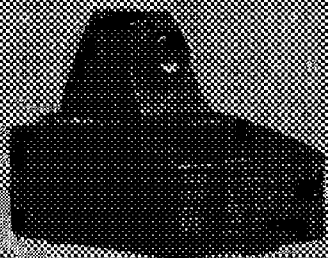
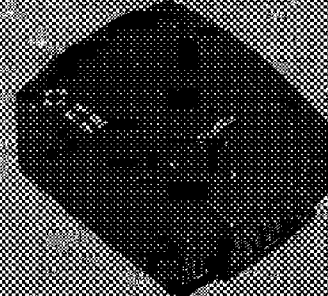


ImagePro 7200



User's Manual

23A7200



DUKANE

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INTRODUCTION.

The ImagePro 7200 is a professional, low-cost, and compact LCD projection system. It displays the brightest and clearest images, with a breakthrough weight of 9.25 pounds.

With freeze, enlarge, curtain, and pointer functions, The ImagePro 7200 is an exceptionally powerful presentation tool.

The ImagePro 7200 is compatible with IBM, MAC, and Fujitsu personal computers as well as NTSC, PAL and SECAM video sources. In addition, the ImagePro 7200 supports most SVGA computers at true 800 x 600 resolution. The projector offers separate audio channels for good sound quality from either the projector itself or from external speakers.

The ImagePro 7200 has a unique 'pop-up' design projection lens. The lens can be folded down to save space and protect the lens. In use, the lens is high above the table surface, which helps prevent shadowing from items on the tabletop.

The ImagePro 7200 is the best choice in data-video projection systems, considering its light weight and brightness. Thank you for choosing a Dukane product!

PRECAUTIONS.

To prevent accidents caused by improper handling or operation, please take note of the following precautions.

DO'S

1. Keep the product away from dirt and dust, and periodically wipe its surface with a soft, dry cloth. Stubborn marks may be removed using a soft cloth moistened with a mild detergent.
2. Turn off the product before cleaning its surface.
4. If the product will not be in use for a long period of time, *disconnect the power plug from the AC outlet.*

DONT'S

1. Do not attempt to service the product yourself. Opening the case may expose the handler to dangerous voltage or other hazards.
2. The product's LCD panel and lens have delicate surfaces that may be easily scratched. Do not use abrasive cleaners, waxes or solvents. The fresnel lens (inside the fold-up housing) should not be touched at all, and do not attempt to clean it.
3. Avoid using the product under the following conditions:
Extremely hot, cold or humid environments; areas susceptible to dust; near an appliance generating a strong magnetic field; and in direct sunlight.

NOTICES.

Information in this document is subject to change without prior notification for the sake of improving reliability, design and function.

This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic, or other means in any form without first obtaining prior written permission from Dukane.

All brand or product names are trademarks or registered trademarks of their respective companies.

The personal computers and computer software referred to in this manual are not included with this unit.

WARNING LABELS

Hot Lamp Warning

CAUTION

Wait 5 minutes after turning off lamp before opening lamp door.

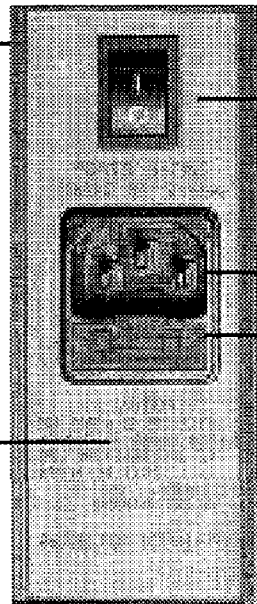
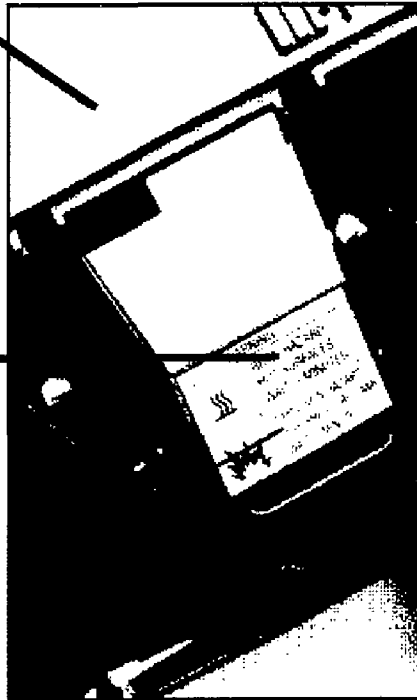
Hot Lamp Cover Warning

Burn Hazard
Hot Surfaces
Wait 5 Minutes

Fuse Type Warning

For continued protection against risk of fire hazard, replace only with same type and rating of fuse.

Fuse: 6A/250V



Power Switch

Power Input Connection

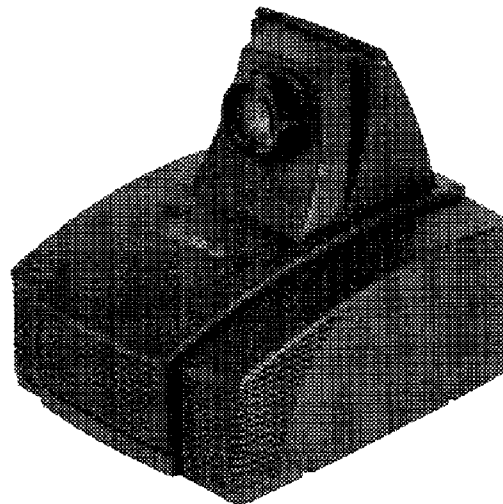
Fuse Holder with Spare

PRODUCT FEATURES.

- True SVGA
- One 6.5" active matrix color TFT LCD panel
- Compatible with IBM VGA, VESA, MAC, and FMTOWNS series
- Direct RGB input
- Displayable colors: 16.7M colors
- Built-in monitor loop-through
- High brightness: 270 ANSI Lumens
- Lightweight compact design, weighing 4.2kgs (9.25 lbs)
- User adjustable keystone correction, up to 20 degrees
- Enlarge/curtain/pointer/freeze/mute functions
- 'Pop-up' lens folds down for storage
- Internal speakers and stereo amplification

