, ensure that both the projector and the mirror are carefully placed so the projected light does not shine into the eyes of the audience.

### Ceiling-mount Setup

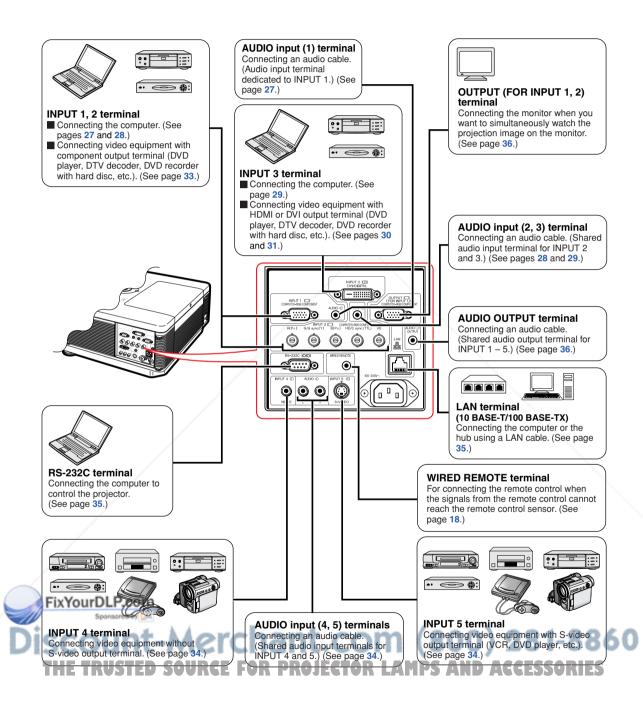
It is recommended that you use the optional Sharp ceiling-mount

bracket for this installation. Before mounting the projector, contact your nearest Sharp Authorized Projector Dealer or Service Center to obtain the recommended ceiling-mount bracket (sold separately).

- AN-PHCM20 ceiling-mount bracket, its AN-EP101AP extension tube (for the U.S.A.).
- AN-NV6T ceiling-mount bracket, its AN-TK201 and AN-TK202 extension tubes (for countries other than the U.S.A.).
- Invert the image by setting "Ceiling + Front" in "PRJ Mode". See page 84 for use of this function.

## Connections

## **INPUT/OUTPUT Terminals and Connectable Main Equipment**



## Samples of Cables for Connection

• For more details of connection and cables, refer to the operation manual of the connecting equipment. • You may need other cables or connectors not listed below.

Equipment	Terminal on connected equipment	Cable	Terminal on the projector
Computer	RGB	RGB cable (supplied)	
output terminal	5 BNC to 15-pin D-sub cable (commercially available)	INPUT 2	
	DVI digital video output terminal	DVI Digital cable (commercially available)	
	Audio output terminal	ø3.5 mm stereo or mono audio cable (commercially available or available as Sharp service part QCNWGA038WJPZ)	AUDIO (for INPUT 1)
Audio-visual equipment	HDMI output terminal	DVI to HDMI cable (commercially available)	INPUT 3
	DVI digital video output terminal	DVI Digital cable (commercially available)	
	RGB output terminal	5 RCA RGB cable (commercially available) BNC to RCA adaptors (commercially available)	
FixYourDLP.con		3 RCA to 15-pin D-sub cable (optional: AN-C3CP2)	INPUT 1
SCOUN THE TRUSTER	Component video output terminal	<b>Component video cable (commercially available)</b>	

### Samples of Cables for Connection

Equipment	Terminal on connected equipment	Cable	Terminal on the projector
Audio-visual equipment	Video output terminal	Video cable (commercially available)	INPUT 4
	S-video output terminal	S-video cable (commercially available)	INPUT 5
	Audio output terminal	ø3.5 mm stereo minijack to RCA audio cable (commercially available)	AUDIO (for INPUT 1)
Monitor	RGB input terminal	RGB cable (supplied or commercially available)	
Amplifier	Audio input terminal	ø3.5 mm stereo minijack to RCA audio cable (commercially available)	

FixYourDLP.com Sponsored by M Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

## **Connecting to a Computer**

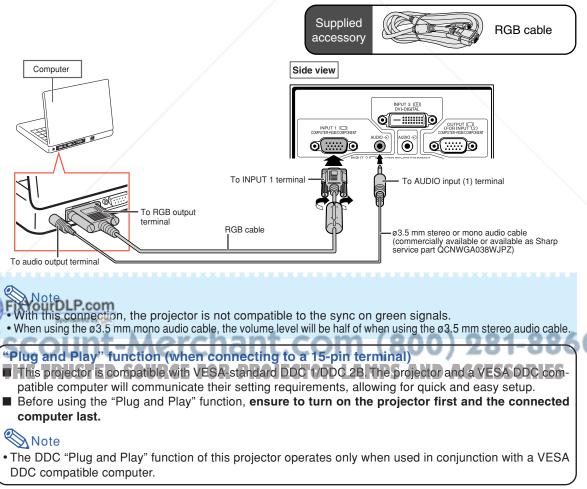
Before connecting, ensure the power cord of the projector from the AC outlet is unplugged, and that the devices to be connected are turned off. After making all connections, turn on the projector and then the other devices. When connecting a computer, ensure that it is the last device to be turned on after all the connections are made.

Ensure the operation manuals of the devices to be connected have been read before making connections.

## Note

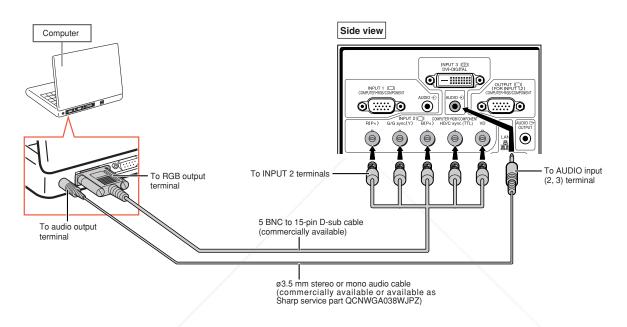
- See page **97** "Computer Compatibility Chart" for a list of computer signals compatible with the projector. Use with computer signals other than those listed may cause some of the functions to not work.
- Connecting computers other than the recommended types may result in damage to the projector, the computer, or both.
- A Macintosh adaptor may be required for use with some Macintosh computers. Contact your nearest Macintosh Dealer.
- Depending on the computer you are using, an image may not be projected unless the signal output setting of the computer is switched to the external output. Refer to the computer operation manual for switching the computer signal output settings.

## **Connecting with the RGB Cable**



### Connecting with a 5 BNC to 15-pin D-sub Cable

The projector employs a 5 BNC computer input to prevent deterioration of image quality. When connecting the input terminals on the projector to the computer directly, Connect the R ( $P_B$ ), G/G sync (Y), B ( $P_B$ ), HD/C sync and VD cables of the 5 BNC to 15-pin D-sub cable (commercially available) to the INPUT 2 terminals on the projector.



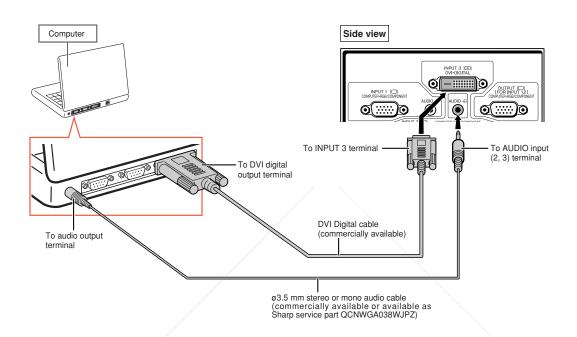
## Note 📎

- When connecting the projector to a compatible computer other than a PC (VGA/SVGA/XGA/SXGA/UXGA) or Macintosh (i.e. Workstation), a separate cable may be needed. Please contact your dealer for more information.
- When using the ø3.5 mm mono audio cable, the volume level will be half of when using the ø3.5 mm stereo audio cable.
- The HD/C sync terminal is only for TTL signal.

### FixYourDLP.com Sponsored by M Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

## **Connecting with a DVI Digital Cable**

The projector employs the DVI digital input terminal for direct input of digital video signals from a computer.



Note 🚫

- When connecting the projector to a computer in this way, select "D. PC RGB" for "Signal Type" in the "Picture" menu.
- When using the ø3.5 mm mono audio cable, the volume level will be half of when using the ø3.5 mm stereo audio cable.



## **Connecting to Video Equipment**

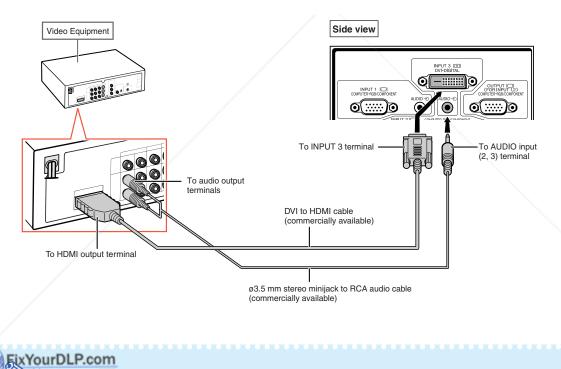
Before connecting, ensure the power cord of the projector from the AC outlet is unplugged, and that the devices to be connected are turned off. After making all connections, turn on the projector and then the other devices.

The projector has a DVD digital terminal, computer-RGB/component terminal, S-video terminal and video terminal for video input. Refer to the listed illustrations on how to connect audiovisual equipment.

If your audio-visual equipment has an RGB output terminal or component output terminal, use the computer-RGB/component terminals (INPUT 1 or 2) on the projector for video connection.

### **Connecting to Video Equipment That Has an HDMI Output Terminal with a DVI to HDMI Cable**

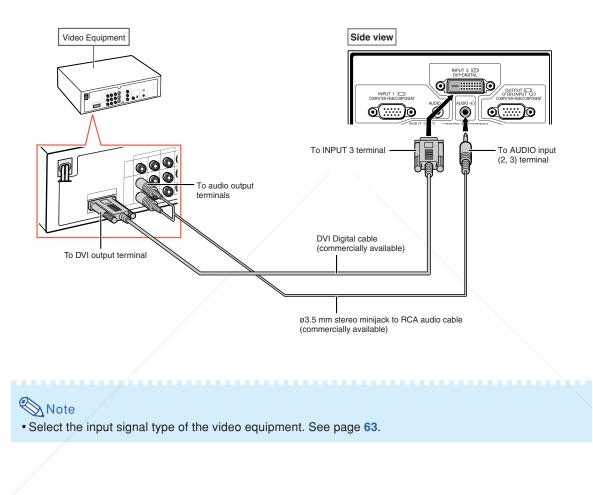
Use a DVI to HDMI cable when connecting HDMI video equipment such as DVD players to the INPUT 3 terminal.



Noteresses between the signal type of the video equipment. See page 63.
While the projector is connected to video equipment that has an HDMI output terminal, only the video signal can be input to the projector. (Connect the AUDIO input (2, 3) terminal for audio input.)

### **Connecting to Video Equipment That Has a DVI Output Terminal with a DVI Digital Cable**

Use a DVI Digital cable when connecting video equipment with the DVI output terminal such as DVD players to the INPUT 3 terminal.

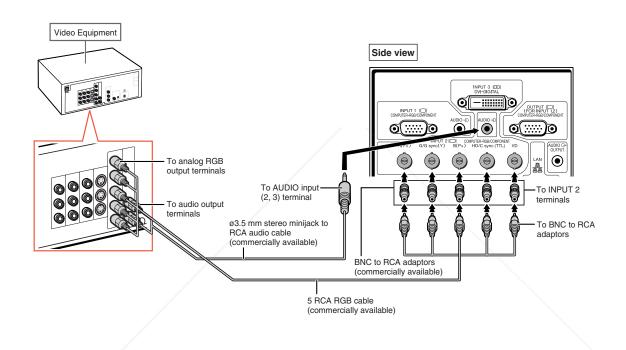




### Connecting to RGB Video Equipment with a 5 RCA RGB Cable

Use a 5 RCA RGB cable when connecting the RGB video equipment such as DVD players and DTV\* decoders to the INPUT 2 terminals.

\* DTV is the umbrella term used to describe the new digital television system in the United States.



## Note

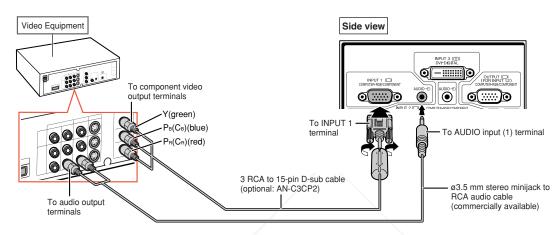
- When connecting the projector to the video equipment in this way, select "RGB" for "Signal Type" in the "Picture" menu. See page 63.
- The HD/C sync and VD terminals may be used depending on the specifications of the DTV decoder connected to this projector. Please refer to the operation manual of the DTV decoder for details.
- The HD/C sync terminal is only for TTL signal.
   FixYourDLP.com

Sponsored by DM

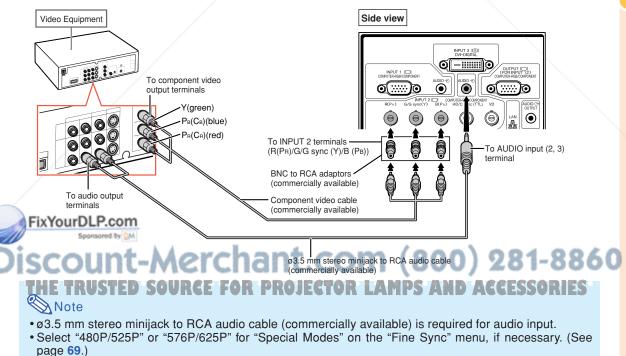
## Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

### **Connecting to Video Equipment That Has Component Output Terminals**

When connecting the video equipment that has component output terminals to the INPUT 1 terminal, use the 3 RCA to 15-pin D-sub cable (optional: AN-C3CP2).



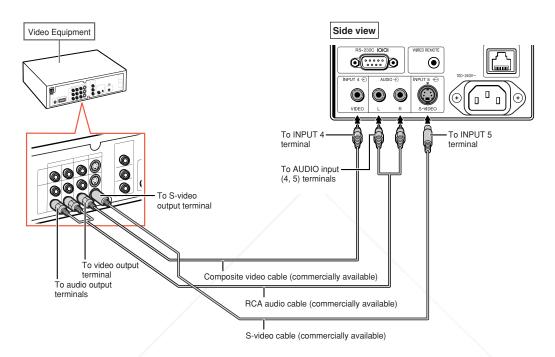
When connecting the video equipment that has component output terminals to the INPUT 2 terminals, use the BNC to RCA adapters (commercially available).



- When you connect video equipment with a 21-pin RGB output (Euro-scart) to the projector, use a commercially available cable that fits in the projector terminal you want to connect.
- The projector does not support RGBC signals via the Euro-scart.

### **Connecting with an S-video Cable or a Composite Video Cable**

Connect the video equipment to the INPUT 4 or 5 terminal using the S-video cable or composite video cable (commercially available).



### 🗞 Note

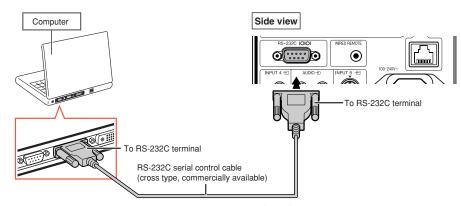
- The S-video signal input to the S-VIDEO terminal is separated into color and luminance signals for realizing a higher-quality image.
- An RCA audio cable (commercially available) is required for audio input.
- When you connect video equipment with a 21-pin RGB output (Euro-scart) to the projector, use a commercially available cable that fits in the projector terminal you want to connect.



## Controlling the Projector by a Computer

When the RS-232C terminal on the projector to the RS-232C serial terminal on the computer, or when the LAN terminal on the projector to the LAN terminal on the computer, the computer can be used to control the projector. Refer to the "SETUP GUIDE" contained on the supplied CD-ROM for details.

When connecting to a computer using an RS-232C serial control cable



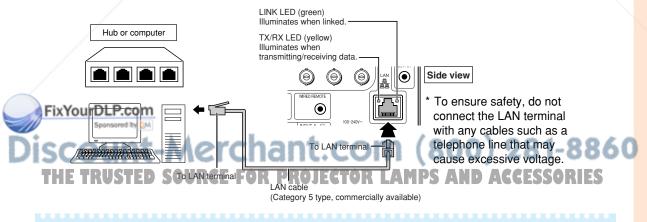
### Note

- The RS-232C function may not operate if your computer terminal is not correctly set up. Refer to the operation manual of the computer for details.
- Refer to "SETUP GUIDE" contained on the supplied CD-ROM for the RS-232C specifications and commands.

#### 🔲 Info

- Do not connect the RS-232C cable to a terminal other than the RS-232C terminal on the computer. This may damage your computer or projector.
- Do not connect or disconnect an RS-232C serial control cable to or from the computer while it is on. This may damage your computer.

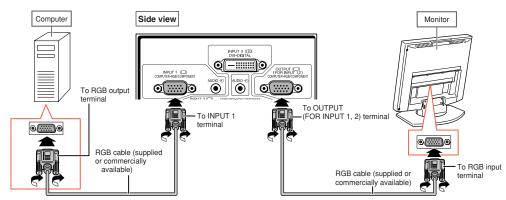
#### When connecting to the LAN terminal using a LAN cable



#### 🔕 Note

- When connecting to a hub, use straight-through Category 5 (CAT.5) type cable (commercially available).
- When connecting to a computer, use <u>cross-over</u> Category 5 (CAT.5) type cable (commercially available).

