Table of Contents

Usage Notice

Precautions

Follow all warnings, precautions, and maintenance procedures as recommended in this user's guide.

⚠ **Warning**- Do not look into the lens. The bright light may cause eye injury.

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

⚠ **Warning**- To prevent the risk of electric shock, do not open or disassemble the product.

⚠ **Warning**- Please allow the unit to cool down before changing the lamp; carefully follow the lamp replacement instructions listed under "Replacing the Lamp."

⚠ **Warning**- This product self-detects the life cycle of the lamp and will display a warning message when the lamp is about to expire. Be sure to replace the lamp when it displays warning messages.

⚠ **Warning**- After installing a new lamp, reset the lamp life using the onscreen menu.

⚠ **Warning**- Before turning off the product, follow the cooling fan to run for several minutes.

⚠ **Warning**- Turn on the projector first and then select the signal sources.

⚠ **Warning**- When the lamp reaches the end of its life, it will burn out and may make a loud "popping" sound. If this occurs, the projector will not turn back on until the lamp module has been replaced. To replace the lamp, follow the procedures listed under "Replacing the Lamp."

Usage Notice

Do:

❖ Turn off the product before cleaning.

❖ Use a soft cloth moistened with mild detergent to clean the display housing.

❖ Disconnect the power plug from AC outlet if the product is not being used for a long period of time.

Do not:

❖ Block the slots and openings on the unit provided for ventilation.

❖ Place in direct sunlight.

❖ Use abrasive cleaners, waxes, or solvents to clean the unit.

❖ Use under the following conditions:

- Extreme heat, cold, or humidity.
- In areas susceptible to excessive dust and dirt.
- Near any appliance generating a strong magnetic field.

Introduction

Product Features

This product is a SVGA single chip 0.55-inch DLP™ projector. Its outstanding features follow:

◆ Masked wide 480p (800 x 480); perfect for DVD

◆ 4.6-pounds/2.0kg compact design

◆ Single chip DLP™ technology

◆ HDTV compatible (480i/p, 576i/p, 1080i, 720p)

◆ NTSC/NTSC4.43/PAL/PAL-M/PAL-N/SECAM, and HDTV compatible

◆ Wireless remote control

◆ User-friendly multilingual on-screen display menu

◆ Advanced keystone correction

◆ User-friendly control panel

◆ 180-watt replaceable P-VIP lamp with Economy- mode support

◆ Apple Macintosh compatible

Introduction

Package Overview

This projector comes with all the items shown below. Check to make sure your unit is complete, contact your dealer immediately.

Projector Unit   D-15 to RCA Adapter   Wireless Remote
                             for YPbPr   Controller

S-Video Cable   Composite Video Cable   Power Cord

Battery x 2   User's Manual/   Carrying Case
                     Warranty Card

❖ Due to the difference in applications for each country, some regions may have different accessories.

Lens Cap   SCART RGB Connector
                   (For European Use Only)

Introduction

Product Overview

Main Unit

1. Control Panel
2. Zoom Ring
3. Focus Lens
4. Elevator Button
5. IR Receivers
6. Connection Ports
7. Power Socket

Control Panel
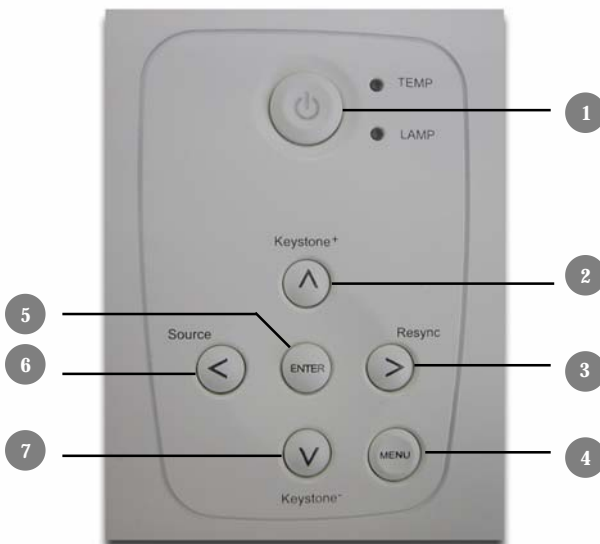
1. Power
   -Temp Indicator
   -Lamp Indicator
2. Keystone+
3. Re-sync
4. Menu/Exit
5. Enter
6. Source
7. Keystone -