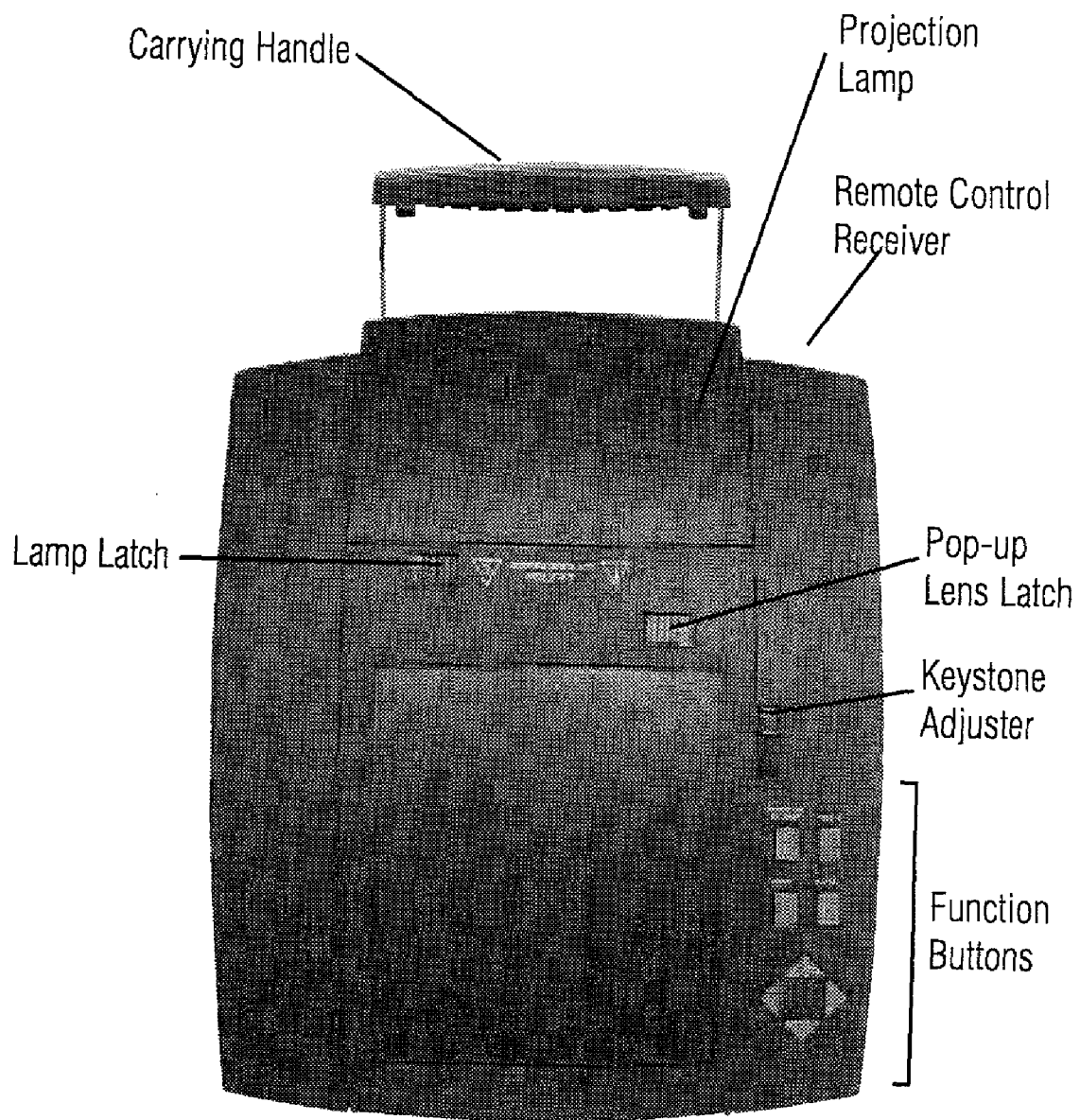
ACCESSORIES.

AC power cord
15-Pin VGA/SVGA signal cable
15-Pin MAC signal adapter
15-Pin MAC monitor adapter
Composite video signal cable
S-video signal cable
Audio signal cable
Wireless remote control with battery
Four EVD lamps
User's manual
Carrying case
Warranty card



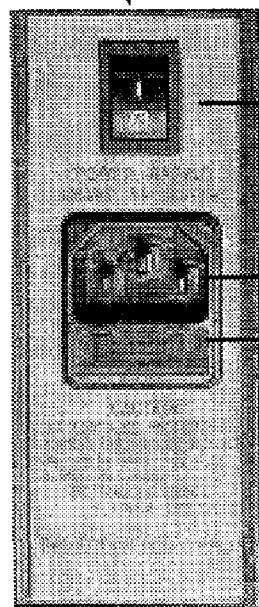
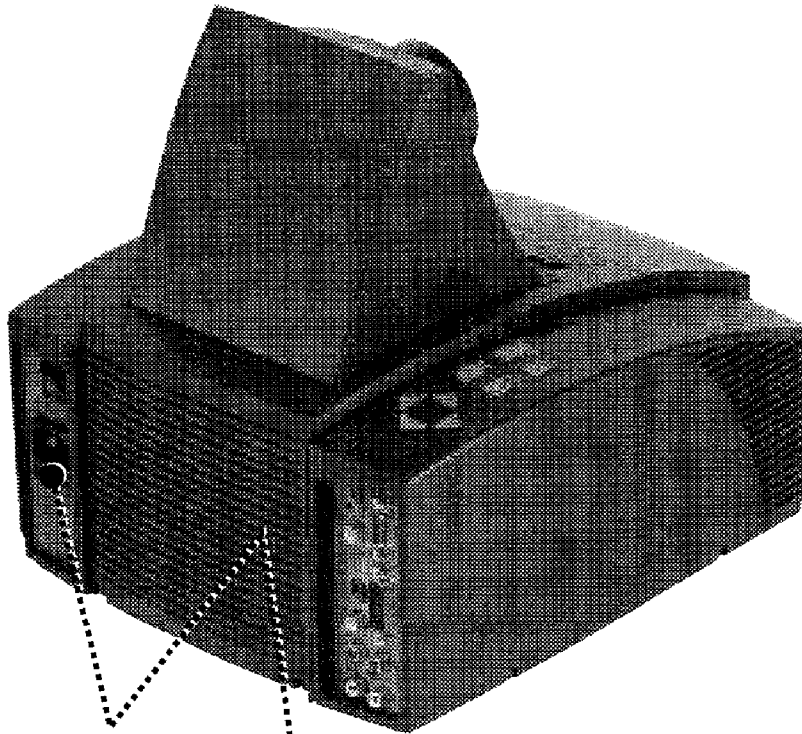
MAIN UNIT