## Connecting to a Monitor That Has an RGB Input Terminal



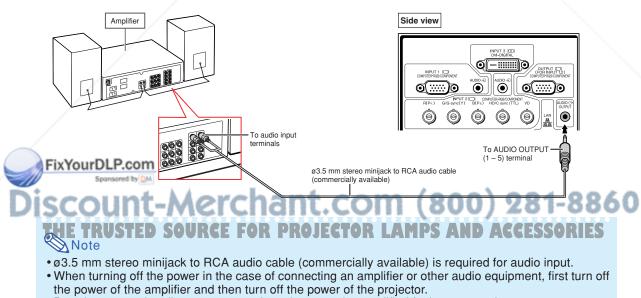
You can display computer images on a monitor using the RGB cables.

#### 📎 Note

- RGB signals and component signals input from the INPUT 1 or INPUT 2 terminals can be output to the monitor.
- For inputting video signals from the INPUT 1 terminal, another RGB cable (commercially available) is required.

## **Connecting to an Amplifier or Other Audio Equipment**

Audio signals input from equipment connected to each audio input terminal of the projector can be output to audio equipment.



- By using external audio components, the volume can be amplified for better sound.
- For details on Variable Audio Output (VAO) and Fixed Audio Output (FAO), see page 72.

## **Turning the Projector On/Off**

### **Connecting the Power Cord**

Plug the supplied power cord into the AC socket on the rear of the projector.

### **Turning the Projector On**

Before performing the steps in this section, connect any equipment that you use with the projector. (See pages 27–36.)

Remove the lens cap and press  $\stackrel{\scriptstyle (\mathcal{M})}{\textcircled{}}$  on the projector or  $\stackrel{\scriptstyle (\mathcal{M})}{\coprod}$  on the remote control.

- The power indicator illuminates green.
- After the lamp indicator illuminates, the projector is ready to start operation.
- When System Lock is set, the keycode input screen appears. Enter the right keycode to start projection. See page **79** for details.

### Note

2

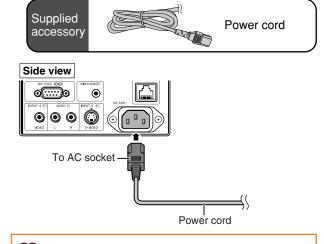
- The lamp indicator illuminates or blinks, indicating the status of the lamp. **Green:** The lamp is ready.
  - Blinking green: The lamp is warming up. Red: The lamp is shut down abnormally or the lamp should be replaced.
- When switching on the projector, a slight flickering of the image may be experienced within the first minute after the lamp has been illuminated. This is normal operation as the lamp's control circuitry is stabilizing the lamp output characteristics. This does not indicate malfunction.
- If the projector is put into standby mode and immediately turned on again, the lamp may take some time to illuminate.

### **Turning the Power Off (Put-**

#### ing the Projector into Standby Mode)

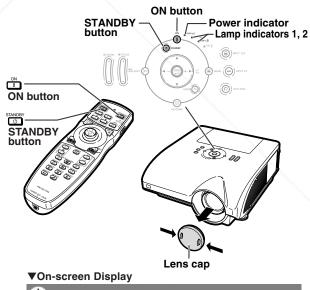
Press () standard on the projector or standard on the remote control, then the press that button again while the RO

- confirmation message is displayed, to put the projector into standby mode.
- Unplug the power cord from the AC outlet after the cooling fan stops.



#### 📕 Info

• English is the factory preset language. If you want to change the on-screen display to another language, change the language according to the procedure on page **89**.



🕛 Enter STANDBY mode?

Yes: Press Again No: Please Wait

## nt.com (800) 281-8860 Ojector Lamps and Accessories

#### 🔔 Info

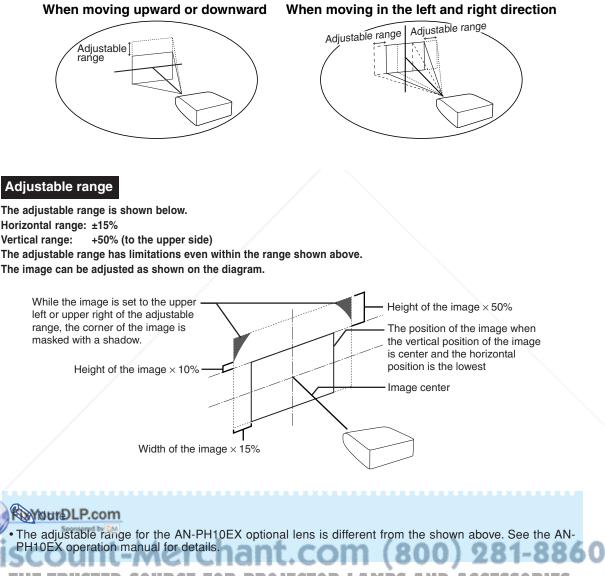
• Do not unplug the power cord during projection or cooling fan operation. The cooling fan in this projector continues to run for about 90 seconds after the projector enters the standby mode. This can cause damage due to rise in internal temperature, as the cooling fan also stops.

GB-**37** 

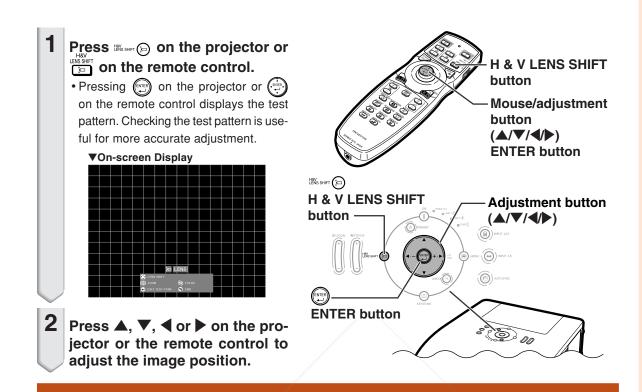
## **Image Projection**

### **Shifting the Lens**

In addition to the zoom function and adjustment of projection angle using the adjustment feet, you can adjust the position of the projection using the lens shift function. This is a useful function in cases such as when the screen can not be moved.

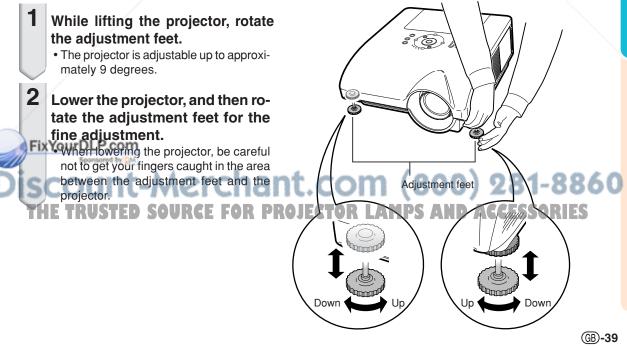


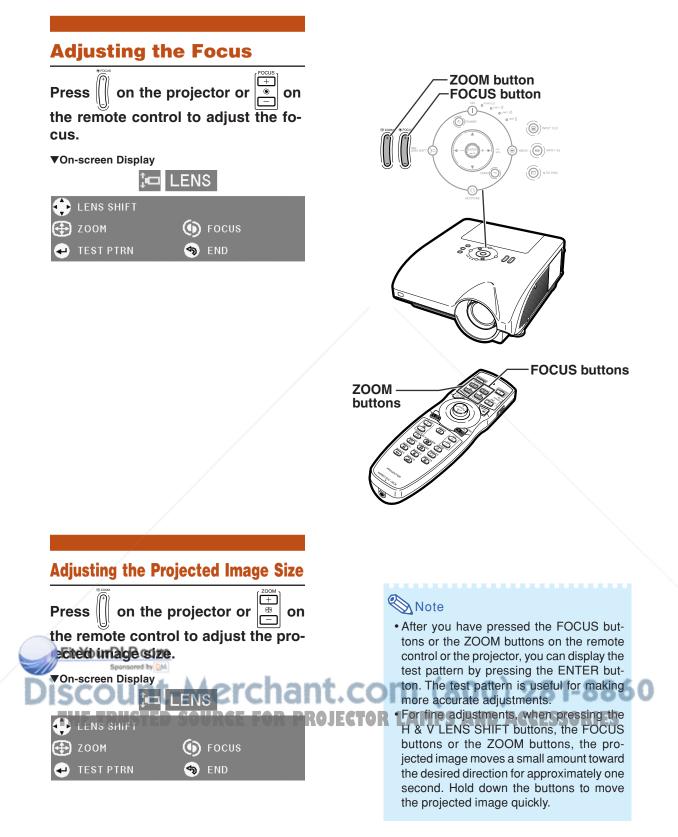
THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES



### **Using the Adjustment Feet**

- When the position of the projected image cannot be adjusted with the lens shift function, use the adjustment feet to adjust the projected angle.
- The height of the projector can be adjusted using the adjustment feet when the screen is located higher than the projector, the screen is inclined or when the installation site is slightly inclined.
- Install the projector so that it is as perpendicular to the screen as possible.





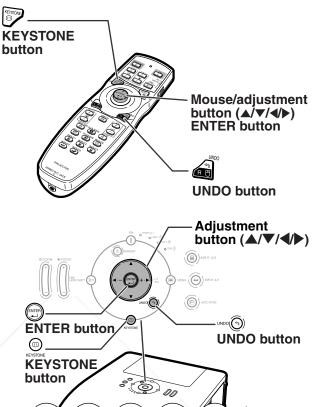
# **Correcting Trapezoidal Distortion**

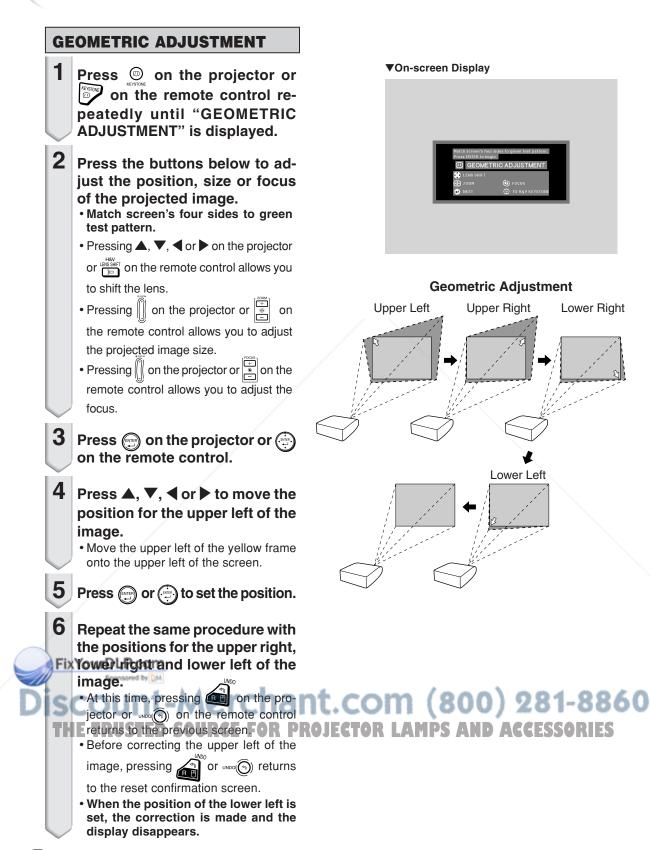
When the image is projected either from the top or from the bottom towards the screen at an angle, the image becomes distorted trapezoidally. The function for correcting trapezoidal distortion is called Keystone Correction.

There are the two types of the Keystone Correction.

- 1) "GEOMETRIC ADJUSTMENT" for correcting an image designating the corner of the projected image
- "H & V KEYSTONE"/"IMAGE RESIZING" for correcting an image designating the horizontal and vertical axes

Press () on the remote control.	e Type of the Key- ction projector or on the DJUSTMENT" will be dis-	ENTER button	
	is pressed, the display		
GEOMETRIC ADJUSTMENT † The display disappears.	→ H & V KEYSTONE ↓ ← IMAGE RESIZING		
GEOMETRIC ADJUSTMENT	For correcting an image desig- nating the corner of the pro- jected image		
H & V KEYSTONE	For correcting an image desig- nating the horizontal or vertical axes		
IMAGE RESIZING FixYourDLP.cc sponsored by SCOUN THE TRUST	Only when "H & V KEY-	nt.com (8 Rojector Lamps	00) 281-8860 AND ACCESSORIES





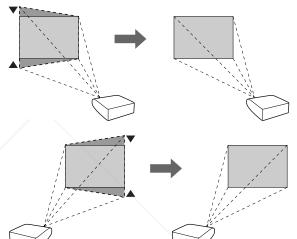
### H & V KEYSTONE

- **1** Press (a) on the projector or peatedly until "H & V KEY-STONE" is displayed.
  - When the correction has already been made with "GEOMETRIC ADJUST-MENT", the confirmation message for resetting the correction before "H & V KEYSTONE" is displayed.
- **2** Press  $\blacktriangle$ ,  $\bigtriangledown$ ,  $\blacklozenge$ ,  $\blacklozenge$  or  $\triangleright$  to move the position for the horizontal or vertical axes.
- **3** Press tion.
  - When "H & V KEYSTONE" is set to the values other than "0", "IMAGE RESIZING" is displayed.

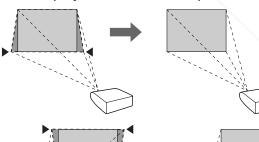
#### ▼On-screen Display



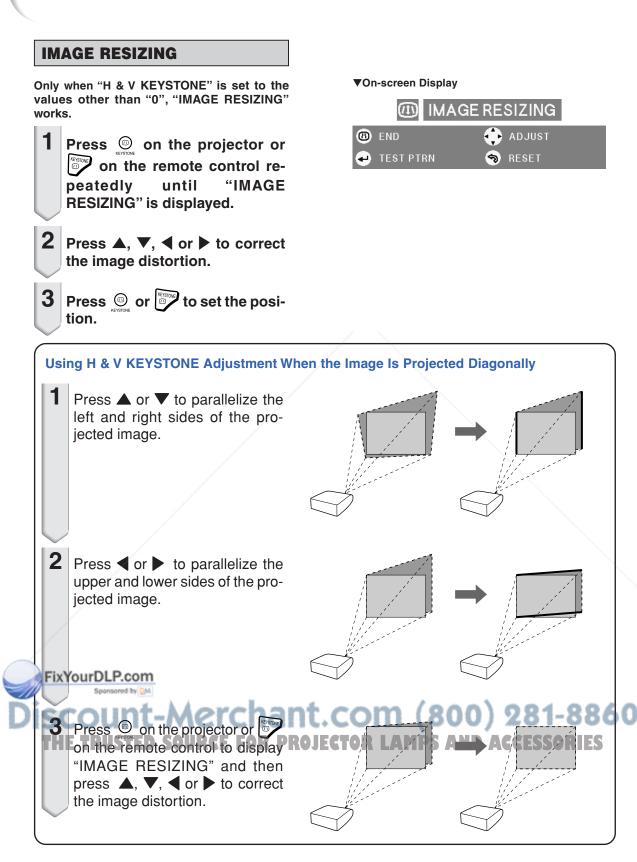
## Horizontal Keystone Correction (Adjustment with $\P/ \triangleright$ )



## Vertical Keystone Correction (Adjustment with $\blacktriangle / \heartsuit$ )



FixYourDLP.com Sponsored by EM ISCOUNT-Merchant. (800) 1-886 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES



### Switching the Input Mode

Select the appropriate input mode for the connected equipment.

Press (B), (B), (NPUT2, NPUT3, NPUT4 or (D) on the remote control to select the input mode.

• When pressing (B) MATTER on the projector, the input mode switches in order of :

ר→INPUT 1 → INPUT 2 → INPUT 3

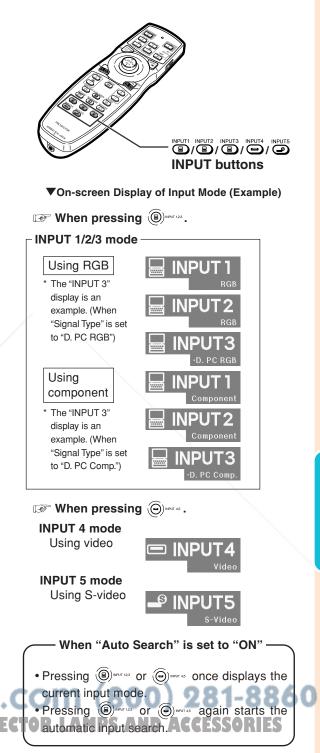
• When pressing (a) where on the projector, the input mode switches between "INPUT 4" and "INPUT 5".