Introduction

Connection Ports

1   Power Socket
2. IR Receiver
3. S-Video Input Connector
4. Composite Video Input Connector
5. Monitor Out Connector
6. Component/SCART RGB & Computer (VGA) input

Wireless Remote Control

Power On/Off — Re-sync

Hide — Freeze

Brightness — Zoom

Contrast — Keystone Adjustment

4 x 3 — Native 4x3

Window

16 x 9 — Native 16x9

Enter — Four Directional Keys

Menu/Exit

S-Video Source

Composite Source — VGA Source (YPbPr)
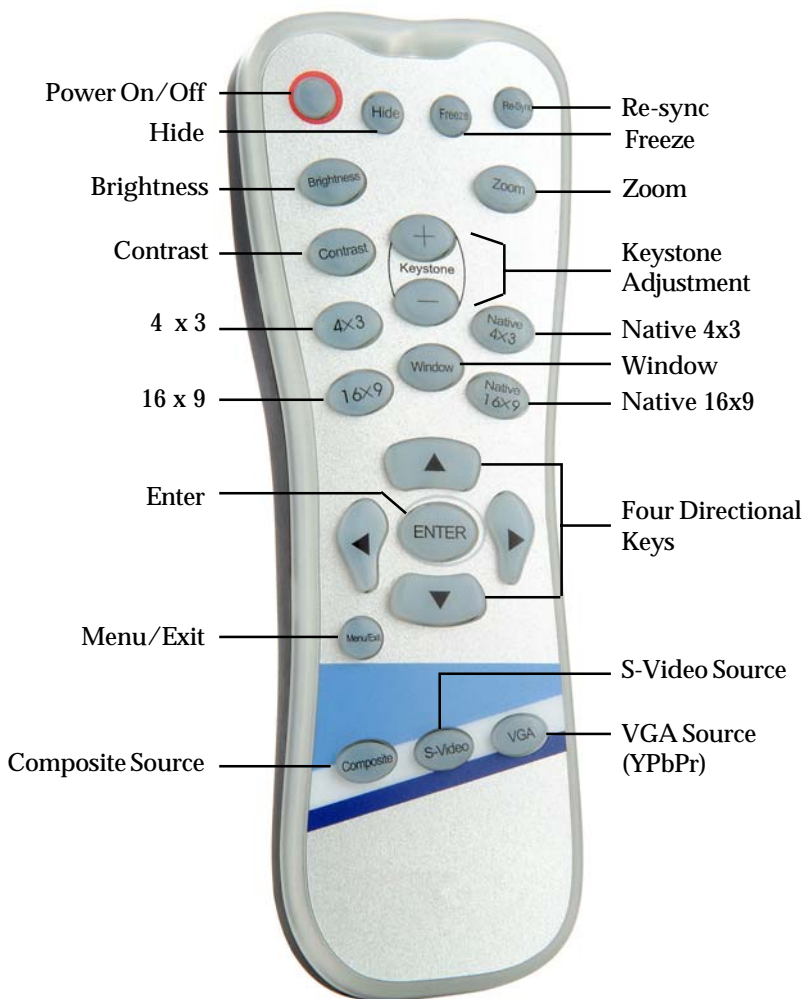
Installation