TOP VIEW



REAR VIEW

POWER SWITCH AND POWER CONNECTION

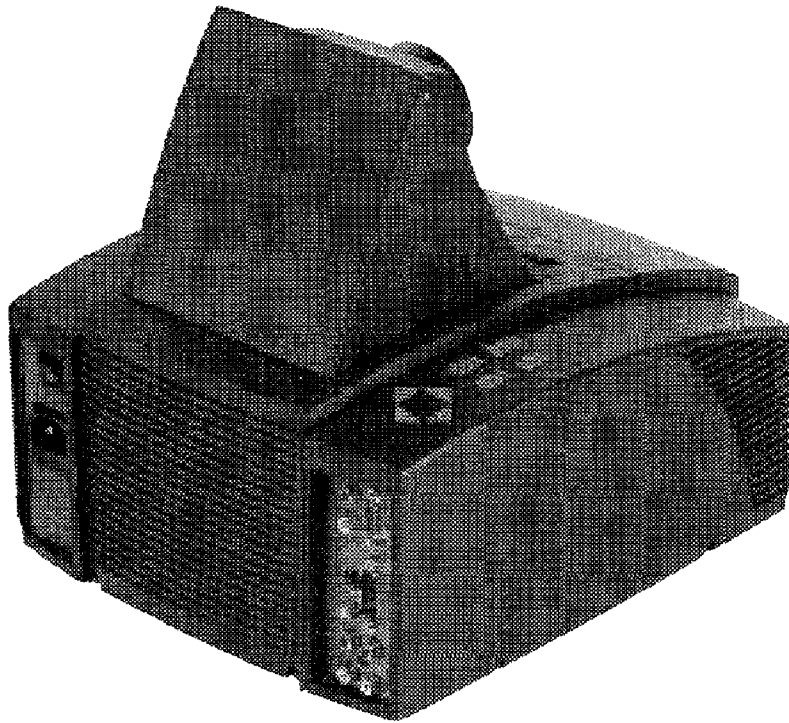


Power Switch

Power Input Connection

Fuse Holder with Spare

INPUT/OUTPUT CONNECTIONS



Left/Right Audio
Connection

S-Video Input
Connection

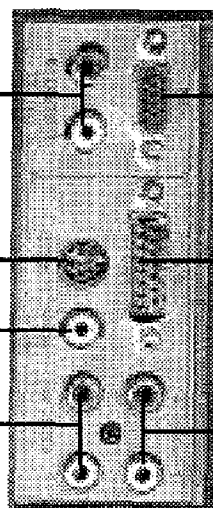
RCA Video Input

Left/Right Audio
Input for Video
Connections

RGB Monitor Loop-Through

RGB Input Connection

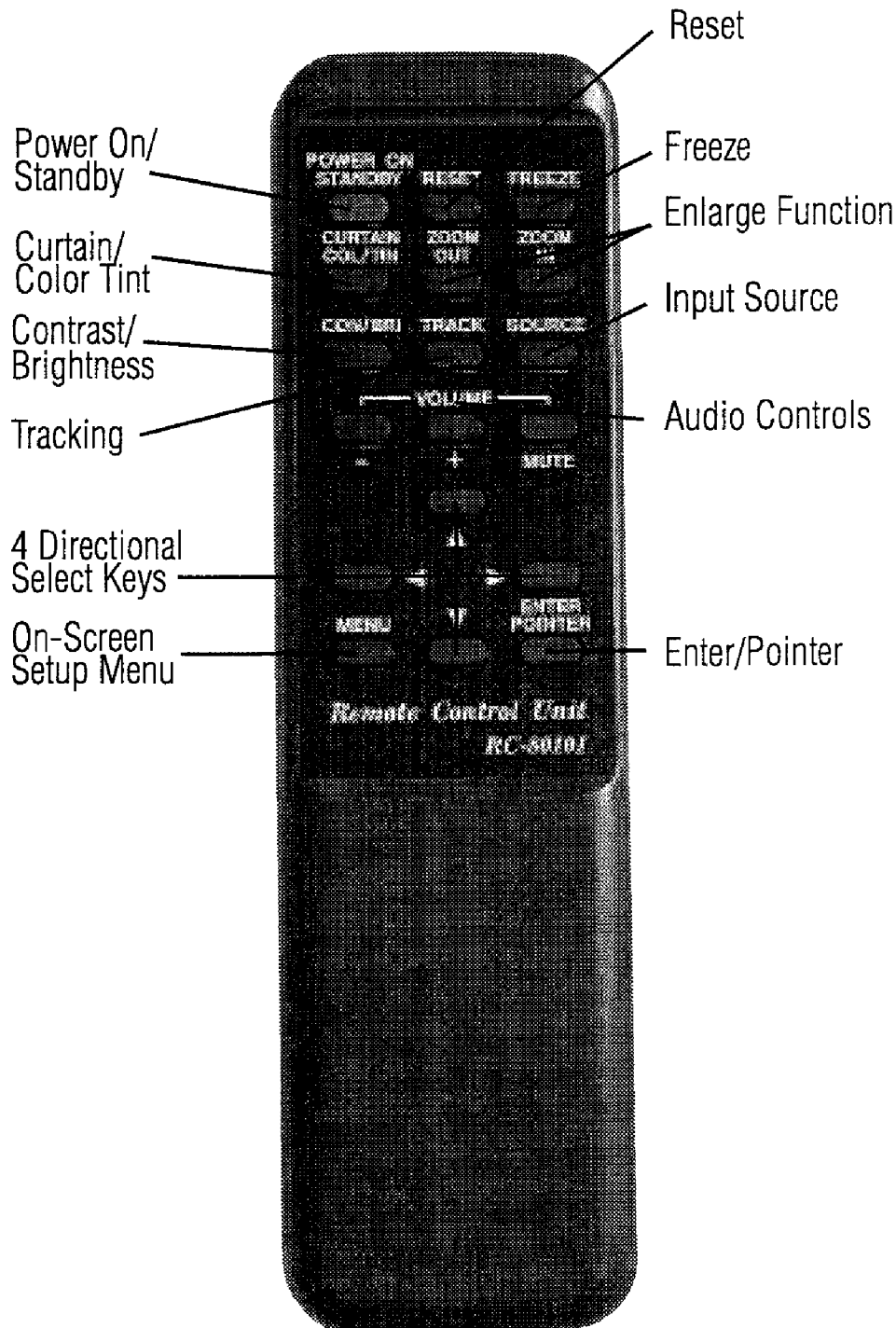
Left/Right Audio Input for
Computer Connections



ABOUT THE REMOTE CONTROL UNIT.

The wireless remote control, similar to the ones used for TVs and VCRs, allows you to set up and adjust the image settings and also allows you to conduct interactive presentations.

The program buttons on the remote give you instant access to all functions.



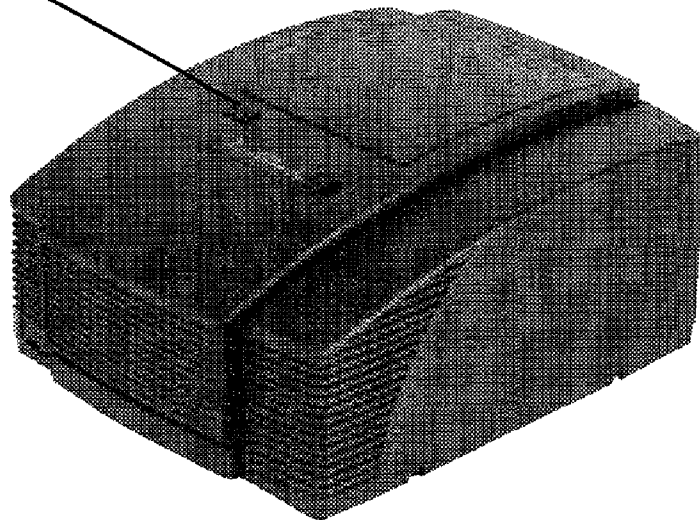
HOW TO SET-UP YOUR PROJECTOR.

This chapter explains the set-up procedures for your projector, including information pertaining to peripheral equipment. Follow the procedures below:

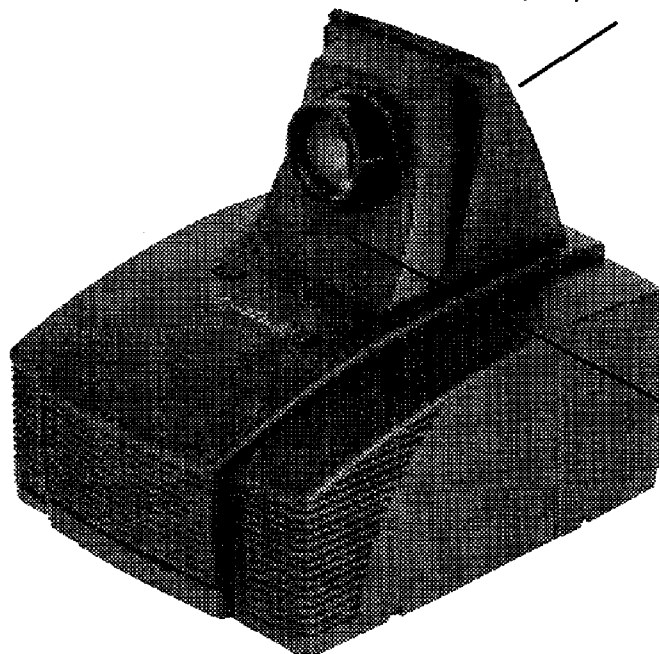
POP-UP THE LENS.