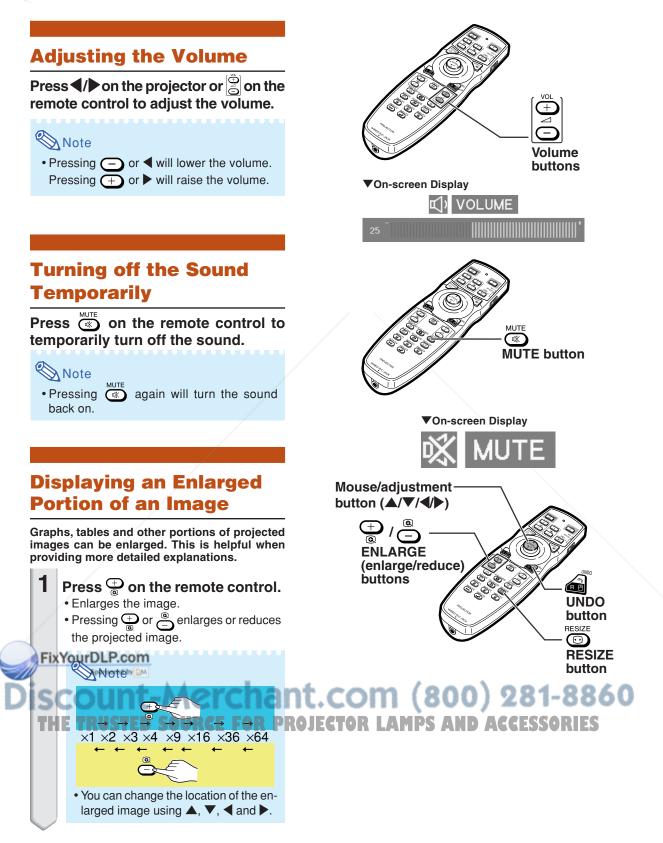
### Note 📎

- When no signal is received, "NO SIGNAL" will be displayed. When non-supported signal is received, "NOT REG." is displayed.
- When "Auto Search" of the "Options (1)" menu is set to "ON", the input mode with signal can automatically be detected and displayed. (See page **78**.)
- The input mode is not displayed when "OSD Display" of the "Options (1)" menu is set to "Level A" or "Level B". (See page 75.)

#### About the Input mode

	About the input mode		
	INPUT 1/ INPUT 2 (RGB/	Used for projecting images from equipment that sends RGB signals or component signals connected to	
	component)	the INPUT 1 or 2 terminals.	
/	INPUT 3 (digital PC RGB/digital PC compo- nent/digital	Used for projecting images from equipment connected to the INPUT 3 terminal.	
	Find to BGBL	Pcom	
ŀ	digital video		
	-		
l	component)	int_Morcha	
ł	INPUT 4	Used for projecting images	
1	(video)	from equipment connected to the INPUT 4 terminal.	
	INPUT 5	Used for projecting images	
	(S-video)	from equipment connected to the INPUT 5 terminal.	





• The magnification then returns to ×1.

### Note 🚫

In the following cases, the image will return to the normal size  $(\times 1)$ .

- When switching the input mode.
- When 🔊 has been pressed.
- When the input signal is changed.
- When the input signal resolution and refresh rate (vertical frequency) change.
- When been pressed.

### Freezing a Moving Image

Press on the remote control.
The projected image is frozen.

Press en again to return to the moving image from the currently connected equipment.

### Selecting the Picture Mode

You can select the suitable picture mode for the projected image, such as movie or video game.

Press () on the remote control. When pressing (), the picture mode

PR

changes in order of →STANDARD-→PRESENTATION-→CINEMA-

THE TRUSTED SOU

### Note 📎

- Press 
  to return to the "STANDARD" mode.
- This function can also be accessed from the OSD menu (see page **60**).





860

PICTURE MODE

button

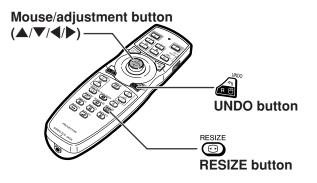
### **Image Projection**

This function allows you to modify or customize the resize mode to enhance the input image. Depending on the input signal, you can choose "NORMAL", "FULL", "DOT BY DOT", "BORDER", "STRETCH" or "SMART STRETCH" image.

### **Resize Mode**

### Press on the remote control.

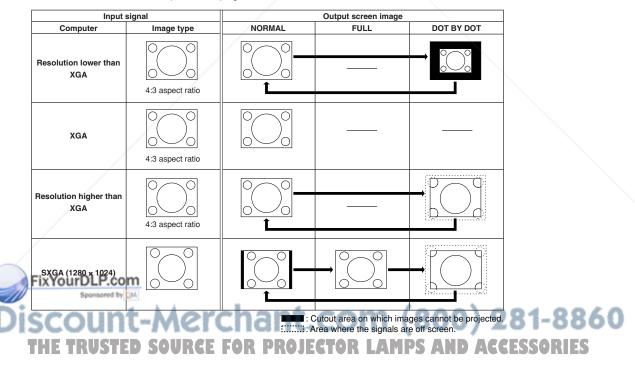
- Pressing changes the display as shown.
- To return to the standard image, press is while "RESIZE" is displayed on the screen.
- This function can also be accessed from the OSD menu (see page 74).



#### COMPUTER

		NORMAL	FULL	DOT BY DOT
	SVGA (800 × 600)	1024 × 768	—	800 × 600
4:3 aspect ratio	XGA (1024 × 768)	1024 × 768		—
	SXGA (1280 × 960)	1024 × 768	/	1280 × 960
	UXGA (1600 × 1200)	1024 × 768	-	1600 × 1200
Other aspect ratios	SXGA (1280 × 1024)	960 × 768	1024 × 768	1280 × 1024

• "NORMAL" is fixed when XGA (1024 × 768) signals are entered.

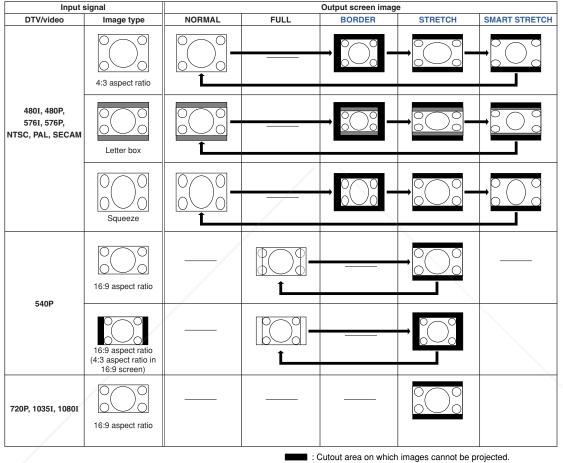


#### VIDEO

		NORMAL	FULL	BORDER	STRETCH	SMART STRETCH
480I, 480P, 576I, 576P,	4:3 aspect ratio,	1024 × 768		768 × 576*		1024 × 576*
NTSC, PAL, SECAM	letter box, squeeze	1024 × 768	_	/08 × 5/6	1024 × 576*	1024 × 576
540P	16:9 aspect ratio	—	1024 × 768	—	1024 × 570	—
720P, 1035I, 1080I	16:9 aspect ratio	—	—	_		—

• "STRETCH" is fixed when 720P, 1035I or 1080I signals are entered.

\* The "Digital Shift" function can be used with these images.



Area on which the image is not included in the original signals.



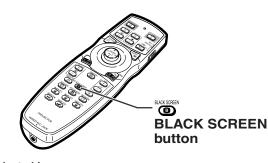
### **Displaying the Black** Screen

This function allows you to temporarily display the black screen.

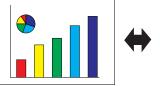


Press BLACK SCREEN

BLACK SCREEN **2** Pressing **(D)** again will turn the projected image back on.



Projected Image



BLACK SCREEN

### **Displaying and Setting** the Break Timer

This function allows you to show the remaining time for break during meeting.

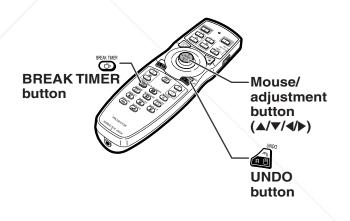


60 minutes (in 1 units). • The break timer starts to count down as

soon as  $\blacktriangle$ ,  $\bigtriangledown$ ,  $\triangleleft$  or  $\triangleright$  is pressed.

λ Note Pressing 📸 will cancel the break timer. Auto Power Off function will be temporarily disabled during the break timer. When no input signal is detected for more than 15 minutes, the projector will automatitimer has elapsed. • The break timer will be displayed on the

- startup image. To change the screen displayed during the break timer, change the setting of "Startup Image" (see page 77). • When "Slave" is set for "Stack Setting", the
- break timer is not displayed. (See page 84.)



▼On-screen Display

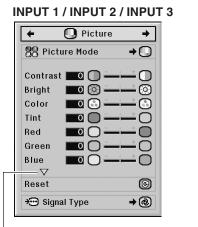


t.com (800) 281-8860 Ically enter the standby mode if the break ROJECTOR LAMPS AND ACCESSORIES

## **Menu Items**

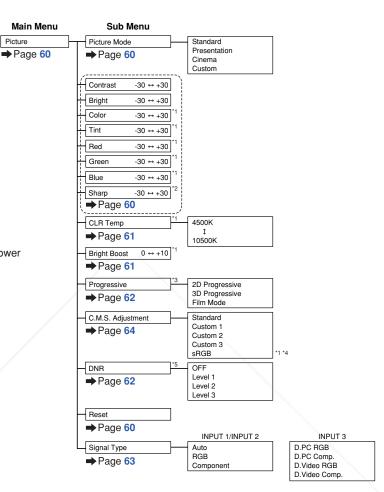
The following shows the items that can be set in the projector.

#### "Picture" menu



Pressing  $\nabla$  displays the items on the lower part of the "Picture" menu.

🗧 🚺 Picture	+
Picture Mode	<b>→</b>
Blue O	-0
Sharp	
Bright Boost 10 0	
C.M.S. Adjustment	+Õ
	-0
Reset	⊌ →@
- 3 //	



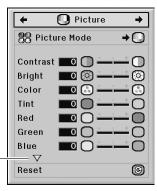
- \*1 "Color", "Tint", "Red", "Green", "Blue", "CLR Temp" and "Bright Boost" cannot be adjusted when "C. M. S. Adjustment" is set to "sRGB".
- \*2 "Sharp" can be adjusted only when 480I, 480P, 540P, 576I, 576P, 720P, 1035I, or 1080I signal is input.
- \*3 "Progressive" can be adjusted only when 480I or 576I signal is input.
- \*4 "sRGB" can be selected under the conditions below.
  - When "Signal Type" is set to "RGB", "D. PC. RGB" or "D. Video RGB"
- When "Signal Type" is set to "Auto" and the input signal is distinguished as "RGB". •5 "DNR" can be adjusted only when 480I, 480P, 576I or 576P signal is input.

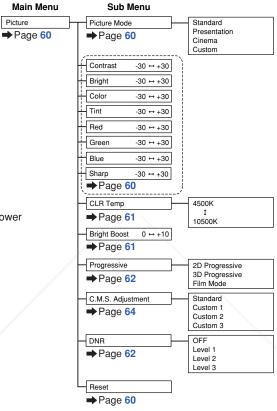
nt-Merchant.com (800) 281-8860 SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES



#### "Picture" menu

#### **INPUT 4 / INPUT 5**





+	🚺 Picture	+
88 Pic	cture Mode	<b>→</b>
∆ Blue		· • •
Sharp		
	mp 7500 %	
	600st <b>3</b> 0	
P Pro		⇒ 8D
K.D 🔝	1.S. Adjustment	<b>→</b> □
🔘 dn	IR	⇒②
Reset		C

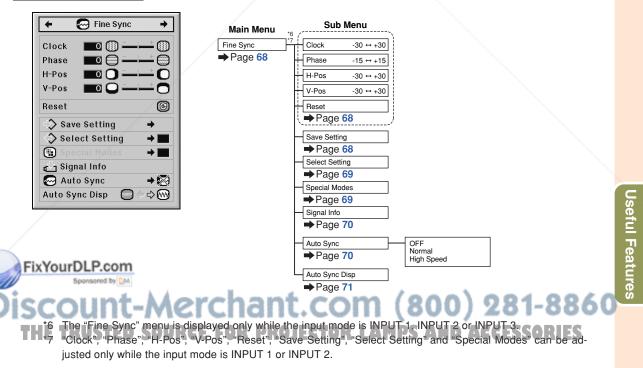


#### "C.M.S." menu

+	🛄 C.M.S.	+
🕒 С.М.	S. Adjustment	<b>+</b> 1
	s 🗖 🛞 🗕	
Chroma Hue		
Reset (	This Color)	C
-	All Colors)	C
Uie Vie	w Settings	

Main Menu	Sub Menu	
C.M.S. ➡Page 64	C.M.S. Adjustment Standard → Page 64 Custom 1 Custom 2 Custom 3 sRGB	
	Target [R] Red [Y] Yellow [G] Green [C] Cyan [B] Blue [M] Magenta	
	Lightness $-30 \leftrightarrow +30$ ⇒ Page 65 Chroma $-30 \leftrightarrow +30$ ⇒ Page 65	
	Hue $-30 \leftrightarrow +30$ $\Rightarrow$ Page 66 Reset (This Color) $\Rightarrow$ Page 66 Reset (All Colors)	
	<ul> <li>→ Page 66</li> <li>View Settings</li> <li>→ Page 67</li> </ul>	

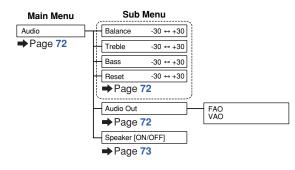




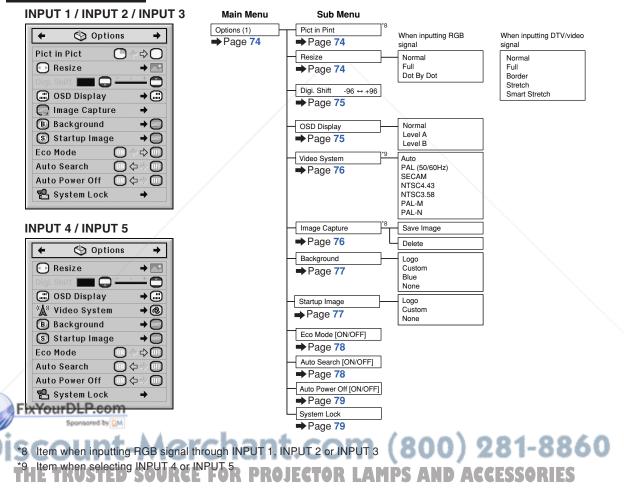
### Menu Items

#### "Audio" menu

+	📢 🛛 Audio 🔶
Balance	■ 0 « 🗅 = – t 🛶 📢 »
Treble	
Bass	
Reset	ц©
<b>⊈</b> Aud	io Out → 📢 🗦
Speaker	

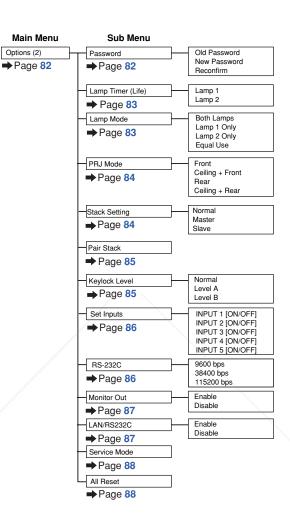


#### "Options (1)" menu



#### "Options (2)" menu

+	🇳 Options	+
50	Password	+
Ö	Lamp Timer (Life)	
Ö	Lamp Mode	⇒ Ö5:
	PRJ Mode	⇒⊒
	Stack Setting	⇒ 📼
		00
A	Keylock Level	→ 🖰
Ð	Set Inputs	+
10101	RS-232C → 1152	00 bps
O	Monitor Out	→ 🔘
Co	LAN/R\$232C	÷≣g
Ø	Service Mode	+
AII	Reset	G



#### "Language" menu Main Menu Sub Menu 🗲 💬 Language 🔸 Language English English Deutsch ➡Page 89 Español Deutsch Nederlands Français Español Italiano Nederlands Svenska Português Françaio LP.com 汉语 Italiano 한국어 Svenska 日本語 (800) 281-8860 Português 汉语 AMPS AND ACCESSORIES EG OR L 한국어 日本語

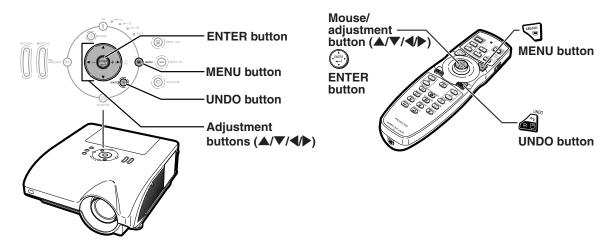
"Status" menu

Main menu	
Status	
➡Page 89	

Useful Features

## Using the Menu Screen

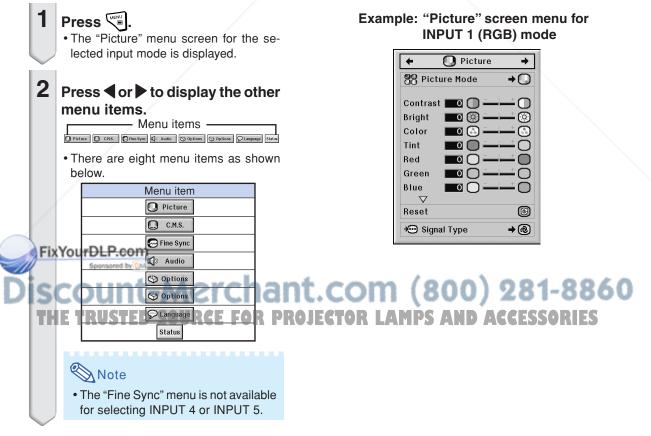
The menu can be operated to achieve two functions, adjustments and settings. (For setting the menu items, see pages 58 and 59.)