Connecting the Projector
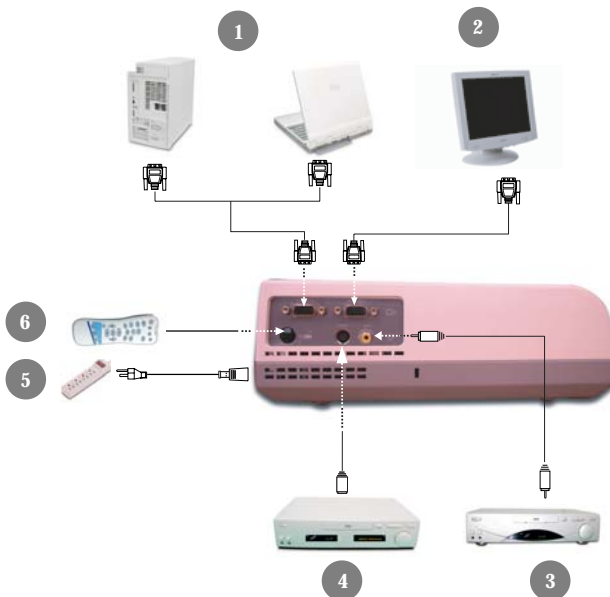
1. Component video\SCART RGB connection diagram
2. Monitor Out
3. S-Video Input
4. Composite Video Input
5. Power Socket
6. IR Receiver

Powering On/Off the Projector

Powering On the Projector

1. Remove the lens cap.
2. Ensure that both the power cord and signal cable are securely connected.
3. Turn on the power and lamp by pressing the "Power" button on the control panel. The start-up screen will be displayed in approximately one minute.
4. Turn on your source (computer, notebook, or video player , etc...); the projector will automatically detect your source.

❖ *If the screen displays "No Signal," please make sure the signal cables are securely connected.*

❖ *If you connect multiple sources at the same time, use the "Source" button on the control panel to select the desired source.*

❖ Turn on the projector first followed by the signal sources.

Power Button

Lens Cap

Installation

Powering Off the Projector

1. Press the "Power" button to turn off the projector lamp.

2. After pressing "Power," you will see the following message, "Power off the lamp?" displayed on the screen. Press the "Power" button again to confirm, otherwise the message will disappear after five seconds.

3. When the projector is off, the "Power" LED indicator will be orange approximately 120 seconds for the lamp cooling. Only after the "Power" indicator blinks green and the projector is at the standby mode, the power cord can be unplugged from the unit.

4. Do not turn on the projector immediately following a power off procedure.

❖ *When the "LAMP" indicator lights orange, the lamp may fail. Please contact your local reseller or service center.*

❖ *When the "TEMP" indicator flashes orange for about ten seconds, you will see a message "Fan Fail" or "Over Temperature"on the display. The projector will automatically shut down. Under normal conditions, the projector can be switched on again for your presentation. If the problem persists, contact your local reseller or service center.*

Adjusting the Projected Image

Adjusting the Projector's Height

The projector is equipped with an elevator foot to adjust the projector's height.

To raise or lower the projector :

1. Turn the projector over and locate the elevator foot. Press the elevator button ❶ to extend the foot so it may be adjusted.

2. While holding down the elevator button, adjust the foot to the desired height, ❷ then release the button to lock the elevator foot into position.

3. Use ❸ to fine-tune tilt-adjustment

4. Lower the projector so it rests on its foot; adjust as needed.

Tilt-adjustment Foot

Elevator Foot

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Installation

Adjusting the Projector's Zoom/Focus

You may adjust the zoom to zoom the lens in or out. Turn the zoom ring to zoom in or zoom out. To focus on the image, turn the focus lens until you see a clear image. The projector will focus from 3.93 to 32.81 feet (1.25 to 10m) distances of feet.

Zoom Ring

Focus Lens

Control Panel & Remote Control

There are two ways for you to control the functions: with remote control and control panel.

Control Panel   *Remote Control*

Using the Remote Control

Power

▶ "Power" turns on the projector's lamp. Refer to the "Powering On/Off the Projector" section on page 11~ 12 for more details.

Hide

▶ "Hide" immediately turns the screen black. Press "Hide" again to restore the displayed image.

Freeze

▶ "Freeze" pauses the screen image, press "Freeze" again to un-pause.

Re-Sync

▶ Automatically synchronizes the projector with the input source.

User Controls

Brightness

▶ Adjusts the brightness of the image.