Slide the lens latch. The top will open a small amount (similar to the hood of your car), raise the pop-up lens and make sure its completely upright in the locked position.

Lens Latch



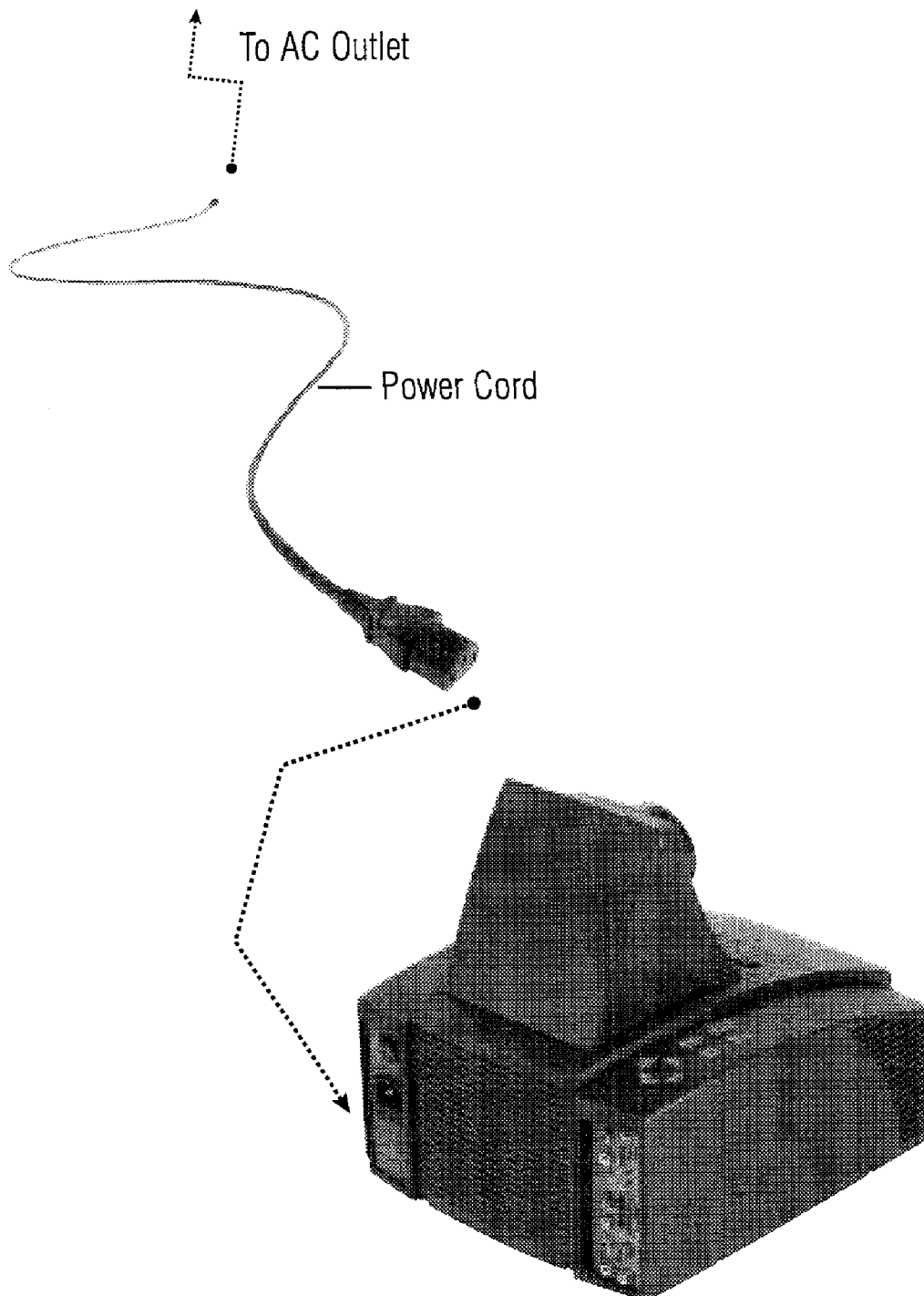
The Pop-up Lens Assembly



To close the pop-up lens, pull back on the area below the lens & fold down.

CONNECT THE POWER SUPPLY.

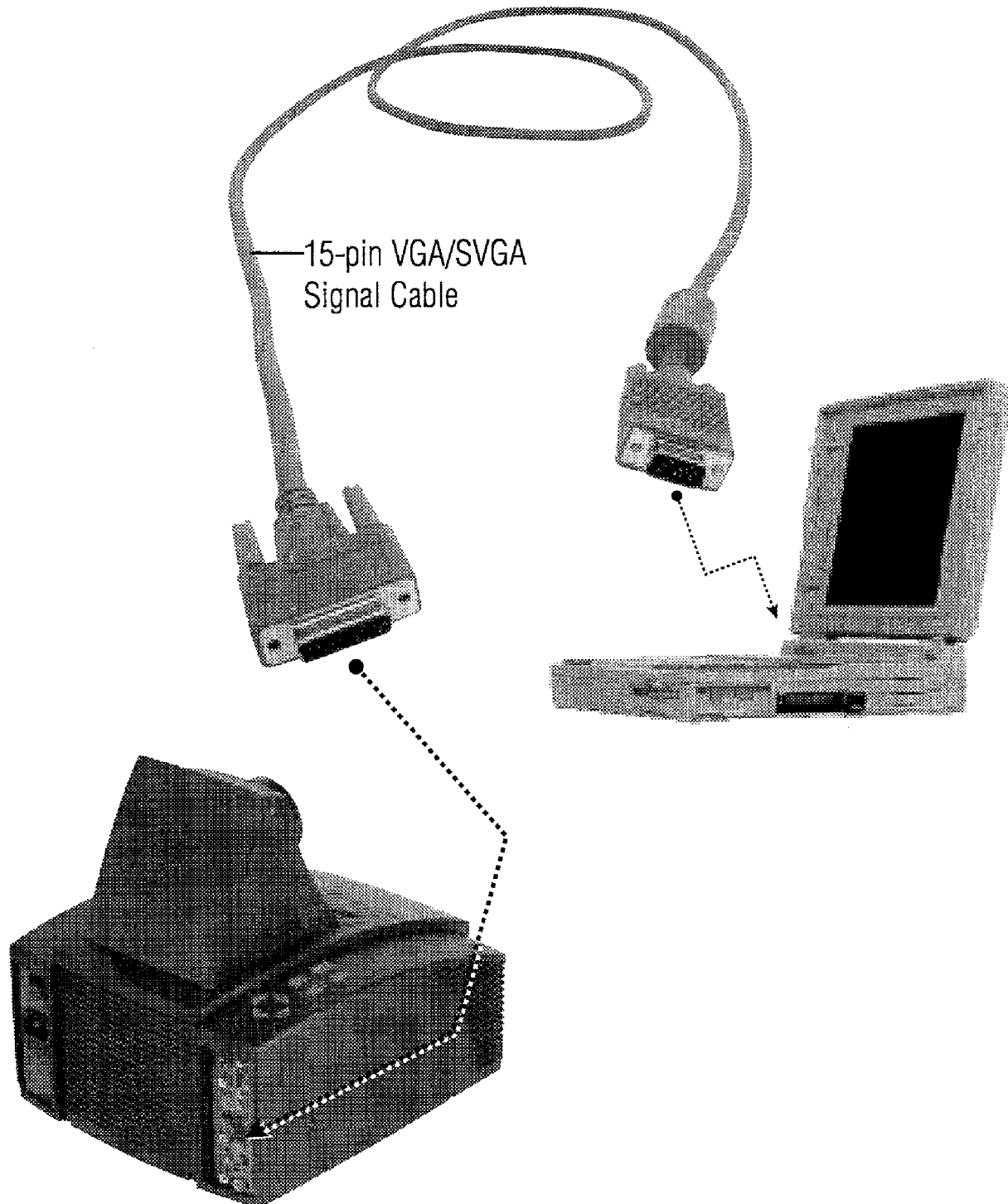
Insert the power cord into the AC input socket of your projector and plug into an AC outlet.