### **Menu Selections (Adjustments)**

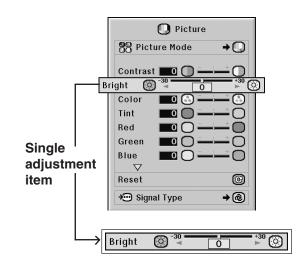
#### Example: Adjusting "Bright"

• This operation can also be performed by using the buttons on the projector.



# **3** Press $\blacktriangle$ or $\blacktriangledown$ to select the item you want to adjust.

### To adjust the projected image while viewing it



## Press

- The selected single adjustment item (e.g. "Bright") appears instead of the menu.
- When pressing ▲ or ▼, the following item ("Color" after "Bright") will be displayed.

### Note

Press 🔊

• Press for return to the previous screen.

# 4 Press ◀ or ► to adjust the item selected.

• The adjustment is stored.

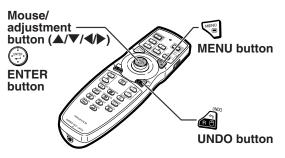
• The menu screen will disappear.

Picture 👭 Picture Mode → □ Contrast 🗖 🔘 +15 ⊨<sup>+30</sup> Bright  $(\circ)$  $\odot$ Color 3 0 🕄 -Tint Red ) Green  $\bigcirc$ Blue  $\nabla Z$ Reset © **→**@ → Signal Type

## iscount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

### **Using the Menu Screen**

The menu can be operated to achieve two functions, adjustments and settings. (For adjusting the menu items, see pages 56 and 57.)



### **Menu Selections (Settings)**

#### Example: Setting "OSD Display"

• This operation can also be performed by using the buttons on the projector.

### 1 Press 🔊

menu items.

2

• The "Picture" menu screen for the selected input mode is displayed.

Press < or <br/>
to display the other

- Menu items ·

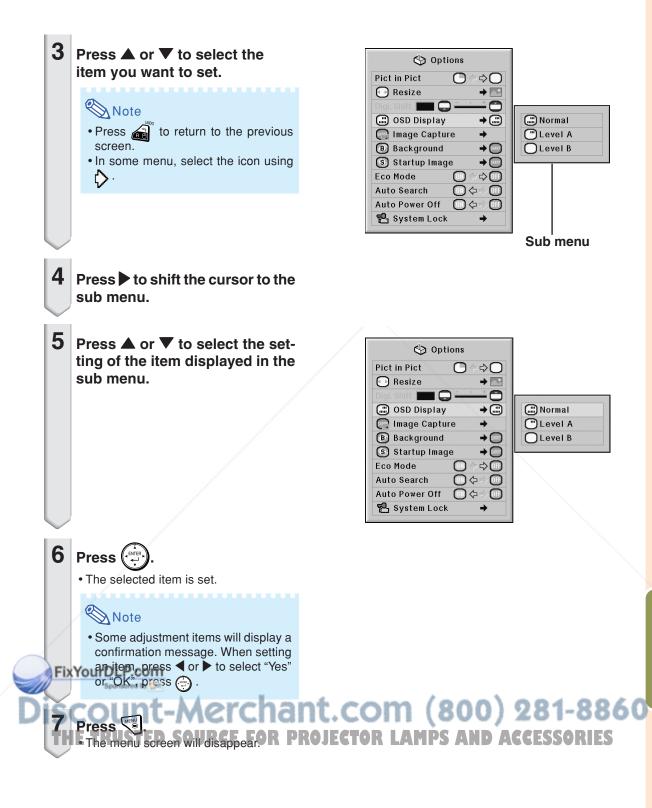
Picture 🔲 C.H.S. 🕞 Fine Sync 🕼 Audio 🚫 Options 🚫 Options 🖓 La

#### Example: "Picture" screen menu for INPUT 1 (RGB) mode





for selecting INPUT 4 or INPUT 5.



## Picture Adjustment ("Picture" menu)

You can adjust the projector's picture to your preferences using the "Picture" menu.

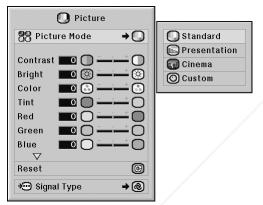
### **Selecting the Picture Mode**

This function allows you to select the picture mode in accordance with brightness of the room or content of the image to be projected.

In all picture modes, items on the "Picture" menu can be adjusted and saved.

Menu operation Page 58

#### Example: "Picture" screen menu for IN-PUT 1 (RGB) mode



#### **Description of Picture Modes**

	· /
Selectable items	Description
Standard	For standard image
Presentation	Brightens darker portions of image for
	more enhanced presentations.
Cinema	Gives greater depth to darker portions
	of image for a more exciting theater
	experience.
Custom	The factory preset value is the same as
	the one of "Standard".
	Using the dedicated software allows
/	you to adjust the gamma curve.
	Visit "http://sharp-world.com/projector/"
FixYourDL	Foc details.

to select the picture mode. (See page 47.)

on the remote control

TX TOUTDL HOCOGIAIIS

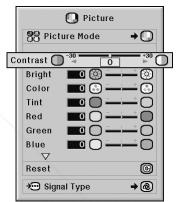
/ou can also press 😱

### **Adjusting the Image**

Select a picture mode before adjusting the image.

Menu operation Page 56

#### Example: "Picture" screen menu for IN-PUT 1 (RGB) mode



#### **Description of Adjustment Items**

Selectable items	Press	Press 🕨
Contrast	For less contrast	For more contrast
Bright	For less brightness	For more brightness
Color <sup>*1</sup>	For less color intensity	For more color intensity
Tint <sup>*1</sup>	For making skin tones	For making skin tones
	purplish	greenish
Red <sup>*1</sup>	For weaker red	For stronger red
Green <sup>*1</sup>	For weaker green	For stronger green
Blue <sup>*1</sup>	For weaker blue	For stronger blue
Sharp <sup>*2</sup>	For less sharpness	For more sharpness

- \*1 "Color", "Tint", "Red", "Green" and "Blue" cannot be adjusted when "C.M.S. Adjustment" on the "C.M.S." menu is set to "sRGB". (See page 64.)
- \*2 "Sharp" can be adjusted only when 480I, 480P, 540P, 576I, 576P, 720P, 1035I or 1080I DTV signal is input during the INPUT 1, 2 or 3 mode; or the input mode is set to INPUT 4 or 5.

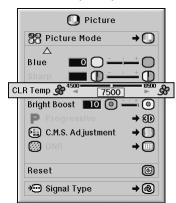
RR LAMPS AND ACCES

• To reset all adjustment items, select "Reset" and press (...).

### **Adjusting the Color Temperature**

#### Menu operation 🌩 Page 56

#### Example: "Picture" screen menu for IN-PUT 1 (RGB) mode



#### **Description of Color Temperature Settings**

Selectable items	Description
4500K	For lower color temperature for warmer,
	reddish incandescent-like images.
	1
	For higher color temperature for cooler,
10500K	bluish, fluorescent-like images.
103001	bidisti, ildolescent-like illages.

### 🗞 Note

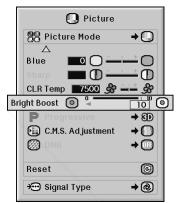
• "CLR Temp" cannot be set when "C.M.S. Adjustment" on the "C.M.S." menu is set to "sRGB". (See page 64.)

### **Emphasizing the Contrast**

This function emphasizes the bright portions of images to obtain a higher contrast image.

Menu operation Page 56

Example: "Picture" screen menu for IN-PUT 1 (RGB) mode



#### **Description of Bright Boost Setting**

Press <	Press 🕨
To improve color reproduc-	To increase brightness,
tion, lower bright boost	increase bright boost
setting.	setting.

### 🔊 Note

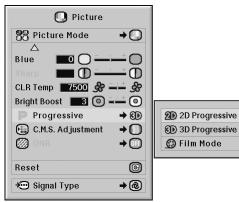
• "Bright Boost" cannot be set when "C.M.S. Adjustment" on the "C.M.S." menu is set to "sRGB". (See page 64.)



### **Selecting the Progressive Mode**

#### Menu operation Page 58

#### Example: "Picture" screen menu for IN-PUT 1 (RGB) mode



#### **Description of Progressive**

Selectable items	Description	
2D	Useful to display fast-moving images such	
Progressive	as sports and action films.	
3D	Useful to display relatively slowmoving	
Progressive	images such as drama and documentary	
	more clearly.	
Film Mode	Reproduces the image of film source*	
clearly. Displays the optimized image		
	transformed with three-two pull down (NTSC	
	and PAL60Hz) or two-two pull down	
	(PAL50Hz and SECAM) enhancement to	
	progressive mode images.	

The film source is a digital video recording with the original encoded as is at 24 frames/second. The projector can convert this film source to progressive video at 60 frames/second with NTSC and PAL60Hz or at 50 frames/second with PAL50Hz and SECAM to play back a high-definition image.

### Note

• In NTSC or PAL60Hz, even if the 3D Progressive

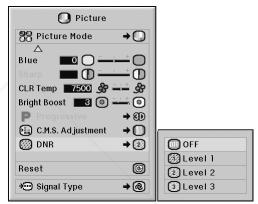
- mode has been set, the three-two pull down enhance of ment will be enabled automatically when the film source has been entered.
- When the image is blurred or noisy, switch to the optimal mode.
- When using progressive inputs, inputs are directly displayed so that "2D Progressive", "3D Progressive" and "Film Mode" cannot be selected.

### **Reducing Image Noise (DNR)**

Video digital noise reduction (DNR) provides high quality images with minimal dot crawl and cross color noise.

Menu operation Page 58

#### Example: "Picture" screen menu for IN-PUT 1 (RGB) mode



#### Description of DNR

Selectable items	Description		
OFF	DNR does not function.		
Level 1-3	Sets the DNR level.		

### Note 📎

• Set a level so as to view a clearer picture. Make sure to set "DNR" to "OFF" in the following cases:

- When the image is blurry.
- When the contours and colors of moving images drag.
- When TV broadcasts with weak signals are projected.

This function is available for all signals with IN-PUT 4 and 5.

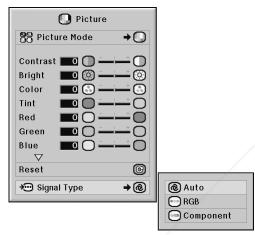
• This function is available for 480I, 480P, 576I and 576P signals with INPUT 1, 2 and 3.

### **Signal Type Setting**

This function allows you to select the input signal type RGB or component for INPUT 1, INPUT 2 or INPUT 3.

Menu operation Page 58

#### Example: "Picture" screen menu for IN-PUT 1 (RGB) mode



#### **Description of Signal Type Settings**

#### **INPUT 1/INPUT 2**

Selectable items	Description	
Auto	Input signals are automatically recog-	
	nized as RGB or component.	
RGB	Set when RGB signals are received.	
Component	Set when component signals are	
	received.	

#### **INPUT 3**

~	Selectable items		
	PFRYSBrDL	Set when digital PC RGB signals are	
=//	Span	received from a computer.	
~	D. PC Comp.	Set when digital PC component signals	
	ICCOI	are received from a computer.	t.com (800) 281-8860
	D. Video RGB	Set when digital video RGB signals are	
	THF TRU	received from video equipment. DRC	JECTOR LAMPS AND ACCESSORIES
	D. Video Comp.	Set when digital video component	The second
		signals are received from video equip-	
		ment.	

## Color Management System ("C. M. S." menu)

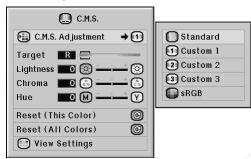
This function allows you to individually adjust the display characteristics of six colors (R: Red, Y: Yellow, G: Green, C: Cyan, B: Blue, M: Magenta).

### Selecting the Color Reproduction Mode

This function allows you to select the color reproduction mode for the projected images.

#### Menu operation Page 58

#### Example: "C.M.S." screen menu



#### **Description of C.M.S. Adjustment**

Selectable items	Description	
Standard	Standard settings	
Custom 1 – 3	"Lightness", "Chroma" and "Hue" can be	
	adjusted for each of the six colors.	
sRGB	A natural tint based on an original im-	
	age from the computer.	

### 🗞 Note

- sRGB is an international standard of color reproduction regulated by the IEC (International Electrotechnical Commission). As the fixed color area has been decided by the IEC, the images are displayed in a natural tint based on an original image, when "C.M.S. Adjustment" is set to "sRGB".
- You cannot set "Color", "Tint", "Red", "Green", "Blue", "GLP Teme", "Bright Boost" on the "Picture" menu, when "C.M.S. Adjustment" is set to "sRGB".
- For additional information about the sRGB function, visit "http://www.srgb.com/".

#### 📗 Info

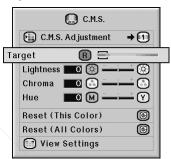
• When "C.M.S. Adjustment" is set to "sRGB", the projected image may become dark, but this does not indicate a malfunction.

### **Selecting the Target Color**

This function allows you to select the target color for adjusting the display characteristics.

Menu operation Page 56

Example: "C.M.S." screen menu



#### **Description of Target Colors**

R	Red	C	Cyan
Y	Yellow	₿	Blue
G	Green	Μ	Magenta

(GB)**-64** 

# Setting the Brightness of the Target Color

This function allows you to set the brightness of the selected target color.

Menu operation Page 56

#### Example: "C.M.S." screen menu



#### **Description of Brightness**

Press <	Press 🕨	
For less brightness of the	For more brightness of the	
target color	target color	

### **Setting the Chromatic Value of the Target Color**

This function allows you to set the chromatic value of the selected target color.

Menu operation Page 56





#### **Description of Chromatic Value**

Press <	Press 🕨
For less chromatic value of	For more chromatic value of
the target color	the target color

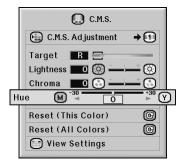


# Setting the Hue of the Target Color

This function allows you to set the hue of the selected target color.

Menu operation Page 56

#### Example: "C.M.S." screen menu



#### **Description of Hue**

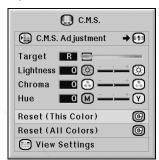
Press <	Press 🕨	
For stronger red of the	For stronger yellow of the	
target color	target color	

### Resetting User-defined Color Settings

This function allows you to reset the specific target color or all of the six colors.

Menu operation Page 56

#### Example: "C.M.S." screen menu



#### **Description of Reset**

Selectable items	Description
	"Lightness", "Chroma" and "Hue" of
	the color selected for "Target" are
	reset.
Reset (All Colors)	"Lightness", "Chroma" and "Hue" of
	all colors are reset.



### **Overview of All Color Settings**

This function allows you to confirm the settings of all the colors.

Menu operation Page 56

Example: "C.M.S." screen menu

🛄 C.M.S.								
C.M.S. Adjustment → 1								
Target   R     Lightness   O     Chroma   O     Hue   O     M   Y								
Reset (This Color) (C) Reset (All Colors) (C)		6	0	0	െ	6	0	
		B	Ð	U	9	B	9	
📑 View Settings	Lightness	0	0	0	0	0	0	1
	Chroma	0	0	0	0	0	0	
	Hue	0	0	0	0	0	0	



# Computer Image Adjustment ("Fine Sync" menu)

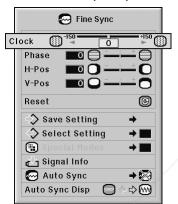
You can adjust the computer image, match the computer display mode, and confirm the input signal using the "Fine Sync" menu.

# Adjusting the Computer Image

Use the Fine Sync function in case of irregularities such as vertical stripes or flickering in portions of the screen.

Menu operation 🌩 Page 56

Example: "Fine Sync" screen menu for INPUT 1 (RGB) mode



#### **Description of Adjustment Items**

Selectable items	Description
Clock	Adjusts vertical noise.
Phase	Adjusts horizontal noise (similar to
	tracking on your VCR).
H-Pos	Centers the on-screen image by
	moving it to the left or right.
V-Pos	Centers the on-screen image by
	moving it up or down.

# 🗞 Note

You can supportially adjust the computer image by setting "Auto Sync" on the "Fine Sync" menu to "Normal" or "High Speed", or pressing image on the projector or image on the remote control. See page 70 for details.
 To reset all adjustment items, select "Reset" and **JECTOR LAMPS AND ACCESSORIES**

# **Saving Adjustment Settings**

This projector allows you to store up to seven adjustment settings for use with various computers.

Menu operation Page 58

Example: "Fine Sync" screen menu for INPUT 1 (RGB) mode

🐼 Fine Sync	
Clock         Image: Clock state s	
Reset 🕑	Resolution Vert Freq
⇒ Save Setting →	1 1024 × 768 60 Hz
♦ Select Setting →	2
Image: Special Modes → ■	3
signal Info	5
Auto Sync 🔶 🕅	6
Auto Sync Disp	7

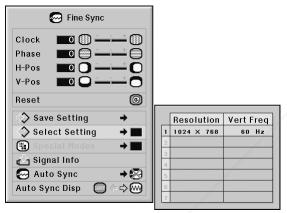
# press 💮.

# Selecting Adjustment Settings

Adjustment settings stored in the projector can be easily accessed.

#### Menu operation Page 58

Example: "Fine Sync" screen menu for INPUT 1 (RGB) mode



# 🗞 Note

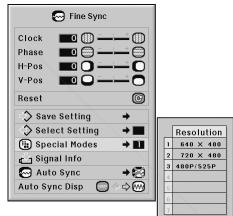
- If a memory has not been set, a resolution and frequency setting will not be displayed.
- When selecting a stored adjustment setting with "Select Setting", you can set the projector in the stored adjustments.