Zoom

▶ Zooms in or out on the image.

Contrast

▶ Controls the degree of difference between the lightest and darkest parts of the picture.

Keystone +/-

▶ Corrects image distortion caused by tilting the projector.

4 x 3

▶ Scales the image at a 4:3 aspect ratio.

16 x 9

▶ Scales the image at a 16:9 aspect ratio.

Window

▶ Enables the viewing of a 2.35:1 or 1.85:1 movie without black bars at the top and bottom of the screen. Some of the original image will be lost from the left and right edges of the screen.

Native 4 x 3

▶ Displays the native image with 0% overscan.

Native 16 x 9

▶ Displays the native image with 0% overscan.

Four Directional Select Keys

▶ Press "Menu/Exit," then use ⬆ ⬇ ◀ ▶ to select menu items or to make adjustments to your selection.

Enter

▶ Confirms your selection.

Menu/Exit

▶ Displays or exits the onscreen display menu.

Composite

▶ Chooses video source.

S-Video

▶ Chooses S-Video source.

VGA

▶ Chooses Analog RGB, Analog YPbPr, Component, and HDTV sources.

User Controls

Using the Control Panel

Keystone +/-

▶ Corrects image distortion caused by tilting the projector.

Re-Sync

▶ Automatically synchronizes the projector with the input source.

Source

▶ Chooses RGB, S-Video, Composite, Component, and HDTV sources.

Enter

▶ Confirms your selection.

Menu/Exit

▶ Displays or exits the onscreen display menus.

Power/Standby

▶ Refer to the "Powering On/Off the Projector" section on pages 11~ 12.

User Controls

Onscreen Display Menus

How to Operate

▶ The projector has multilingual onscreen display menus that allow you to make image adjustments and change a variety of settings. The projector automatically detects the source.

▶ Press "Menu/Exit" on the Remote Control or Control Panel.

▶ When the menu is displayed, use ⬆ ⬇ ◀ ▶ to navigate the main menu. To Select a specific icon, press "Enter" to access related.

◆ To exit the main menu, press "Menu/Exit".

▶ When a sub menu is displayed, use ⬆ ⬇ to select the desired item and adjust the settings with ◀ ▶ .

◆ To exit the sub menu, press "Menu/Exit".

▶ After using ◀ ▶ to make selections within the sub menu, press "Enter" to confirm your changes and return to the sub menu.

◆ Press "Menu/Exit" to return to the main menu. If you do not press "Enter" to confirm your changes before exiting, the items will not to be modified.

Item

Main menu   Sub menu
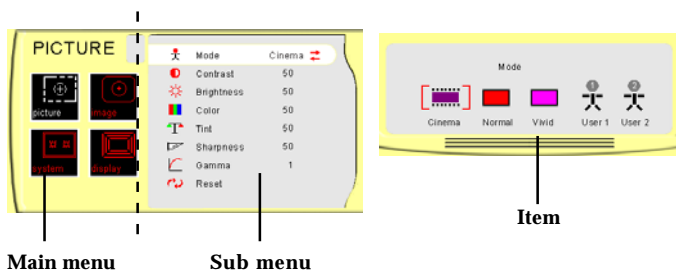
Menu Tree

PICTURE.............. Mode ——————————— Cinema/Normal/Vivid/User-1/User-2

Contrast

Brightness

Color (Video only)

Tint (Video only)

Sharpness

Gamma

Reset ——————————— Current/All

IMAGE.................. White Peaking ——— 1/2/3

Color Temp ——————— Film/Video/Graphics/PC

Image Mode ————— R Contrast/G Contrast/B Contrast/R Brightness/G Brightness/B Brightness

Advanced Adjustment ———

Reset ——————————— Current/All

SYSTEM................ Language ——————— English/French/Japanese/Spanish/Chinese(Simple)(Traditional)/Italian/Portugese/Germanic/Korean