FOR IBM COMPATIBLE COMPUTER CONNECTION.

FOR IBM COMPATIBLE DESKTOP COMPUTERS:

Connect the supplied 15-pin VGA/SVGA signal cable to your projector (RGB input connection) and to the signal output of your computer.

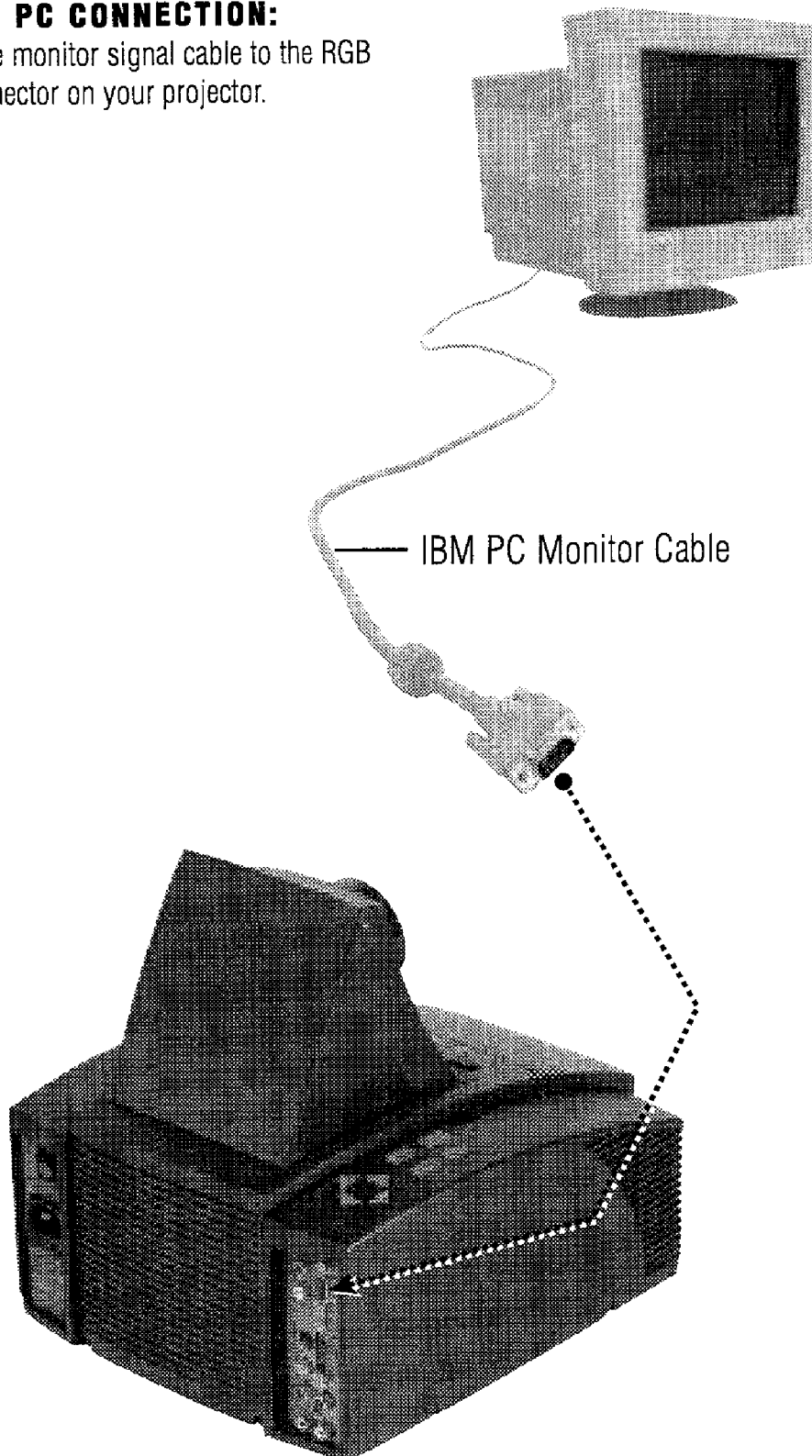


FOR IBM MONITOR CONNECTION.

The built-in monitor loop-through allows you to view your monitor and projected images simultaneously.

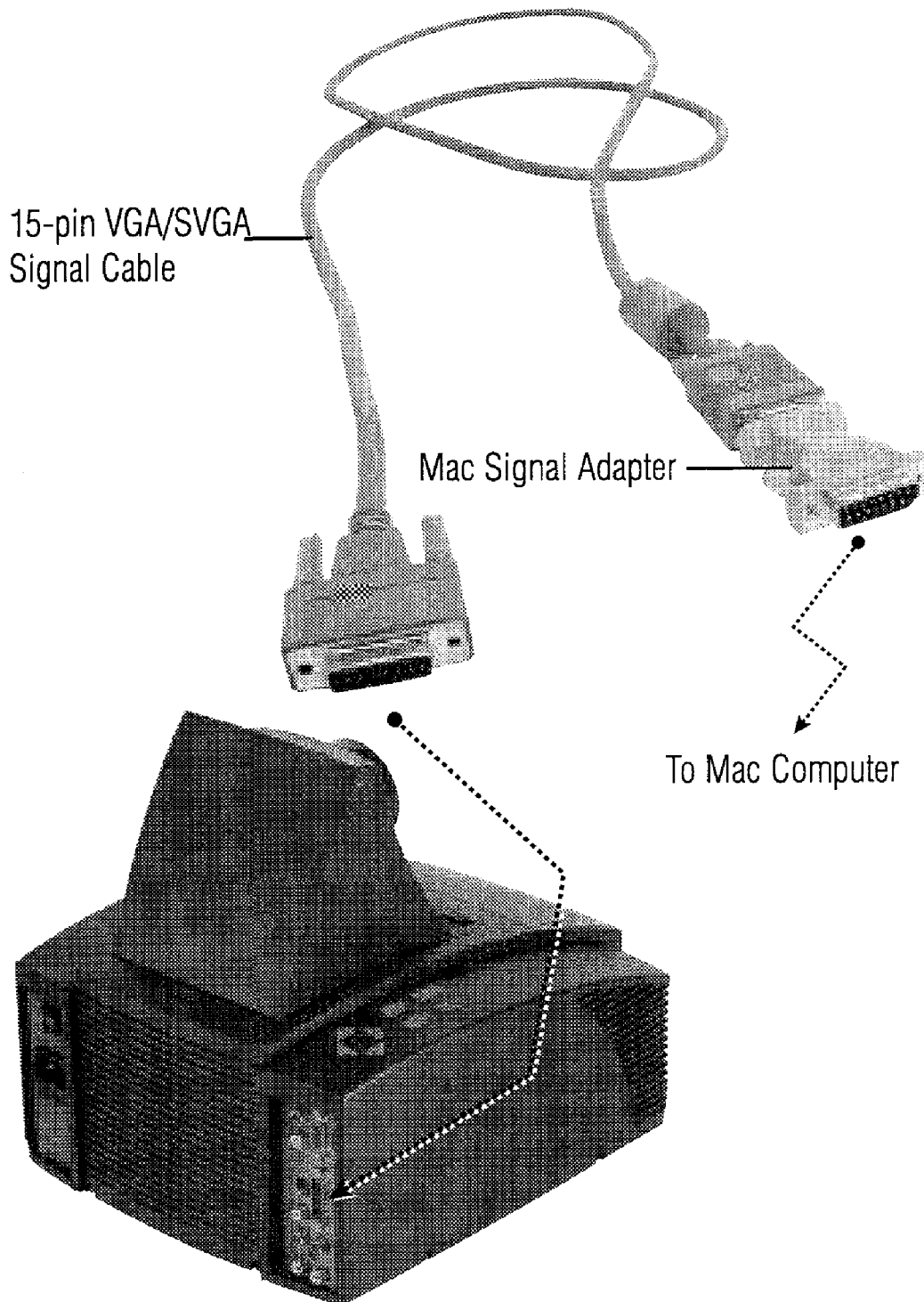
FOR IBM PC CONNECTION:

Connect the monitor signal cable to the RGB output connector on your projector.