## **Special Mode Setting**

Ordinarily, the type of input signal is detected and the correct resolution mode is automatically selected. However, for some signals, the optimal resolution mode in "Special Modes" on the "Fine Sync" menu may need to be selected to match the computer display mode.

Menu operation Page 58

Example: "Fine Sync" screen menu for INPUT 1 (RGB) mode



#### 🆏 Note

- If your computer displays patterns which repeat every other line (horizontal stripes), flickering may occur which makes the image hard to see.
- See "Checking the Input Signal" on page 70 for information on the currently selected input signal.

FixYourDLP.com Sponsored by M Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

# **Checking the Input Signal**

Menu operation Page 56

Example: "Fine Sync" screen menu for INPUT 1 (RGB) mode

😔 Fine Sync		
Clock 🔲 🛞 🗕 🕂 🛞		
Phase 🔲 😁 🛶 😁		
H-Pos 🔳 🖸 🔂 🛶 🔂		
V-Pos 🗖 🔾 🛶 🗖		
Reset 🕝		
Save Setting +		
♦ Select Setting →		
🕒 Special Modes 🛛 🔶 🔳		
📩 Signal Info	Resolution	1024 × 768
🐼 Auto Sync 🛛 🔿 🕅	Hor Freq	48.4 kHz
Auto Sync Disp	Vert Freq	60 Hz

## 🗞 Note

FixYourDLP.com

- The projector will display the number of scanned lines available from audio-visual equipment such as a DVD player or Digital Video.
- The projector will display the resolution when connecting the computer.

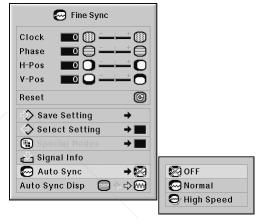
SOURCE FOR



Used to automatically adjust a computer image.

Menu operation Page 58

#### Example: "Fine Sync" screen menu for INPUT 1 (RGB) mode



#### **Description of Auto Sync Adjustment**

Selectable items	Description
OFF	Auto Sync adjustment is not automati-
	cally performed.
Normal High Speed	Auto Sync adjustment will occur when
	the projector is turned on or when the
	input signals are switched, when
	connected to a computer.
	"Normal" takes more time than "High
	Speed" for more accurate Auto Sync
	adjustment.

# 🗞 Note

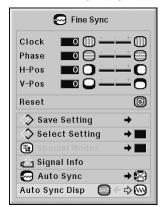
- Auto Sync adjustment is also performed by pressing (a) and the projector or (a) on the remote control.
- The Auto Sync adjustment may take some time to complete, depending on the image of the computer connected to the projector
- When the optimum image cannot be achieved with Auto Sync adjustment, use manual adjustments. (See page **68**.)
- When is pressed while "Auto Sync" is "OFF" or "High Speed", Auto Sync will be executed in "High Speed" mode. If the button is pressed again within one minute, Auto Sync will be executed in "Normal" mode.

# **Auto Sync Display Function**

Used to set the display during Auto Sync.

Menu operation Page 56

# Example: "Fine Sync" screen menu for INPUT 1 (RGB) mode



#### **Description of Auto Sync Display**

Selectable items	Description
_	The image set as a background image is projected. See page <b>77</b> .
<b>W</b>	The computer image being adjusted is displayed.



# Audio Adjustment ("Audio" menu)

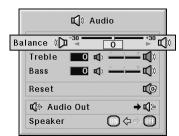
You can adjust the projector's audio to your preferences using the "Audio" menu.

# Adjusting the Audio

This function allows you to adjust the projector's audio.

Menu operation 🌩 Page 56

#### Example: "Audio" screen menu



#### **Description of Adjustment Items**

Selectable items	Press <	Press 🕨
Balance	Increased audio from	Increased audio from
	the left speaker	the right speaker
Treble	For weaker treble	For stronger treble
Bass	For weaker bass	For stronger bass

## 🗞 Note

• To reset all adjustment items, select "Reset" and press .

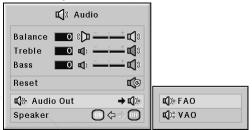
FixYourDLP.com Sponsored by M Discount-Merchant.C THE TRUSTED SOURCE FOR PROJECT

# Setting the Audio Output Type

This function determines whether the audio level output from the AUDIO OUTPUT terminal is fixed or variable by linking with VOLUME.

Menu operation Page 58

#### Example: "Audio" screen menu



#### **Description of Audio Out Settings**

Selectable items	Description
FAO	Audio output that does not vary in
(Fixed Audio	strength with the volume level of the
Output)	source projector.
VAO	Audio output that varies in strength with
	the volume level of the source projec-
Audio Output)	tor.

#### 🛄 Info

 When "Audio Out" has been set to "VAO", first make sure to lower the volume of the projector before turning the power on or off and when switching the input.

# 🗞 Note

When the projector is connected to audio equipment:

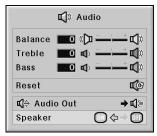
- It is recommended that "FAO" be selected on "Audio Out". Because the audio signal from the audio equipment does not vary in strength with the volume level of the projector, you can enjoy better sound.
- When "FAO" be selected on "Audio Out", video and
  - audio may not synchronize.
    When connecting audio equipment that has a function for adjusting audio delay time, adjust the delay time for synchronizing video and audio.
- When the audio equipment does not have such a function and the unsynchronized video and audio bothers you, select "VAO" on "Audio Out". Selecting "VAO" synchronizes video and audio automatically.

# **Speaker Setting**

This function allows you to turn the audio output of the internal speaker on or off when the projector is connected to an external amplifier.

Menu operation Page 56





#### **Description of Speaker Settings**

Selectable items	Description
ON	The audio signal is output from the internal speaker.
OFF	The audio signal is not output from the internal speaker.



# Using the "Options (1)" Menu

You can use the "Options (1)" menu to enhance the usage for the projector.

# **Displaying Dual Pictures** (Pict in Pict)

The Pict in Pict (picture in picture) function allows you to display two pictures on the same screen. You can display the image input from INPUT 4 or 5 as an inset picture overlapping the main picture input from INPUT 1, 2 or 3.

Menu operation Page 56

#### Example: "Options (1)" screen menu for INPUT 1 (RGB) mode



# 🗞 Note

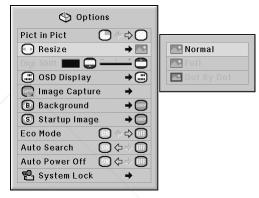
- Inset picture can only be displayed in composite video or S-video signal of NTSC/PAL/SECAM.
- The audio of the inset picture will come out of the projector's speakers.
- While the "Pict in Pict" function is working, other functions except the "FREEZE" function cannot be used. The "FREEZE" function only works for the inset picture.
- The "Pict in Pict" function does not work when the following signals are input to the main picture.
  - UXGA/SXGA+/SXGA signal
- 480I/480P/540P/576I/576P/720P/1035P/1080I signal
   Interlaced RGB signal
   Alsignals (when 'Resize' is set to "Dot by Dot")
- All signals (when "Resize" is set to "Dot by Dot")
   No signal (or when the resolution or refresh rate

# **Setting the Resize Mode**

Depending on the input signal, you can select the screen image.

Menu operation Page 58

#### Example: "Options (1)" screen menu for INPUT 1 (RGB) mode



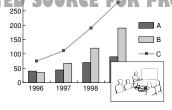
#### Selectable Items of Resize Mode

When inputting RGB signal	When inputting DTV/video signal
Normal	Normal
Full	Full
Dot By Dot	Border
-	Stretch
_	Smart Stretch

#### 🗞 Note

- For details of the Resize mode, see pages 48 and 49.
- You can also press on the remote control to change the resize mode. (See page **48**.)

(vertical frequency) of the signal is changed) LCOM (800) 281-8860 IE TRUSTER SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

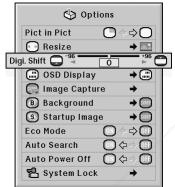


# Shifting the Projected Image Vertically (Digital Shift)

For easier viewing, this function shifts the image projected on the screen up or down eliminating either the upper or lower black band found in 16:9 and other wide aspect ratios.

Menu operation Depage 56

#### Example: "Options (1)" screen menu for INPUT 1 (RGB) mode



#### **Description of Digital Shift**

Press <	Press 🕨
Shifts the projected image	Shifts the projected image
down.	up.

# Note 📎

• The "Digital Shift" function works with the "BOR-DER", "STRETCH" or "SMART STRETCH" im-

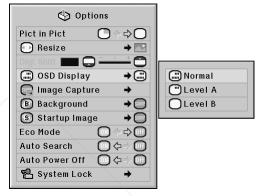
age. (See page 49.) Fix YourDLP.com

# **Setting On-screen Display**

This function allows you to turn the on-screen messages on or off.

Menu operation Page 58

#### Example: "Options (1)" screen menu for INPUT 1 (RGB) mode



#### **Description of OSD Display Settings**

Selectable items	Description
Normal	All on-screen displays are displayed.
	INPUT/VOLUME/MUTE/BLACK SCREEN/
	FREEZE/AUTO SYNC/ENLARGE/ "An in-
Level A	valid button has been pressed." are not dis-
	played.
Level B	All on-screen displays are not displayed. (ex-
	cept the menu, H & V LENS SHIFT, KEY-
	STONE, FOCUS, ZOOM, "All buttons on
	Projector are locked." and warning displays)

# Note 🔊

• While "Keylock Level" is "Level A" or "Level B", pressing ()) The displays "All buttons on Projector are locked." despite the "OSD Display"

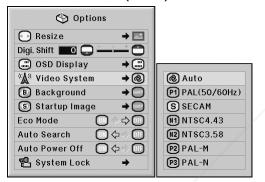
Discount-Merchant.com (800) 281-886 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

# **Setting the Video System**

The video input system mode is factory preset to "Auto"; however, a clear picture from the connected audio-visual equipment may not be received, depending on the video signal difference. In that case, switch the video signal.

Menu operation Page 58

Example: "Options (1)" screen menu for INPUT 4 (video) mode



#### **Description of Video Systems**

Selectable items	Description
PAL (50/60 Hz)	When connected to PAL video equipment.
SECAM	When connected to SECAM video equipment.
NTSC4.43	When reproducing NTSC signals in PAL
	video equipment.
NTSC3.58	When connected to NTSC video equipment.

# 🗞 Note

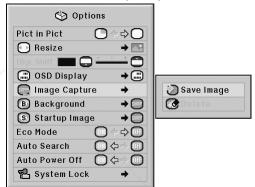
- The video signal can only be set in INPUT 4 or INPUT 5 mode.
- When "Video System" is set to "Auto", you may not receive a clear picture due to signal differ-Fences: Should GMTS occur, switch to the video system of the source signal.

# **Capturing Projected Images**

This projector allows you to capture projected images (RGB signals) and set them as a startup image, or background image when no signals are being received.

Menu operation Page 58

Example: "Options (1)" screen menu for INPUT 1 (RGB) mode



#### 🗞 Note

- Only images from XGA (1024 × 768) non-interlace signals in INPUT 1, INPUT 2 or INPUT 3 mode can be captured.
- . The saved image is reduced to 256 colors.
- Images from equipment connected to INPUT 4 or INPUT 5 terminal cannot be captured.
- Only one image can be captured and saved.
- The color of images may differ before and after saving if an image is captured on which image adjustment has been performed using the "C.M.S." function.
- To delete the captured image, select "Delete", and then press .

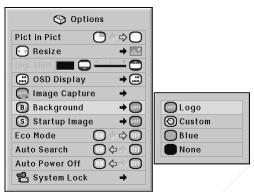
 While "Video System" is set to "Auto", when PAL-M or PAL-N signal is input, the image from PAL signal will be displayed.
 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

# Selecting the Background Image

# **Selecting the Startup Image**

#### Menu operation 🗭 Page 58

#### Example: "Options (1)" screen menu for INPUT 1 (RGB) mode



#### **Description of Background Images**

Selectable items	Description
Logo	Default image
Custom	User customized image (e.g. company logo)
Blue	Blue screen
None	Black screen

# 🗞 Note

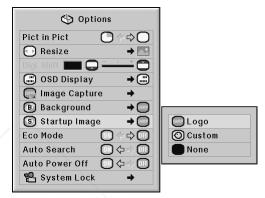
- You can set a captured image as a background image by selecting "Custom".
- When "Custom" is selected, an image saved using "Image Capture" can be displayed as a background image.

# FixYourDLP.com

Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

#### Menu operation Page 58

#### Example: "Options (1)" screen menu for INPUT 1 (RGB) mode



#### **Description of Startup Images**

Selectable items	Description
Logo	Default image
Custom	User customized image (e.g. company logo)
None	Black screen

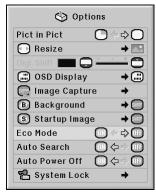
## 📎 Note

- You can set a captured image as a startup image by selecting "Custom".
- When "Custom" is selected, an image saved using "Image Capture" can be displayed as a startup image.

## Eco Mode



#### Example: "Options (1)" screen menu for INPUT 1 (RGB) mode



#### **Description of Eco Mode**

Selectable items	Brightness	Power consumption (When using AC 100V)	Lamp life
ON	Approx. 80%	Approx. 505 W	Approx. 3,000 hours*
OFF	100%	630 W	Approx. 2,000 hours*

\* This is a reference value and is not guaranteed.

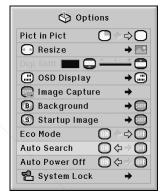
# 🗞 Note

• When "Eco Mode" is set to "ON", the power consumption will decrease and the lamp life will extend. (Projection brightness decreases approximately 20%.)

# Detecting the Input Signals Automatically

Menu operation Page 56

#### Example: "Options (1)" screen menu for INPUT 1 (RGB) mode



#### **Description of Auto Search**

Selectable items	Description
ON	Automatically searches for and switches to
	the input mode in which signals are being
	received.
OFF	"Auto Search" does not function.

# 🗞 Note

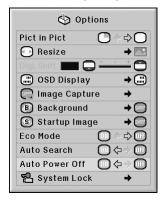
• While the "Auto Search" function is detecting the input signal, pressing a button on the projector or the remote control stops the "Auto Search" function. After the "Auto Search" function finishes completely, press the desired button.

## FixYourDLP.com Spread by M Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

# **Auto Power Off Function**

#### Menu operation 🌩 Page 56

#### Example: "Options (1)" screen menu for INPUT 1 (RGB) mode



#### **Description of Auto Power Off**

Selectable items	Description
ON	The projector automatically enters the standby mode when no input signal is
	detected for 15 minutes or longer.
OFF	The "Auto Power Off" function will be disabled.

# 🗞 Note

• When "Auto Power Off" is set to "ON", 5 minutes before the projector enters the standby mode, the message "Enter STANDBY mode in X min." will appear on the screen to indicate the remaining minutes.

FixYourDLP.com

# **System Lock Function**

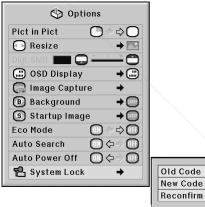
This function prevents unauthorized use of the projector. Once this function is activated, users must enter the correct keycode each time the projector is turned on. We suggest you record the keycode in a safe place where only authorized users have access.

#### 📕 Info

 If you lose or forget your keycode, contact your nearest Sharp Authorized Projector Dealer or Service Center (see page 101). Even if the product warranty is valid, the keycode reset will incur a charge.

Menu operation Page 58

#### Example: "Options (1)" screen menu for INPUT 1 (RGB) mode



Old Code	-	-	-	-
New Code	-	-	-	-
Reconfirm	-	-	-	-

## Setting the keycode

# 1 Select "System Lock" on the "Options (1)" menu, then press ▶.

- A message is displayed.
- Read this message, and press
- 2 Press the 4 buttons on the remote control or on the projector to enter the preset keycode in "Old Code".
  - When setting the keycode for the first time, press ▼ on the projector for four times.

Old Code	<b>-</b>
New Code	
Reconfirm	
Recomm	

# Using the "Options (1)" Menu

# 🗞 Note

- If you input a wrong keycode, the cursor returns to the first point of the "Old Code".
- The preset keycode is 4 ▼ buttons on the projector. If this keycode is set, the keycode input screen does not appear when turning the power on.

**3** Press the 4 buttons on the remote control or on the projector to enter the new keycode in "New Code".

## 🗞 Note

- You cannot use the following buttons for keycode:
  - ON button
- STANDBY button
- ENTER button
- L-click button
- R-click/UNDO button
- MENU button
- ZOOM buttons
- FOCUS buttons
- H & V LENS SHIFT button
- System Lock function recognizes each button on the remote control or on the projector as an individual button, even if they share the same button name. If you set the keycode with the buttons on the projector, use only those buttons on the projector. If you set the keycode with the buttons on the remote control, use only those buttons on the remote control.
  - Enter the same keycode in "Reconfirm".

#### WourDLP.com

#### Not displaying the keycode input screen when turning the projector on • Press ▼ on the projector for four times in steps 2 and 3 above. ED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES When the Sustem Lock is set

#### When the System Lock is set

 When System Lock is set, the keycode input screen appears after the power is turned on.
 When it appears, enter the right keycode to start projection. Failure to enter the keycode will cause images not to be projected even when signals are entered to the projector.

#### **Changing the keycode**

Old Code	
New Code	
Reconfirm	

- Press the 4 buttons on the remote control or on the projector to enter the preset keycode in "Old Code".
- **2** Press the 4 buttons on the remote control or on the projector to enter the new keycode in "New Code".
- **3** Enter the same keycode in "Reconfirm".