Bulb ——————————— Lamp Hour/Lamp Reminding/Lamp Reset

Source Lock ——————— On/Off

Auto Shutdown ——————— On/Off

Blanking ——————————— Blue/Black

Eco Mode ——————————— On/Off

DISPLAY.............. Projection ——————— Front Desktop/Front Ceiling/Rear Desktop/Rear Ceiling

Format ———————————— 4X3/16X9/Window/Native 4X3/Native 16X9

Keystone ———————————

Zoom Mode ——————— -50~+50

+1~32

User Controls
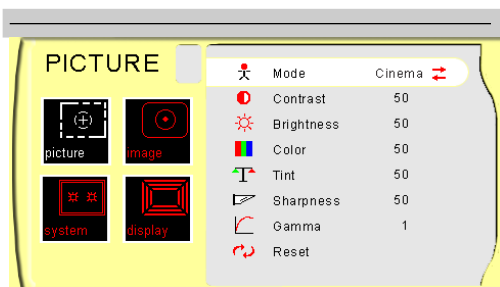
PICTURE

Mode

There are three factory presets optimized for various types of pictures: cinema, normal, and vivid. You can customize contrast, brightness, intensity, color, tint, sharpness, and gamma for each preset mode.

Contrast

Contrast controls the degree of difference between the lightest and darkest parts of the picture. Adjusting the contrast changes the amount of black and white in the image.

▶ Press ◀ to decrease the contrast.
▶ Press ▶ to increase the contrast.

Brightness

Adjusts the brightness of the image.

▶ Press ◀ to darken image.
▶ Press ▶ to lighten image.

Color

Adjusts a video image from black and white to fully saturated color.

▶ Press ◀ to decrease the amount of color in the image.
▶ Press ▶ to increase the amount of color in the image.

Tint

Adjusts the color balance of red and green.

▶ Press ◀ to increase the amount of green in the image.
▶ Press ▶ to increase the amount of red in the image.

Sharpness

Adjusts the sharpness of the image.

▶ Press ◀ to decrease the sharpness.
▶ Press ▶ to increase the sharpness.

❖The "Tint" sub menu is not supported under the Component Video or Analog RGB input sources.

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User Controls
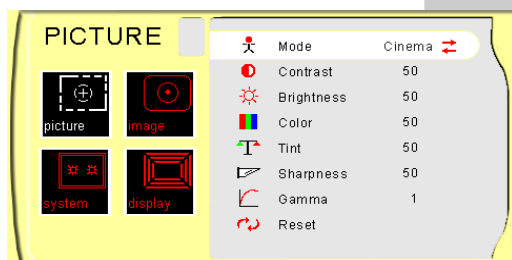
PICTURE

Gamma

Gamma affects how dark scenery is displayed. With a greater gamma value, dark scenery will look brighter. Use ◀ ▶ to adjust gamma values.

Reset

Returns the adjustments and settings to the factory default values.

▸ Current: Returns the current menu's settings to factory default values.

▸ All: Returns the settings for all menus to factory default values.

User Controls

IMAGE

White Peaking

The white segment control to set the white peaking level of the DMD chip. " 0" stands for minimal peaking, and "10" stands for maximum peaking. If you prefer a stronger image, adjust toward the maximum setting. For a smoother, more natural image, adjust toward the minimum setting.
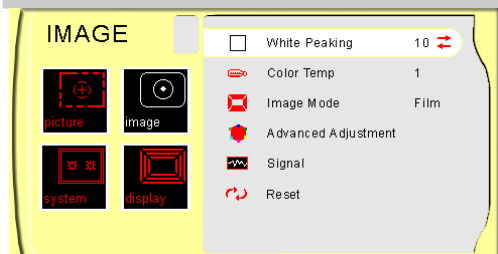
Color Temp

The color temp control adjusts the color temperature. The range is from "1" to "3". At a higher temperature, the screen looks colder; at a lower temperature, the screen looks warmer.

Image Mode

There are four factory presets optimized for various types of images.

▸ Film : For home theater

▸ Video : For video mode

▸ Graphic : For graphics

▸ PC : For computers or notebooks

Advanced Adjustment

Use ◀ or ▶ to select R (Red), G (Green), or B (Blue) for brightness and contrast.