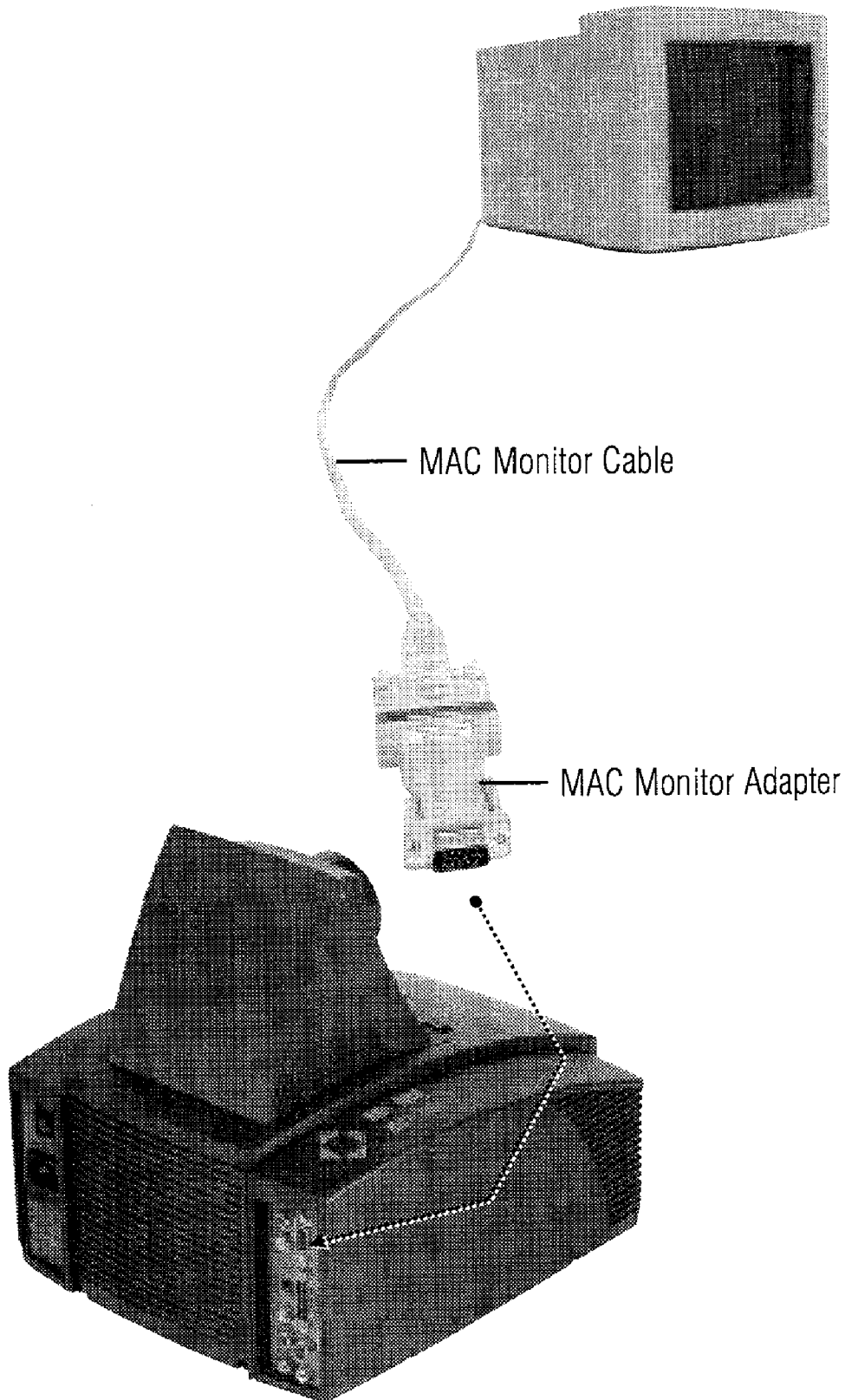
FOR MAC COMPUTER CONNECTION.

Connect the supplied 15-pin signal cable to your projector. Connect the supplied Mac signal adapter to the 'VGA/SVGA signal cable' and then into the signal output of your Mac.



FOR MAC MONITOR CONNECTION.

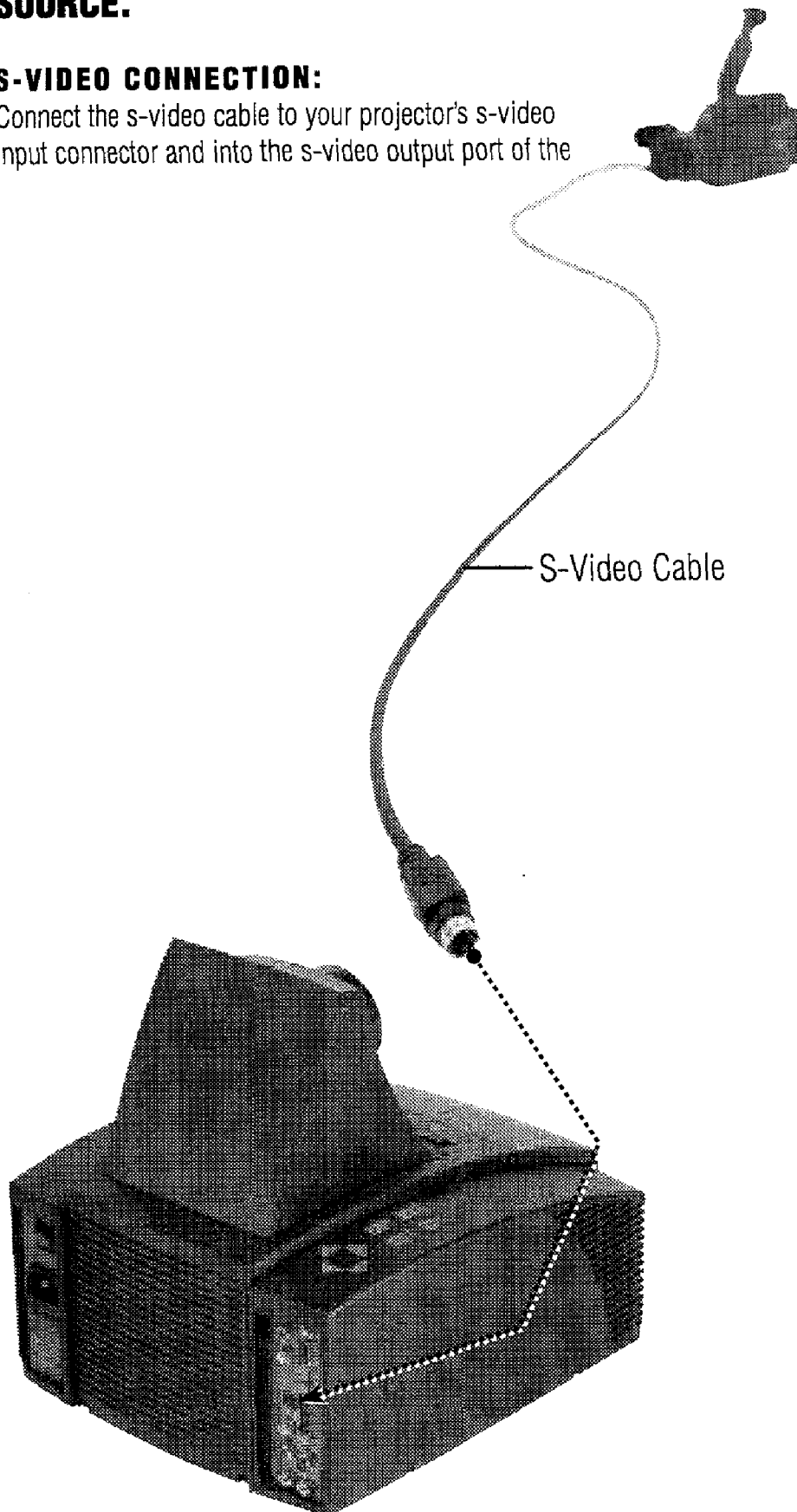
Connect the supplied MAC monitor adapter onto the monitor signal cable and into your projector's RGB output connection.