#### When the system lock is set

If you have set the system lock, enter the keycode and follow the procedure below to release the system lock.

▼Input screen for keycode



#### \delta Note

- When System Lock is set, the keycode input screen appears after the power is turned on.
- If no keycode is entered, the image will not be displayed, even if the projector receives the input signal.
- **1** Press  $\square$  on the remote control or  $\bigcirc$  on the projector to turn on the projector.
- **2** When the keycode input screen appears, enter the right keycode to start projection.

# 🗞 Note

 System Lock function recognizes each button on the remote control or on the projector as an individual button, even if they share the same button name. If you set the keycode with the buttons on the projector, use only those buttons on the projector. If you set the keycode with the buttons on the remote control, use only those buttons on the remote control.

Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

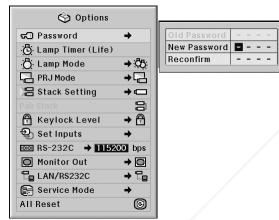
# Helpful Functions Set during Installation ("Options (2)" menu)

## Setting a Password

- · There is no factory preset for the password, so the "Options (2)" menu is enabled.
- · If you do not want others to operate the "Options (2)" menu, set a password.

Menu operation Page 58

#### Example: "Options (2)" screen menu



- Select "Password" from the "Options (2)" menu, and press .
- 2 Press  $\blacktriangle$  or  $\nabla$  to set the first digit in "New Password" and then press .
- 3 Enter the remaining 3 digits and press (\*\*\*).

Axenter the same password in "Reconfirm" and press (...).

t.com (800) 281-8860 PROJECTOR LAMPS AND ACCESSORIES 50

. The password must be entered to use the "Options (2)" menu when a password has been set.

#### Changing the password

Old Password	-	-	-	-
New Password	-	-	-	١
Reconfirm	-	-	-	-

- 1 Press  $\blacktriangle$ ,  $\triangledown$  and  $\triangleright$  to enter the password in "Old Password" and press 💮.
- **2** Press  $\blacktriangle$ ,  $\blacktriangledown$  and  $\blacktriangleright$  to set the new password in "New Password" and press 💮.
- 3 Enter the same 4-digit password in "Reconfirm" and press 💮

# Note 🚫

. If you do not want to set a password, leave the fields blank in steps 2 and 3 and press (.....).

To cancel the password settings, press

If You Forget Your Password If you forget the password, delete it using the following procedure and set a new password. Press  $\overset{\circ}{\mathbb{O}} \rightarrow \overset{\circ}{\mathbb{O}} \rightarrow \overset{\circ}{\mathbb{O}} \rightarrow \overset{\circ}{\mathbb{O}} \rightarrow \overset{\circ}{\mathbb{O}} \rightarrow \overset{\circ}{\mathbb{O}} \rightarrow \overset{\circ}{\mathbb{O}} \rightarrow \overset{\circ}{\mathbb{O}}$ 

# Checking the Lamp Life Status

You can confirm the cumulative lamp usage time and the remaining lamp life (percentage).

Example: "Options (2)" screen menu

Menu operation Page 56

#### Options GO Password 5h (99%) Lamp 1 Ö 🖧 Lamp Timer (Life) Lamp 2 Ö 5h (99%) C Lamp Mode → 05 PRJ Mode ⇒⊡ 🗄 Stack Setting → 🚥 9 → 🖰 🛱 Keylock Level �] Set Inputs -INCOM RS-232C → 115200 bps O Monitor Out → 🖸 LAN/RS232C + ₽ 🕞 Service Mode ⇒ All Reset G

#### **Description of Lamp Timer (Life)**

	Remaining lamp life			
Lamp usage condition	100%	5%		
Operated exclusively while "Eco Mode" is "ON".	Approx. 3,000 hours*	Approx. 150 hours*		
Operated exclusively while "Eco Mode" is "OFF".	Approx. 2,000 hours*	Approx. 100 hours*		

\* This is a reference value and is not guaranteed.

#### Six Your DLP.com

 It is recommended that the lamp be changed when the remaining lamp life becomes 5%.
 The table above indicates rough estimates in the case of using only in each mode shown.

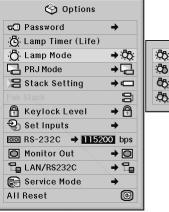
• The lamp life may vary depending on the usage condition.

# **Setting the Lamp Mode**

This function allows you to select the usage of the two lamps installed in the projector.

Menu operation Page 58

#### Example: "Options (2)" screen menu



🖏 Both Lamps
🖏 Lamp 1 Only
🖧:Lamp 2 Only
Contract Equal Use

#### **Description of Lamp Mode**

Selectable items	Description
Both Lamps	Both lamps are used for greater
	brightness.
Lamp 1 Only	The lamp 1 is used.
	When the lamp 1 burns out, the lamp 2
	automatically switches in use.
Lamp 2 Only	The lamp 2 is used.
	When the lamp 2 burns out, the lamp 1
	automatically switches in use.
Equal Use	Both lamps are used alternately for
	certain periods.

# **Reversing/Inverting Projected Images**

This projector is equipped with a reverse/invert image function that allows you to reverse or invert the projected image for various applications.

Example: "Options (2)" screen menu

Menu operation Page 58

#### Options 圮 Password 🖧 Lamp Timer (Life) 👸 Lamp Mode ⇒ 05 🔁 PRJ Mode ⇒⊡ 💾 Front 💾 Ceiling+Front 🗄 Stack Setting → 🚥 8 Rear 🖵 → 🖰 骨 Keylock Level 🖆 Ceiling+Rear €) Set Inputs + 115200 bps O Monitor Out + 🖸 LAN/RS232C → 🔓 🕞 Service Mode + All Reset G

#### **Description of PRJ Modes**

Selectable items	Description
Front	Normal image
Ceiling + Front	Inverted image
Rear	Reversed image
Ceiling + Rear	Reversed and inverted image



• This function is used for the reversed image and ceiling-mount setups. (See page 23.)

-Merci

SOURCE FOR

Sponsored by QM

# **Controlling Multiple Projectors** with the One Remote Control

This function allows you to control multiple projectors with the one remote control during the stack projection or the video wall projection. When using this function, connect the projectors with LAN cables and assign a projector as the master and the other projectors as the slaves. See page 35 for connecting LAN cables.

#### Menu operation Page 58

#### Example: "Options (2)" screen menu

🇳 Options		
圮 Password	+	
👸 Lamp Timer (Life)		
👸 Lamp Mode	⇒ Ö5	
PRJ Mode	⇒⊡	
🔚 Stack Setting	→□	normal 🖾
	00	🔚 Master
🛱 Keylock Level	→ 🗗	🔚 Slave
🍨 Set Inputs	+	
1152 →	00 bps	
Monitor Out	→ 🖸	
LAN/RS232C	⇒ 🖬	
🕞 Service Mode	+	
All Reset	G	

#### **Description of Stack Setting**

Selectable items	Description
Normal	The stack setting is not available.
Master	Set the projector as the master.
Slave	Set the projector as the slave.

## 🕙 Note

- When controlling multiple projectors with the one remote control, settings via web browser are required. Refer to the "SETUP GUIDE" contained on the supplied CD-ROM for details.
- Only when controlling two projectors with the one remote control, using "Pair Stack" allows
- you to skip settings via web browser. (See page 85.)
- When "Slave" is selected on "Stack Setting", the slave projector cannot be controlled with the remote control.

To control the slave projector with the remote control, connect the remote control to the projector. (See page **18**.)

# Shortcut to Make Projector Stack Settings

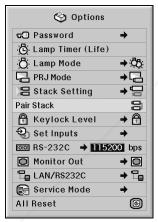
Normally, settings via web browser are required for the stack projection. You can skip the settings via web browser by using "Pair Stack", only when you use the two projectors for the stack projection.

Menu operation Page 56

# 🗞 Note

• Before setting "Pair Stack", select "Master" or "Slave" on "Stack Setting".

#### Example: "Options (2)" screen menu



## Select "Pair Stack" on the "Option

(2)" menu, and then press (

• The confirmation screen will be displayed.

# 2 Select "OK", and then press 💮 .

•The network settings of the projector will com (800) 281-8860

E TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

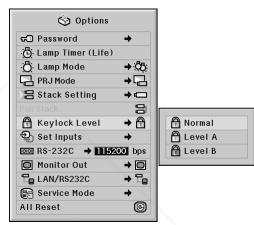
Master	Slave
192.168.150.2	192.168.150.3
255.255.255.0	255.255.255.0
0.0.0.0	0.0.0.0
(Reset)	(Reset)
(Reset)	(Reset)
10002	10002
	255.255.255.0 0.0.0.0 (Reset) (Reset)

# Locking the Operation Buttons on the Projector

This function can be used to lock the use of certain operation buttons on the projector.

Menu operation Page 58

#### Example: "Options (2)" screen menu



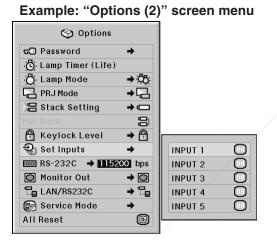
#### **Description of Keylock Level**

Selectable items	Description	
🔁 Normal	All operation buttons are functional.	
🔁 Level A	Only INPUT/VOLUME buttons on the	
	projector are available.	
🔂 Level B	All operation buttons on the projector	
	are unavailable.	

# Bypassing Unused Input Selections

This function allows you to skip the input mode that you rarely use. You can skip the input modes when pressing INPUT 1, 2, 3 button or INPUT 4, 5 button on the projector.

Menu operation Page 58



#### **Description of Set Inputs**

Selectable	items	Description
ON		Sets the INPUT 1—5 mode select-
INPUT 1-5	ON	able respectively.
OFF	OFF	Sets the INPUT 1—5 mode unavail-
	OFF	able respectively.

FixYourDLP.com

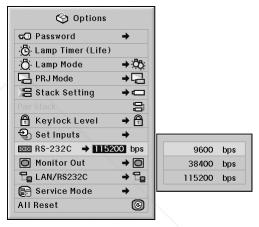
Sponsored by DM

# Selecting the Transmission Speed (RS-232C)

Make sure that both the projector and computer are set for the same baud rate.

Menu operation Page 58

#### Example: "Options (2)" screen menu



#### **Description of RS-232C**

Selectable items	Description
9600 bps	Transmission speed is slow.
38400 bps	\$
115200 bps	Transmission speed is rapid.

## 📎 Note

- Refer to the "SETUP GUIDE" contained on the supplied CD-ROM for RS-232C Specifications and Command Settings.
- Refer to the computer's operation manual for instructions for setting the computer's baud rate.

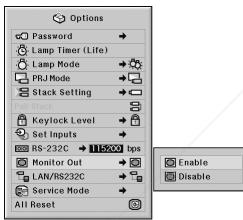
SCOUNT-Merchant.com (800) 281-88 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

# **Monitor Output Settings**

When the Monitor Out has been set to "Enable", the monitor output is activated and power is consumed even in the standby mode. It is recommended that the Monitor Out be set to "Disable" when it is not connected. This reduces power consumption when the projector is in the standby mode.

Menu operation Page 58

#### Example: "Options (2)" screen menu



#### **Description of Monitor Out**

Selectable items	Description
Enable	The monitor output function is activated even if the projector is in standby mode.
Disable	The monitor output function is switched off when the projector is in standby mode.



When the LAN/RS232C has been set to "Enable", the LAN/RS232C is activated and power is consumed even in the standby mode. It is recommended that the LAN/RS232C be set to "Disable" when it is not connected. This reduces power consumption when the projector is in the standby mode.

Menu operation Page 58

#### Example: "Options (2)" screen menu

🍪 Options		
도 Password	+	
🔆 Lamp Timer (Life)		
B Lamp Mode	⇒ Öö:	
PRJ Mode	→ 🔂	
🗄 Stack Setting	→ 🚥	
	00	
🛱 Keylock Level	→	
ञ्चे Set Inputs	+	
1152 NS-232C →	00 bps	
🔘 Monitor Out	→ 🖸	
LAN/RS232C	→ °e	Enable
🕞 Service Mode	<b>→</b>	∑∎Disable
All Reset	Ø	

#### **Description of LAN/RS232C**

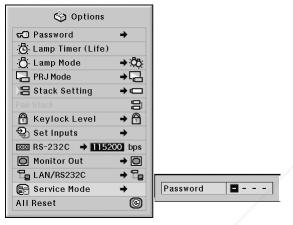
Selectable items	Description
Enable	The LAN/RS232C function is activated even if the projector is in standby mode.
Disable	The LAN/RS232C function is switched off when the projector is in standby mode.

FixYourDLP.com Sponsored by DM Sponsor

## **Service Mode**

Only the service centers use the menu. Do not use the menu.

#### Example: "Options (2)" screen menu



# **Returning to the Default** Settings

This function allows you to initialize the settings you have made in the projector.

Menu operation Page 56

#### Example: "Options (2)" screen menu



#### 🛞 Note

About the network settings

• "IP Address", "Subnet Mask", "Default Gateway" and other network setting items are initialized.

The following items or menu cannot be initialized. • "C. M. S." menu

- "Lightness", "Chroma" and "Hue" respectively saved for Custom 1-3 on the "C.M.S." menu.
- "Fine Sync" menu
- Special Modes
- "Options (1)" menu System Lock
- "Options (2)" menu

Lamp Timer (Life) "Language" menu

 Image stored using "Image Capture SOURCE FOR

FixYourDLP.com

Sponsored by DM

# Selecting the On-screen Display Language

The projector can switch the on-screen display language among 11 languages: English, German, Spanish, Dutch, French, Italian, Swedish, Portuguese, Chinese, Korean or Japanese.

Menu operation Page 58

FixYourDLP.com

Sponsored by DM

#### Example: "Language" screen menu

nglish eutsch spañol	
spañol	
lederlands	
rançais	
taliano	
venska	
ortuguês	
く语	
반국어	
本語	

# **Overview of All Menu Set**tings

This function can be used to display all the adjusted settings as a list on the screen.

Menu operation Page 58

Example:	"Status"	screen	menu
----------	----------	--------	------

🖸 Picture / 🕻	🕼 Audio	😔 Fine Sync	🍪 🍪 Options	/ Other	
88 ⇔O Picture Mode	2500 CLR Temp	O O Clock	⊖ ⇔ 🖾 Resize	Oh (100%) Lamp 1	© ⇔© Monitor Out
O O Contrast	P ⇔ Progressive	Phase 0	Digi. Shift	Oh (100%) Lamp 2	LAN/RS232C
O D Bright	C.M.S. Ad justment		GED Display	-Ö; ⇔ÖÖ; Lamp Mode	
Color 0	Ø ≎O DNR	V-Pos	B ⇔ Background	PRJ Mode ⇔⊡	
O 0 Tint	*⊡ ¢@ Signal Type	Select Setting	S ⇒ Startup Image	)吕 ⇔⊂ Stack Setting	XG-PH50X Projector
C Sharp	¶© 0 Balance	Special Modes	 Eco Mode	B ⇒ B Keylock Level	192.168.150.2 IP Address
Red 0	∎¶» 0 Treble	⊖ ⇔⊗ Auto Sync	□ ← \$ □ Auto Search	1,2,3,4,5 Set Inputs	08:00:1f:98:eb:68 MAC Address
O O Green	∎ Bass	● († 🗟) 💮 Auto Sync Disp	〇 合 🗘 Auto Power Off	RS-232C	0.91 Firmware1
O O Blue	⊈}⇒ ⇔⊄]≫ Audio Out				0.90 Firmware2
D     Bright Boost	C ⇔ C Speaker				Serial Number

## 🔕 Note

• You can refer to the network information of the projector (the projector name, IP address and Mac address) on the "Status" list.

#### **Description of Network Information**

Displayed items	Description		
Projector	The projector name is displayed.		
	(Factory preset: XG-PH50X)		
IP Address	The IP address set for the		
	projector is displayed.		
	(Factory preset: 192.168.150.2)		
MAC Address	The MAC address of the projector		
	is displayed.		

 For information on how to change the projector name and IP address, see "SETUP GUIDE" contained in the supplied CD-ROM.

SCOUNT-Merchant.com (800) 281-88 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

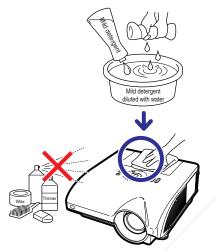
# Maintenance

#### Cleaning the projector

- Ensure the power cord is unplugged before cleaning the projector.
- The cabinet as well as the operation panel is made of plastic. Avoid using benzene or thinner, as these can damage the finish on the cabinet.
- Do not use volatile agents such as insecticides on the projector.

Do not attach rubber or plastic items to the projector for long periods.

The effects of some of the agents in the plastic may cause damage to the quality or finish of the projector.



- Wipe off dirt gently with a soft flannel cloth.
- When the dirt is hard to remove, soak a cloth in a mild detergent diluted with water, wring the cloth well and then wipe the projector.

Strong cleaning detergents may discolor, warp or damage the coating on the projector. Make sure to test on a small, inconspicuous area on the projector before use.

#### **Cleaning the lens**

Use a commercially available blower or lens cleaning paper (for glasses and camera lenses) for cleaning the lens. Do not use any liquid type cleaning agents, as they may wear off the coating film on the surface of the lens.

As the surface of the lens can easily get damaged, ensure not to scrape or hit the lens.