Signal

▸ Horizontal: Adjusts the horizontal position.

▸ Vertical: Adjusts the vertical position.

▸ Frequency: Changes the display data frequency to match the frequency of your computer's graphics card. If you experience a vertical flickering bar, use this function to correct the issue.

❖ The "Signal" sub menu is supported under the Analog RGB and Analog YPbPr input sources.

User Controls
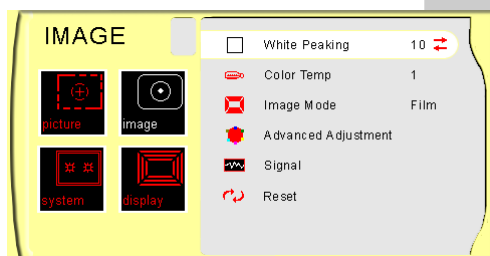
IMAGE

 ▸ Phase : Synchronizes the signal timing of the display with the graphics card. If you experience an unstable or flickering image, use this function to correct it.

Reset

Returns the adjustments and settings to factory default values.

 ▸ Current: Returns the current menu's settings to factory default values.

 ▸ All: Returns all menu settings to factory default values.

User Controls

SYSTEM

Language

Displays a multilingual menu. Use ◀ and ▶ to select your prefered language.

Bulb

▶ Lamp Hour: Displays the cumulative lamp operating time.
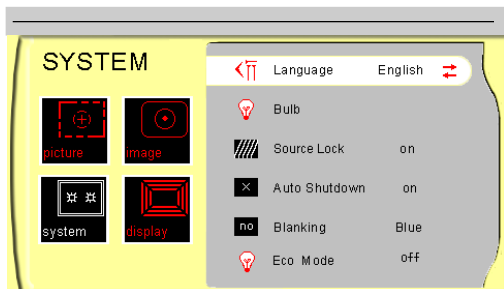
▶ Lamp Reminding: Choose this function to show or hide the warning message when the lamp replacement message is displayed. The message will show up when the lamp reaches 2,000 hours.

Source Lock

When turned off, the projector will search for other signals if the current input signal is lost. When turned on, it will continue to search for the "lost signal" after "Source" is pressed.

Auto Shutdown

Decides the time interval to shutdown the system if there is no signal input. Select "On" to turn the projector off automatically.

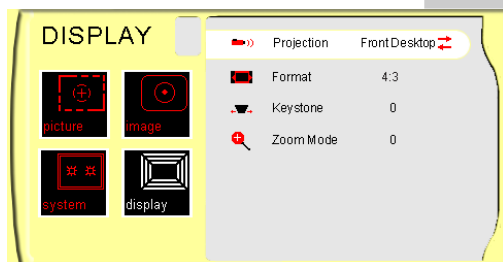### Blanking

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

Eco Mode

This is also known as "Economy Mode." Selects "On" to decrease the brightness by 20%. Select "Off," to maintain normal brightness.

User Controls

DISPLAY

🔊))	Projection	Front Desktop ⇄
📷	Format	4:3
▼	Keystone	0
🔍	Zoom Mode	0

picture image system display

DISPLAY

Projection

▶ 🧍 🔊)) **Front-Desktop**

The factory default setting.

▶ 🧍 ((📷 **Rear-Desktop**

When you select this function, the projector reverses the image so you may project from behind a translucent screen.

▶ 🧍 🔊)) **Front-Ceiling**

When you select this function, the projector turns the image upside down to accommodate ceiling-mounted projection.

▶ 🧍 ((📷 **Rear-Ceiling**

When you select this function, the projector reverses and turns the image upside down at same time. You can display an image from behind a translucent screen with ceiling mounted projection.

Format

There are five screen types including 4x3, 16x9, Window, Native 4x3, and Native 16x9. You may also use remote control to make your format selection. Please refer to the "Control Panel & Remote Control" introduction.

Keystone

Corrects image distortion caused by tilting the projector vertically.

Zoom Mode

Provides different magnification ratios to zoom an image. Images will be centered after zooming.