#### Cleaning the air vents and the intake vent cover

Use a vacuum cleaner to clean dust from the exhaust vent, the intake vents and the intake vent cover (on the bottom of the projector).

#### 🛄 Info

• If you want to clean the air vents and the intake vent cover during projector operation, ensure to press () ==== on the projector or () on the remote control and put the projector into standby mode. After the cooling fan has stopped, unplug the power cord from the AC socket and clean the air vents and the intake vent cover.

# Cleaning the exhaust and intake vents

Cleaning the intake vent cover







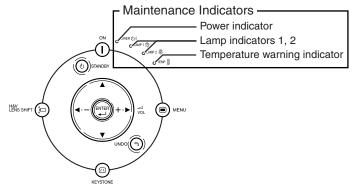
• The air vents and the intake vent cover should be cleaned every 100 hours of use. Clean the air vents and the intake vent cover more often when the projector is used in a dusty or smoky location.

• Ensure the intake vent cover is securely installed. The power will not turn on unless it is correctly installed.

GB**-90** 

# **Maintenance Indicators**

- The warning lights on the projector indicate problems inside the projector.
- If a problem occurs, either the temperature warning indicator or the lamp indicator will illuminate red, and the projector will enter the standby mode. After the projector has entered the standby mode, follow the procedures given below.



#### About the temperature warning indicator



If the temperature inside the projector increases, due to blockage of the air vents, or the setting location, "TEMP." will illuminate in the lower left corner of the picture. If the temperature keeps on rising, the lamp will turn off and the temperature warning indicator will blink, the cooling fan will run for a further 90 seconds, and then the projector will enter the standby mode. After "TEMP." appears, ensure to perform the measures described on page 92.

#### About the lamp indicator

Change The Lamp. (LAMP 1)

"Change The Lamp. (LAMP 2)" is displayed when the remaining life of the lamp 2 becomes 5% or less.

- When the remaining lamp life becomes 5% or less, "Wat" (yellow) and "Change The Lamp. (LAMP 1/ 2)" will be displayed on the screen.
- When the percentage becomes 0%, it will change to "" (red), the lamp will automatically turn off. At this time, the lamp indicator will illuminate in red.

If you try to turn on the projector a fourth time without replacing the lamp, the lamp whose life is 0% will not light up.

THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

# **Maintenance Indicators**

Maintenance indicator		Problem Cause		Possible solution			
	Normal Abnorma		Problem	Cause	Possible solution		
	Off	Red on (Standby)	The internal temperature is abnormally high.	Blocked air intake	• Relocate the projector to an area with proper ventilation. (See page 9.)		
Temperature warning indicator				<ul> <li>Cooling fan break- down</li> <li>Internal circuit failure</li> <li>Clogged air intake</li> <li>Clogged intake vent cover</li> </ul>	<ul> <li>Take the projector to your nearest Sharp Authorized Projector Dealer or Service Center for repair. (See page 101.)</li> <li>Clean the air vents and the intake vent cover. (See page 90.)</li> </ul>		
	Green on Green blinks when the lamp is warming up.)	ks mp	The lamp does not illuminate.	The lamp is shut down abnormally.	• Disconnect the power cord from the AC outlet, and then connect it again.		
Lamp indicators 1, 2			Time to change the lamp.	Remaining lamp life becomes 5% or less.	<ul> <li>Carefully replace the lamp. (See page 94.)</li> <li>Take the projector to your nearest Sharp Authorized Projector Dealer</li> </ul>		
					Red on (Standby)	The lamp does not illuminate.	• Burnt-out lamp • Lamp circuit failure
Power indicator	Green on/ Red on	Red blinks	The power indicator blinks in red when the projector is on.	• The intake vent cover is open.	<ul> <li>Securely install the cover.</li> <li>If the power indicator blinks even when the intake vent cover is securely installed, contact your nearest Sharp Authorized Projector Dealer or Service Center for advice. (See page 101.)</li> </ul>		

#### 🛄 Info

- If the temperature warning indicator blinks and the projector enters the standby mode, the temperature warning indicator starts to illuminate. Check whether any of the ventilation holes are blocked (see page 9) and then try turning the power back on. Wait until the projector has cooled down completely before plugging in the power cord and turning the power back on. (At least 10 minutes.)
- If the power is turned off for a brief moment due to power outage or some other cause while using the projector, and the power supply recovers immediately after that, the lamp indicator will illuminate in red and the lamp may not be lit. In this case, unplug the power cord from the AC outlet, replace the power cord in the AC outlet and then turn the power on again.
- Do not unplug the power cord after the projector has entered the standby mode and while the cooling fan is running. The cooling fan runs for about 90 seconds.



# **Regarding the Lamp**

## Lamp

- It is recommended that the lamp units (optional: AN-PH50LP1 and AN-PH50LP2) be replaced when the remaining lamp life becomes 5% or less, or when you notice a significant deterioration in the picture and color quality. The lamp life (percentage) can be checked with the on-screen display. See page 83.
- Purchase a replacement lamp unit of type AN-PH50LP1 and AN-PH50LP2 from your place of purchase, nearest Sharp Authorized Projector Dealer or Service Center.

#### **IMPORTANT NOTE TO U.S. CUSTOMERS:**

The lamp included with this projector is backed by a 90-day parts and labor limited warranty. All service of this projector under warranty, including lamp replacement, must be obtained through a Sharp Authorized Projector Dealer or Service Center. For the name of the nearest Sharp Authorized Projector Dealer or Service Center, please call toll-free: 1-888-GO-SHARP (1-888-467-4277).

Hg LAMP CONTAINS MERCURY For State Lamp Disposal Information www.lamprecycle.org or 1-800-BE-SHARP

U.S.A. ONLY

## **Caution Concerning the Lamp**

- This projector utilizes a pressurized mercury lamp. A loud sound may indicate lamp failure. Lamp failure can be attributed to numerous sources such as: excessive shock, improper cooling, surface scratches or deterioration of the lamp due to a lapse of usage time. The period of time up to failure largely varies depending on the individual lamp and/or the condition and the frequency of use. It is important to note that failure can often result in the bulb cracking.
- When the lamp indicator and on-screen display icon are illuminated, it is recommended that the lamp be replaced with a new one immediately, even if the lamp appears to be operating normally.
- Should the lamp break, the glass particles may spread inside the lamp cage or gas contained in the lamp may be vented into the room from the exhaust vent. Because the gas in this lamp includes mercury, ventilate the room well if the lamp breaks and avoid all exposure to the released gas. In case of exposure to the gas, consult a doctor as soon as possible.
- Should the lamp break, there is also a possibility that glass particles may spread inside of the projector. In such a case, it is recommended you contact your nearest Sharp Authorized Projector Dealer or Service Center to assure safe operation.

# Replacing the Lamp

# Caution

- Do not remove the lamp unit from the projector right after use. The lamp will be very hot and may cause burn or injury.
- Wait at least one hour after the power cord is disconnected to allow the surface of the lamp unit to fully cool before removing the lamp unit.
- Carefully change the lamp by following the instructions described in this section. \*If you wish, you may have the lamp replaced at your nearest Sharp Authorized Projector Dealer or Service Center.

If the new lamp does not illuminate after replacement, take your projector to the nearest Sharp Authorized Projector Dealer or Service Center for repair.

THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

rom

(800) 281-8860

# Removing and Installing the Lamp Unit

#### 🛄 Info

- Ensure the lamp unit is removed using the handle. Ensure the glass surface of the lamp unit or the inside of the projector are not touched.
- To avoid injury to yourself and damage to the lamp, ensure to carefully follow the steps below.
- Do not loosen other screws except for the lamp unit cover and lamp unit.

(Only the silver screws are loosened.)

# **1** Press (a) STANDBY on the projector or STANDBY on the remote control to put the projector into standby mode.

• Wait until the cooling fan stops.

#### Warning!

• Do not remove the lamp unit from the projector right after use. The lamp and parts around the lamp will be very hot and may cause burn or injury.

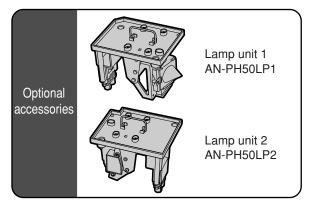
# **2** Disconnect the power cord.

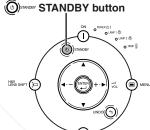
- Unplug the power cord from the AC socket.
- Leave the lamp until it has fully cooled down (about 1 hour).

# **3** Remove the lamp unit cover.

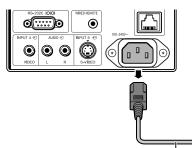
• Loosen the user service screw (①) that secures the lamp unit cover. Remove the Fixed amp unit cover (②).

Sponsored by DM



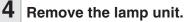






Power cord





· Loosen the securing screws (two for each lamp) from the lamp unit. Hold the lamp unit by the handle and pull it in the direction of the arrow. At this time, keep the lamp unit horizontal and do not tilt it.

#### Insert the new lamp unit.

- · Press the lamp unit firmly into the lamp unit compartment. Fasten the securing screws.
- Be sure that AN-PH50LP1 and AN-PH50LP2 are respective type.

#### Replace the lamp unit cover.

· Align the lamp unit cover and slide it to close. Then tighten the user service screw to secure the lamp unit cover.

#### Info

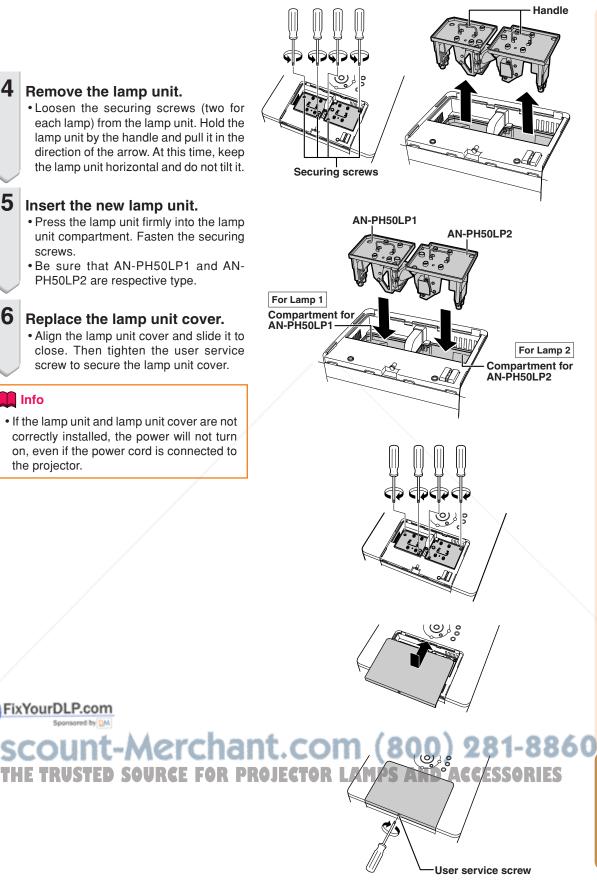
FixYourDLP.com Sponsored by DM

SUI

5

6

• If the lamp unit and lamp unit cover are not correctly installed, the power will not turn on, even if the power cord is connected to the projector.



# **Regarding the Lamp**

## **Resetting the Lamp Timer**

#### Reset the lamp timer after replacing the lamp.

#### 📕 Info

• Make sure to reset the lamp timer only when replacing the lamp. If you reset the lamp timer and continue to use the same lamp, this may cause the lamp to become damaged or explode.

### 1

2

#### Connect the power cord.

• Plug the power cord into the AC socket of the projector.

#### Reset the lamp timer.

#### For Lamp 1

• When you reset the timer for AN-PH50LP1, while simultaneously holding

down ﷺ → , press → on the projector.

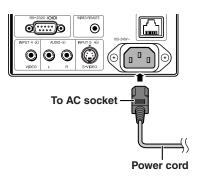
"LAMP 1 100%" is displayed, indicating that the lamp timer is reset.

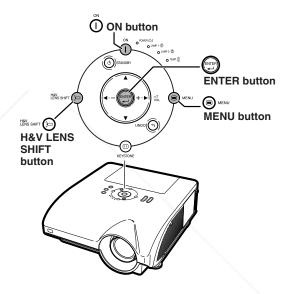
#### For Lamp 2

 When you reset the timer for AN-PH50LP2, while simultaneously holding

down (and (), press () on the projector.

• "LAMP 2 100%" is displayed, indicating that the lamp timer is reset.





# FixYourDLP.com Sponsored by DM Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

# **Computer Compatibility Chart**

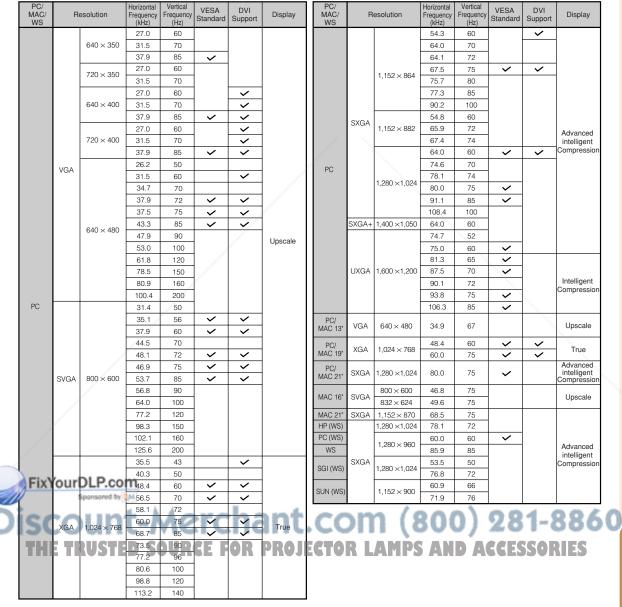
The table below lists signal codes that are compatible with the projector. When the images are distorted or cannot be projected, adjust the output signal of your computer and so forth while referring to the table below.

#### Computer

 Multiple signal support Horizontal Frequency: 15–126 kHz Vertical Frequency: 43–200 Hz Pixel Clock: 12–230 MHz Sync signal: Compatible with TTL level

- · Compatible with sync on green signal
- UXGA, SXGA+ and SXGA compatible in advanced intelligent compression
- AICS (Advanced Intelligent Compression and Expansion System) resizing technology

The following is a list of modes that conform to VESA. However, this projector supports other signals that are not VESA standards.



Appendix

# **Computer Compatibility Chart**



- This projector may not be able to display images from notebook computers in simultaneous (CRT/LCD) mode. Should this occur, turn off the LCD display on the notebook computer and output the display data in "CRT only" mode. Details on how to change display modes can be found in your notebook computer's operation manual.
- When this projector receives 640 × 350 VESA format VGA signals, "640 × 400" appears on the screen.
- When projecting the RGB interlace signal using INPUT 1/2 with "Signal Type" set to "Auto" or "RGB", the image may not be projected as desired. In this case, select either INPUT 4 (video) or INPUT 5 (S-video).

DTV
-----

Signal	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	DVI Support (Compatible with HDCP)
480I/525I	15.7	60	
480P/525P	31.5	60	✓
540P	33.8	60	
576I/625I	15.6	50	
576P/625P	31.3	50	✓
720P/750P	45.0	60	✓
720P/750P	37.5	50	✓
1035I/1125I	33.8	60	✓
1080I/1125I	33.8	60	✓
1080I/1125I	28.1	50	✓



# Troubleshooting

	Problem	Check	Page
		<ul> <li>Projector power cord is not plugged into the wall outlet.</li> </ul>	37
	2	<ul> <li>Power to the external connected devices is off.</li> </ul>	—
		<ul> <li>The selected input mode is wrong.</li> </ul>	45
		• Cables incorrectly connected to side panel of the projector.	27—36
	No picture and no sound	<ul> <li>Remote control batteries have run out.</li> </ul>	17
	or projector does not start.	• External output has not been set when connecting notebook computer.	27
		Cables incorrectly connected to the side panel of the projector.	27—36
		"Bright" is set to minimum position.	60
		<ul> <li>The "BLACK SCREEN" function is working.</li> </ul>	50
	Sound is heard but no picture appears.		
		Image adjustments are incorrectly set.	60
		<ul> <li>(INPUT 1, INPUT 2, INPUT 3 only)</li> <li>Input signal type (RGB/Component) is incorrectly set.</li> <li>(INPUT 4, INPUT 5 only)</li> </ul>	63
	Cotto and	Video Input system is incorrectly set.	76
	Color is faded or poor.		
		Adjust the focus.	40
		The projection distance exceeds the focus range.	22
		<ul> <li>(Computer Input only)</li> <li>Perform "Fine Sync" Adjustments. ("Clock" Adjustment)</li> <li>Perform "Fine Sync" Adjustments. ("Phase" Adjustment)</li> </ul>	68 68
	Picture is blurred; noise appears.	Noise may appear depending on the computer.	_
		Cables incorrectly connected to side panel of the projector.	27—36
		Volume is set to minimum.	46
		The "MUTE" function is working.	46
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	The "Speaker" menu is set to "OFF".	73
	Picture appears but no sound is heard.		
	An unusual sound is occasionally heard from the cabinet.	<ul> <li>If the picture is normal, the sound is due to cabinet shrinkage caused by room temperature changes. This will not affect operation or performance.</li> </ul>	_
	Maintenance indicator illuminates or blinks in red.	See "Maintenance Indicators".	91
D	The projector cannot be turned on or put into the	<ul> <li>If the "Keylock Level" menu is set to "Level A" or "Level B", all or specific buttons on the projector are unavailable. Use the</li> </ul>	885 0
	standby mode using the ON or STANDBY button on the projector.	V remote control to operate the projector PS AND ACCESSO	RIES

# Troubleshooting

Problem	Check	Page
All buttons on the projector and the remote control are unavailable.	• If the "Stack Setting" menu is set to "Slave" and the "Keylock Level" menu is set to "Level B", all buttons on the projector and the remote control are unavailable. Connect the remote control to the projector, and then use the remote control to operate the projector.	18 84 85
Picture is green on INPUT 1or 2 (COMPONENT). Picture is pink (no green) on INPUT 1, 2 or 3 (RGB).	<ul> <li>Change the input signal type setting.</li> </ul>	63
Picture is too bright and whitish.	Image adjustments are incorrectly set.	60
The cooling fan becomes noisy.	• When temperature inside the projector increases, the cooling fan runs faster.	_
The lamp does not light up even after the projector turns on. The lamp suddenly turns	The lamp indicator is illuminating in red. Replace the lamp.	91
off during projection.		
The image sometimes flickers.	<ul> <li>Cables incorrectly connected to the projector or the connected equipment works improperly.</li> <li>If this happens frequently, replace the lamp.</li> </ul>	27—36 94
The lamps take a long time to turn on.	• The lamps will eventually need to be changed. The lamps have reached the end of its life. Replace the lamps.	94
Picture is dark.		