Appendices

Troubleshooting

If you experience trouble with the projector, please refer to the following information (listed below). If the problem persists, contact your local reseller or service center immediately.

Problem: No image appears on screen.

▸ Ensure that all cables and power connections are correctly and securely connected as described in the "Installation" section.

▸ Ensure that the pins of connectors are not crooked or broken.

▸ Check to see if the projection lamp has been securely installed. Please refer to the "Replacing the Lamp" section for more information.

▸ Make sure that you have removed that the lens cap and the projector is powered on.

▸ Ensure that the "Hide" feature is not turned on.

Problem: Partial, scrolling or incorrectly displayed images

▸ Press "Re-Sync" on the Remote Control or Control Panel.

▸ If you are using a PC:

For Windows 3.x:

1. In the Windows Program Manager, double click the "Windows Setup" icon in the Main group.

2. Verify that your display resolution setting is less than or equal to 1280 x 720.

For Windows 95, 98, 2K, XP:

1. From the "My Computer" icon, open the "Control Panel" folder, and double click the "Display" icon.

2. Select the "Settings" tab

3. Click on the "Advanced Properties" button.

If the projector is still not displaying the entire image, you may need to change the monitor display that you are using. Refer to the following steps.

4. Verify the resolution setting is less than or equal to 1024 x 768 resolution.
5. Select the "Change" button under the "Monitor" tab .
6. Click on "Show all devices." Next, select "Standard monitor types" under the SP box; choose the resolution mode you need under the "Models" box.
7. Verify that the resolution setting of the monitor display is less than or equal to 1280 x 1024.

▶ If you are using a Notebook PC:
1. First, follow the steps above to adjust resolution of the computer.
2. Switch the Notebook PC display to the "external display only" or "CRT only" mode.

▶ If you experience difficulty changing resolutions or your monitor freezes, restart all equipments including the projector.

Problem: The screen of the Notebook or PowerBook computer is not displaying a presentation.

▶ If you are using a Notebook PC:
Some Notebook PCs may deactivate their own screens when a second display device is in use. Each has a different way to be reactivated. Refer to your computer's documentation for detailed information.

▶ If you are using an Apple PowerBook:
In "Control Panels," open the PowerBook Display to select "Video Mirroring- on."

Problem: Image is unstable or flickering

▶ Use "Phase" to correct it. See page 23 for more information.
▶ Change the monitor color setting or the frequency on your computer.

Problem: Image has vertical flickering bar

▶ Use "Frequency" to make an adjustment. See page 22 for more information.
▶ Check and reconfigure the display mode of your graphics card to ensure compatibility.

Appendices

Problem: Image is out of focus

▶ Adjust the focus using the remote control.

Problem: Image is reversed.

▶ Press "Menu," then select "Display" to adjust the projection.

Problem: Lamp burns out or makes a popping sound

▶ When the lamp reaches its end of life, it will burn out and make a loud popping sound. If this happens, the projector will not turn back on until the lamp module has been replaced. To replace the lamp, follow the procedures in "Replacing the Lamp" page 29.

Appendices

Replacing the Lamp

When the projector's lamp usage reachees 2,000 hours, it displays the following warning message "Lamp may fail soon ! Replacement Suggested !" When you see this message, please contact your local reseller or service center.

Make sure the projector has cooled down for at least 30 minutes before replacing the lamp.

⚠ **Warning:** Lamp compartment is hot! Allow it to cool down before replacing lamp!

⚠ **Warning:** To reduce the risk of personal injury, avoid dropping the lamp module or touching the lamp bulb. If dropped, the bulb may shatter and cause injury.

Lamp Replacing Procedure:
1. Turn off the power to the lamp by pressing the power button.
2. Allow the projector to cool down at least 30 minutes.
3. Disconnect the power cord.
4. Use a screwdriver to remove the screw at the bottom of projector as indicated.❶
5. Remove the cover.❷
6. Unscrew the three screws of the lamp module then remove the lamp module.❸

To replace the lamp module, reverse the previous steps.