This projector is equipped with a microprocessor. Its performance could be adversely affected by incorrect operation or interference. If this should happen, unplug the projector and plug it in again after more than 5 minutes.



# For SHARP Assistance

If you encounter any problems during setup or operation of this projector, first refer to the "Troubleshooting" section on pages 99 and 100. If this operation manual does not answer your question, please contact the SHARP Service departments listed below.

U.S.A.	Sharp Electronics Corporation 1-888-GO-SHARP (1-888-467-4277) lcdsupport@sharpsec.com http://www.sharplcd.com	Benelux	SHARP Electronics Benelux BV 0900-SHARPCE (0900-7427723) Nederland 9900-0159 Belgium http://www.sharp.nl
Canada	Sharp Electronics of Canada Ltd. (905) 568-7140 http://www.sharp.ca		http://www.sharp.be http://www.sharp.lu
Mexico	Sharp Electronics Corporation Mexico Branch (525) 716-9000 http://www.sharp.com.mx	Australia	Sharp Corporation of Australia Pty. Ltd. 1300-135-022 http://www.sharp.net.au
Latin America	Sharp Electronics Corp. Latin American Group (305) 264-2277	New Zealand	Sharp Corporation of New Zealand (09) 634-2059, (09) 636-6972 http://www.sharp.net.nz
	www.servicio@sharpsec.com http://www.siempresharp.com	Singapore	Sharp-Roxy Sales (S) Pte. Ltd. 65-226-6556 ckng@srs.global.sharp.co.jp
Germany	Sharp Electronics (Europe) GMBH 01805-234675		http://www.sharp.com.sg
	http://www.sharp.de	Hong Kong	Sharp-Roxy (HK) Ltd. (852) 2410-2623
U.K.	Sharp Electronics (U.K.) Ltd. 0161-205-2333 cic@sharp-uk.co.uk		dcmktg@srh.global.sharp.co.jp http://www.sharp.com.hk
	http://www.sharp.co.uk	Taiwan	Sharp Corporation (Taiwan) 0800-025111
Italy	Sharp Electronics (Italy) S.P.A. (39) 02-89595-1		http://www.sharp-scot.com.tw
France	http://www.sharp.it	Malaysia	Sharp-Roxy Sales & Service Co. (60) 3-5125678
France	Sharp Electronics France 01 49 90 35 40 hotlineced@sef.sharp-eu.com http://www.sharp.fr	U.A.E.	Sharp Middle East Fze 971-4-81-5311 helpdesk@smef.global.sharp.co.jp
Spain	Sharp Electronica Espana, S.A. 93 5819700 sharplcd@sees.sharp-eu.com http://www.sharp.es	Thailand	Sharp Thebnakorn Co. Ltd. 02-236-0170 svc@stcl.global.sharp.co.jp http://www.sharp-th.com
Switzerland	Sharp Electronics (Schweiz) AG	Korea	Sharp Electronics Incorporated of Korea
Sports	cattaneo@sez.sharp-eu.com http://www.sharp.ch	om (	(82) 2-3660-2002 lcd@sharp-korea.co.kr http://www.sharpkorea.co.kr
Sweden	Sharp Electronics ( Nordic ) AB (46) 8 6343600 DCE EAD DDALEC		Sharp Business Systems (India)
	vision.support@sen.sharp-eu.com http://www.sharp.se	IVA LAMP	(91) 11- 6431313 service@sharp-oa.com
Austria	Sharp Electronics (Europe) GMBH Branch Office Austria 0043 1 727 19 123 pogats@sea.sharp-eu.com http://www.sharp.at		ระเพษษัฒนาµ-บส.6011

Appendix

# Specifications

	Product type	Multimedia Projector
	Model	XG-PH50X (standard zoom lens attached)/XG-PH50X-NL (no lens attached)
	Video system	NTSC3.58/NTSC4.43/PAL/PAL-M/PAL-N/PAL-60/SECAM/
		DTV480I/DTV480P/DTV540P/DTV576I/DTV576P/DTV720P/DTV1035I/DTV1080I
		Single Chip Digital Micromirror Device™ (DMD™) by Texas Instruments
	DMD panel	Panel size: 0.7"
		No. of dots: 786,432 dots (1,024 [H] × 768 [V])
		1.2 × electric zoom/focus lens, F1.8–F2.0, f = 25.6–31.3 mm (standard equipment with XG-PH50X)
	Projection lamp	250 W × 2 15-pin mini D-sub connector
	output (OUTPUT) signal	Y: 1.0 Vp-p, sync negative, 75 $\Omega$ terminated
		$P_B: 0.7 \text{ Vp-p}, 75 \Omega$ terminated
		$P_{\rm B}$ : 0.7 Vp-p, 75 $\Omega$ terminated
	Horizontal resolution	750 TV lines (DTV720P)
	Component input (INPUT 2)	
		Y: 1.0 Vp-p, sync negative, 75 $\Omega$ terminated
		$P_{B}$ : 0.7 Vp-p, 75 $\Omega$ terminated
		$P_{\rm R}$ : 0.7 Vp-p, 75 $\Omega$ terminated
		15-pin mini D-sub connector, 5 BNC connector: RGB separate/composite sync (TTL)/sync
	(OUTPUT) signal	on green type analog input: 0–0.7 Vp-p, positive, 75 $\Omega$ terminated
		Horizontal sync. signal: TTL level (positive/negative) or composite sync (Apple only)
	CR digital input signal (INPLIT 2)	Vertical sync. signal: Same as above DVI connector (24-pin), RGB (digital), 250 $-1,000$ mV, 50 $\Omega$ (Compatible with HDCP)
Г		RCA connector: VIDEO, composite video, 1.0 Vp-p, sync negative, 75 $\Omega$
		terminated
	S-video input signal	4-pin mini DIN connector
	(INPUT 5)	Y (luminance signal): 1.0 Vp-p, sync negative, 75 $\Omega$ terminated
		C (chrominance signal): Burst 0.286 Vp-p, 75 Ω terminated
	Audio input signal	ø3.5 mm stereo minijack, RCA terminal
		0.5 Vrms, more than 22 k $\Omega$
		$0.5$ Vrms, less than 2.2 k $\Omega$
		9-pin D-sub connector
		8-pin RJ-45 modular connector
	Pixel clock	12–230 MHz
	Vertical frequency	
	Horizontal frequency	
		3.0 W (stereo)
		4.5 cm round × 2
		AC 100–240 V
	Rated frequency	6.3 A (AC 100 V)–2.6 A (AC 240 V) 50/60 Hz
		630 W (when "Eco Mode" is "OFF")/505 W (when "Eco Mode" is "ON") with AC 100 V
	r ower concumption	600 W (when "Eco Mode" is "OFF")/485 W (when "Eco Mode" is "ON") with AC 240 V
F	Power consumption (standby)	0.75 W (AC 100 V) - 1.25 W (AC 240 V) (When "Monitor Out" and "LAN/RS232C" are set to "Disable".)
	Heat dissipation	2,370 BTU/hour (when "Eco Mode" is "OFF")/1,900 BTU/hour (when "Eco Mode" is "ON")
		with AC 100 V
		2,260 BTU/hour (when "Eco Mode" is "OFF")/1,825 BTU/hour (when "Eco Mode" is "ON")
	Operating temperature	with AC 240 V 41°F to 104°F (+5°C to +40°C)
		$-4^{\circ}F$ to 140°F (-20°C to +60°C)
	Cabinet	
	I/R carrier frequency	
		16 <sup>5</sup> /32" × 7 <sup>3</sup> /32" × 18 <sup>35</sup> /64" (410 (W) × 180 (H) × 471 (D) mm) (main body only)
		$16\frac{5}{32} \times 7\frac{37}{64} \times 18\frac{35}{64}$ (410 (W) × 192.1 (H) × 471 (D) mm) (including adjustment foot
-		and projecting parts)
1	FixYourDLP.com	XG-PH50X: 32.7 lbs. (14.8 kg)
1		XG-PH50X-NL: 30.0 lbs. (13.6 kg) Lamp unit (AN-PH50LP1/AN-PH50LP2), Remote control (9NK5041808700), Power cord
	rieplacement parts	for U.S., Canada, etc. (9NK3090152800), Power cord for Europe, except U.K.
	SCOUNT-A	(9NK3090152700), Power cord for U.K., Hong Kong and Singapore (9NK3090152900),
	Scount	Power cord for Australia, New Zealand and Oceania (9NK3090152600), RGB cable
	THE TRUSTED SO	(9NK3080431000), Remote mouse receiver (9NK3790197000), Cap for the standard zoom
		lens (9NK3797200400), Projector manual and technical reference CD-ROM
		(9NK3532094500), Operation manual (9NK5010011800)

As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

#### Advanced intelligent compression (Page 97)

High quality resizing of lower and higher resolution images to fit the projector's native resolution.

#### Aspect ratio (Page 48)

Width and height ratio of an image. The normal aspect ratio of a computer and video image is 4:3. There are also wide images with an aspect ratio of 16:9 and 21:9.

#### Auto Sync (Page 70)

Optimizes projected computer images by automatically adjusting certain characteristics.

#### **Background (Page 77)**

Initial setting image projected when no signal is being output.

#### **Border (Page 49)**

Projects a 4:3 image fully within a 16:9 screen by keeping the aspect ratio at 4:3.

#### Clock (Page 68)

Clock adjustment is used to adjust vertical noise when clock level is incorrect.

#### CLR Temp (Color temperature) (Page 61)

Function that can be used to adjust the color temperature to suit the type of image input to the projector. Decrease the color temperature to create warmer, reddish images for natural flesh tones, or increase to create cooler, bluish images for a brighter picture.

#### C.M.S. (Color Management System) (Page 64)

Function allows you individually adjust the display characteristics of six colors (R: Red, Y: Yellow, G: Green, C: Cyan, B: Blue, M: Magenta)

#### Dot by Dot (Page 48)

Mode that projects images in their native resolution.

#### Keylock Level (Page 85)

Mode that can lock the operation of projector buttons to prevent unauthorized adjustment.

#### **Keystone Correction (Page 41)**

Function to digitally correct a distorted image when the projector is set up at an angle, smoothens out jaggies on keystone images and compresses the image not only horizontally but verti-Failly ckeeping the 1413 aspect ratio.

#### Phase (Page 68)

Phase shift is a timing shift between isomorphic signals with the same resolution. When phase level is incorrect, the projected image typically dis-JEC rectly entered, the projector will not operate even plays horizontal flicker.

#### Pict in Pict (Page 74)

The Pict in Pict (picture in picture) function allows you to display two pictures on the same screen. You can display the image input from a video as an inset picture overlapping the main picture input from a computer.

#### Picture Mode (Page 60)

Image quality enhancement function that offers a richer image by brightening the darker portions of the image without altering the brightness of the brighter portions. You can select four different modes: STANDARD, PRESENTATION, CINEMA and CUSTOM.

#### Progressive (Page 62)

The progressive display projects a smoother video image. You can select three different modes: 2D Progressive, 3D Progressive and Film Mode.

#### **Resize (Page 48)**

Allows you to modify or customize the picture display mode to enhance the input image. You can select six different modes: NORMAL, FULL, DOT BY DOT, BORDER, STRETCH and SMART STRETCH.

#### Shifting the lens (Page 38)

Function to adjust the position of the projected image for the position of the screen by shifting the lens horizontally and vertically.

#### Smart Stretch (Page 49)

Projects the image fully in a 16:9 screen by enlarging only the surrounding areas while keeping the aspect ratio in the middle part of the image at 4:3.

#### sRGB (Page 64)

An international standard of color reproduction regulated by the IEC (International Electrotechnical Commission). As the fixed color area has been decided by the IEC, the color changes according to DLP features, so that the images are displayed in a natural tint based on an original image, when "C.M.S. Adjustment" is set to "sRGB".

#### Stack Setting (Page 84)

Setting for the stack projection that allows you to increase the brightness of an image by stacking multiple projectors and projecting same image simultaneously. You can control projectors for the stack projection by assigning a projector as the master and the other projectors as the slaves.

#### Stretch (Page 49)

Mode that stretches the 4:3 image horizontally to display it fully on a 16:9 screen.

#### System Lock (Page 79)

If the "Keycode" set in the projector is not corif signals are entered.

# Index

AC socket ADJ./MOUSE switch Adjustment buttons Adjustment feet Advanced intelligent compression Aspect ratio Audio AUDIO input (1) terminal AUDIO input (2, 3) terminal AUDIO input (2, 3) terminal AUDIO input (4, 5) terminal AUDIO OUTPUT terminal Audio Out AUDIO OUTPUT terminal Auto Power Off Auto Search Auto Sync (Auto Sync adjustment) AUTO SYNC button Auto Sync Disp	. 18 . 56 . 39 . 97 . 48 . 72 . 27 . 28 . 34 . 72 . 36 . 79 . 78 . 70 . 70	
Background BLACK SCREEN button Border BREAK TIMER button Bright Boost	. 50 . 49 . 50	
C.M.S. (Color Management System) C.M.S. Adjustment Carrying handle Clock CLR Temp (Color Temperature) Digi. Shift	. 64 . 13 . 68 . 61	
DŇR Dot By Dot Eco Mode	. 62 . 48 . 78	
ENLARGE buttons ENTER button Exhaust vent Fine Sync	. 56 . 90	
FOCUS buttons FREEZE button Geometric adjustment	. 40 . 47	i S
H & V keystone H & V LENS SHIFT button Image Capture		
Image resizing INPUT 1 – 5 modes INPUT 1 terminal INPUT 2 terminals INPUT 3 terminal	. 44 . 45 . 27 . 28 . 29	
NPUT 5 terminal NPUT 5 terminal INPUT buttons Intake vent Kensington Security Standard connector Keycode	. 34 . 45 .90	t.c
Keycode HRUST ED. SOURCE FOR Keylock Level KEYSTONE button Keystone Correction	. 85 . 41	JEC
Lamp Lamp indicators 1, 2 Lamp Mode Lamp Timer (Life)	. 91 . 83	

	Lamp unit cover	
	LAN terminal LAN/RS232C	
	Language	89
	L-click button Lens cap	
	MENU button	
	Monitor Out	87
	Mouse button	
	Normal	
	ON button	
	Options (1)	74
	Options (2)	82
	OSD Display OUTPUT (FOR INPUT 1, 2) terminal	75 36
	Pair Stack	
	Password	82
	Phase Pict in Pict	
	Picture	60
	Picture Mode PICTURE MODE button	60 47
	Power cord	37
	Power indicator	
	PRJ mode Progressive	
	R-click button	
	Remote control	17
	Remote control sensor Remote mouse receiver	17 19
	Resize	48
	RESIZE button	
	RS-232C	86
	RS-232C terminal	
	Save Setting	68 69
	Service Mode	88
	Set Inputs Signal Info	
	Signal Type	63
	Smart Stretch	
	Special Modes	
	sRGB Stack Setting	
	STANDBY button	84 37
	Startup Image	77
. ,	StatusStretch	89 49
	StretchSystem Lock	
E	Temperature warning indicators.CESSORIES	91
	UNDO button	
	Video System	76
	WIRED R/C JACK WIRED REMOTE terminal	18 18

ZOOM buttons ...... 40



This user manual is provided as a free service by FixYourDLP.com. FixYourDLP is in no way responsible for the content of this manual, nor do we guarantee its accuracy. FixYourDLP does not make any claim of copyright and all copyrights remain the property of their respective owners.

About FixYourDLP.com

FixYourDLP.com (http://www.fixyourdlp.com) is the World's #1 resource for media product news, reviews, do-it-yourself guides, and manuals.

Informational Blog: http://www.fixyourdlp.com Video Guides: http://www.fixyourdlp.com/guides User Forums: http://www.fixyourdlp.com/forum

FixYourDLP's Fight Against Counterfeit Lamps: http://www.fixyourdlp.com/counterfeits

# Sponsors:

FixYourDLP.com

Sponsored by DM

RecycleYourLamp.org – Free lamp recycling services for used lamps: http://www.recycleyourlamp.org

Lamp Research - The trusted 3rd party lamp research company: http://www.lampresearch.com

Discount-Merchant.com – The worlds largest lamp distributor: http://www.discount-merchant.com