HOW TO CONNECT TO A VIDEO SOURCE.

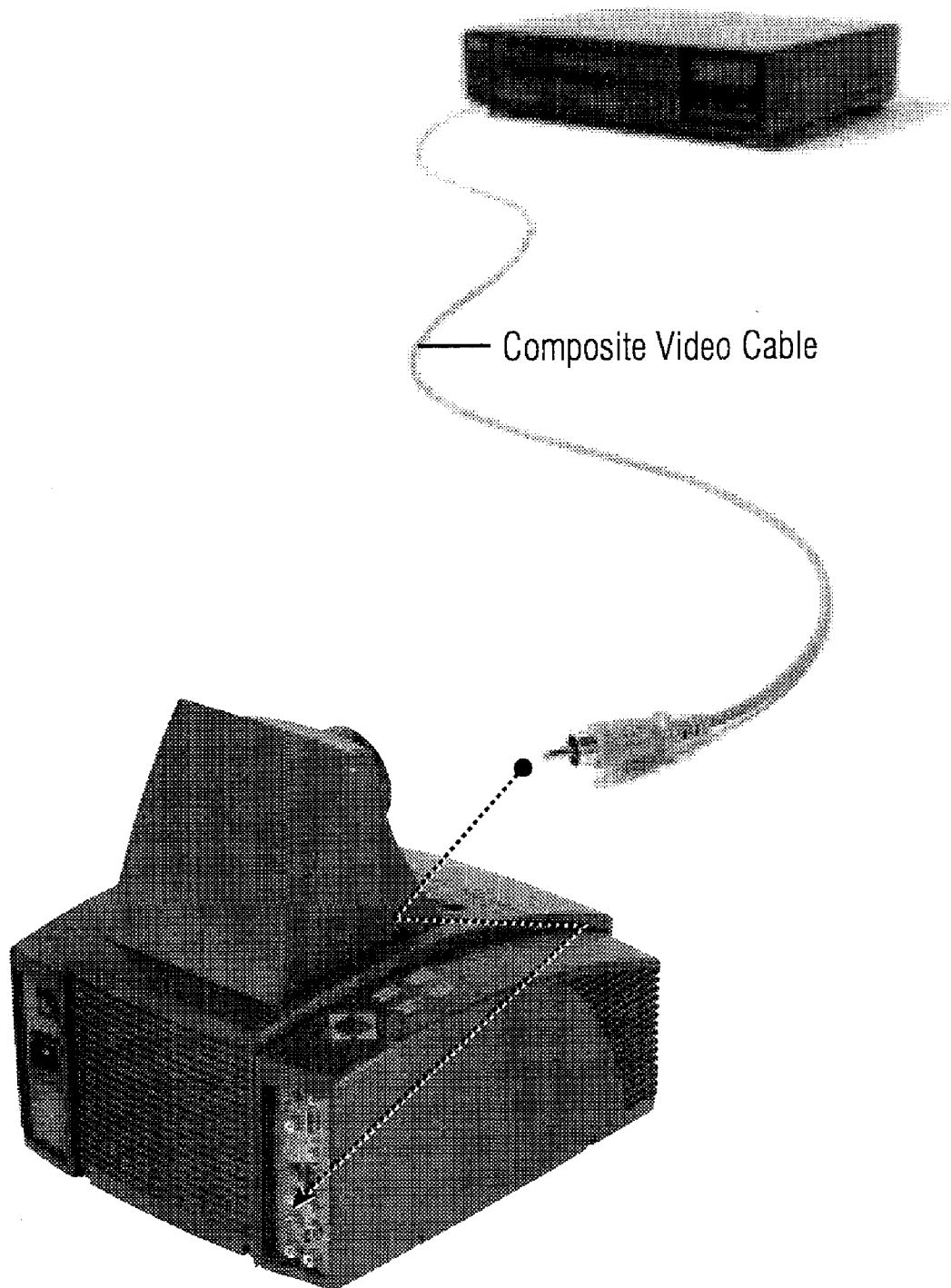
S-VIDEO CONNECTION:

Connect the s-video cable to your projector's s-video input connector and into the s-video output port of the



COMPOSITE VIDEO CONNECTIONS:

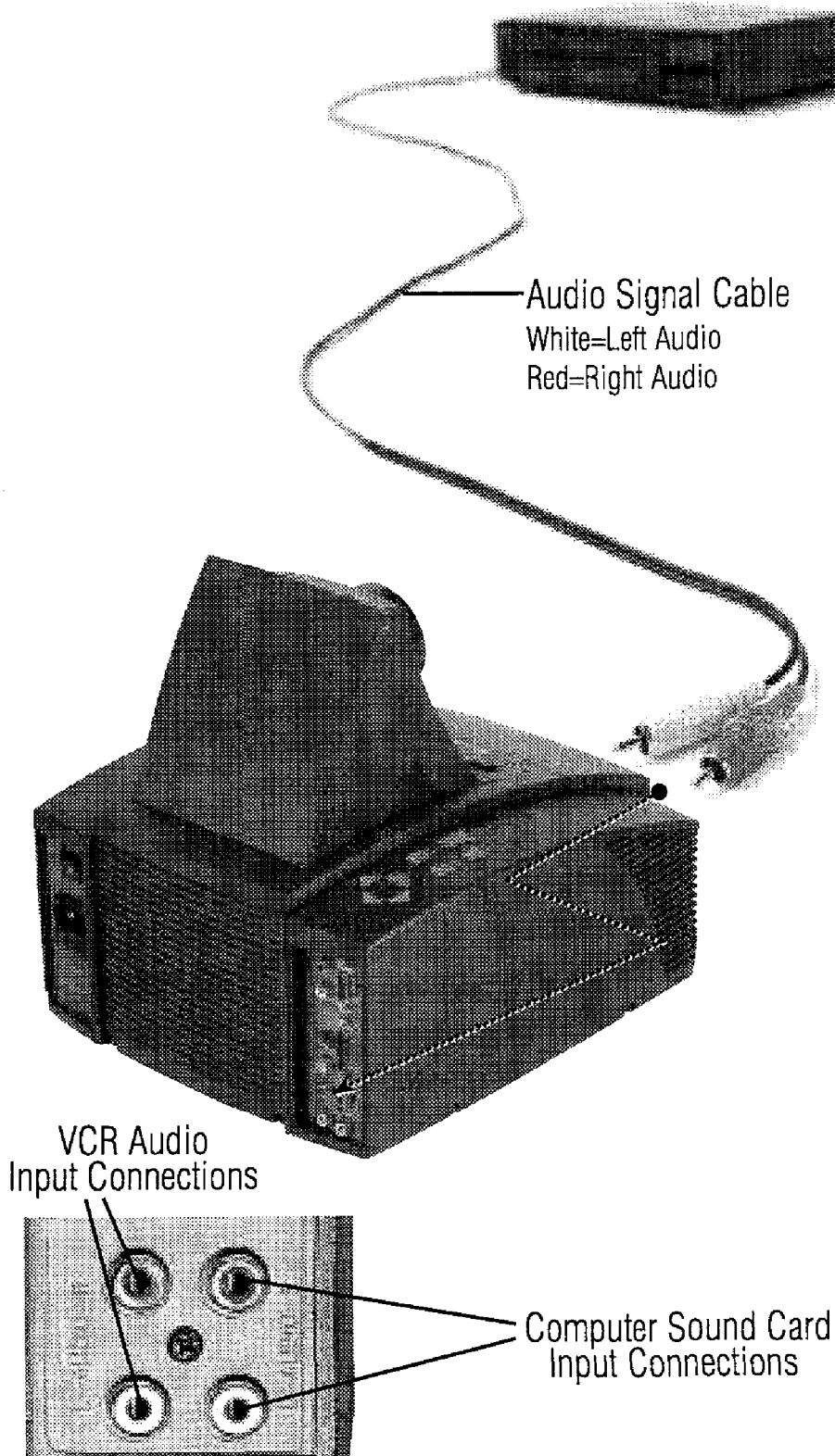
Connect your projector's composite video input to your video source with the supplied composite video cable.



HOW TO CONNECT AN AUDIO SOURCE.

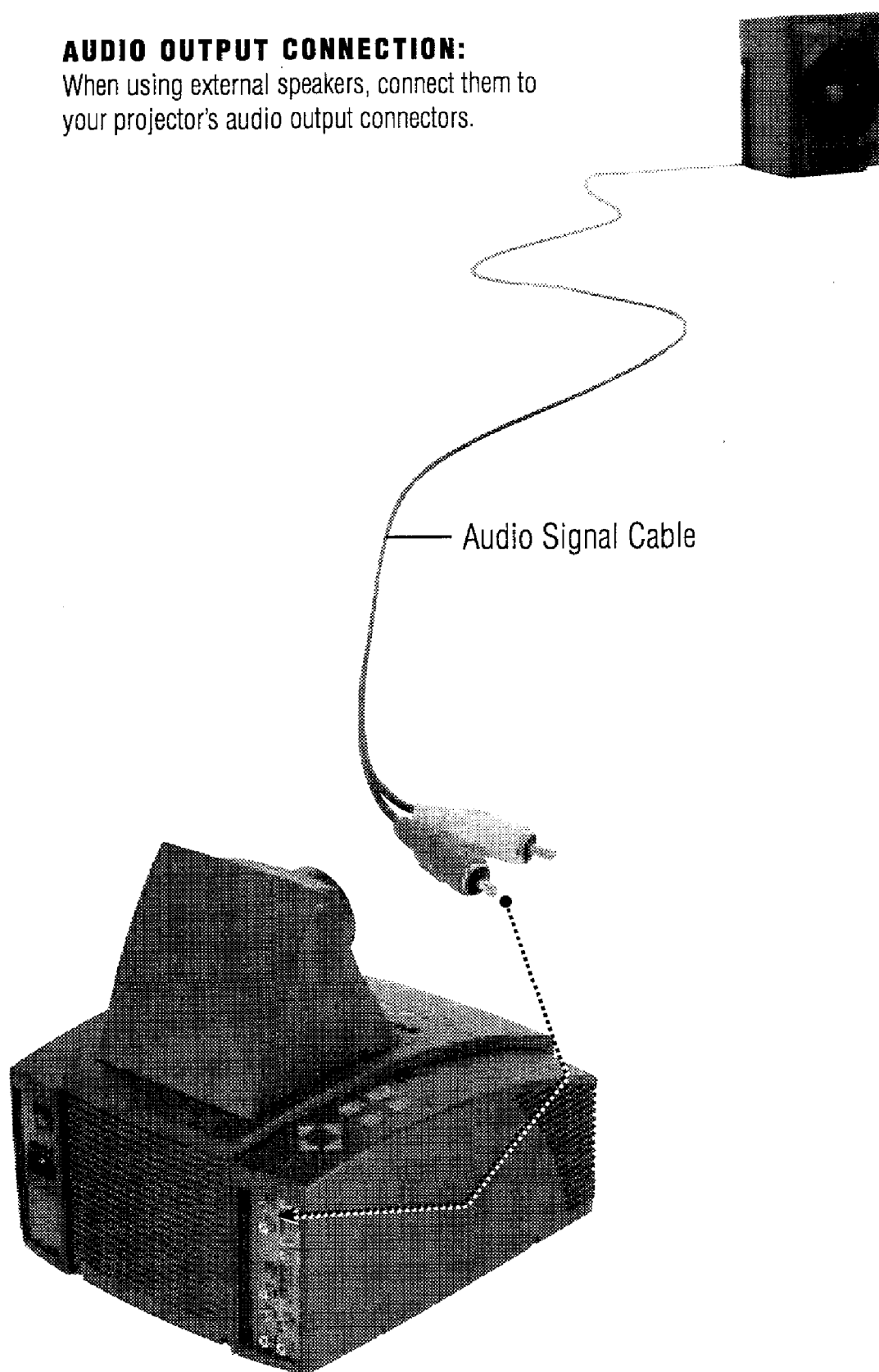
AUDIO INPUT CONNECTION:

Connect your projector's audio input connectors to the audio source (your computer or VCR) with the supplied audio signal (stereo) cable.



AUDIO OUTPUT CONNECTION:

When using external speakers, connect them to your projector's audio output connectors.



HOW TO USE YOUR PROJECTOR.

Before you begin, take time to familiarize yourself with all the controls. They give the product its capabilities. This chapter will explain all control functions.

The following table shows which functions are available from the keypad on the product itself and which functions are available from the remote control unit.

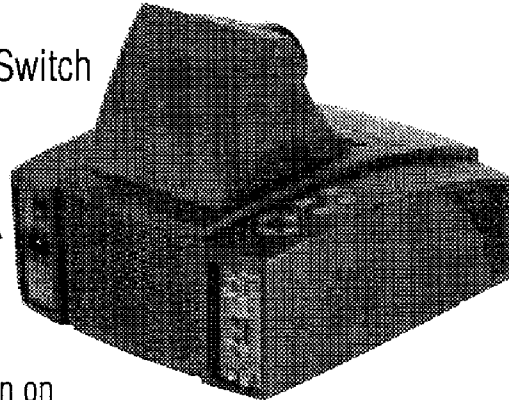
A. FUNCTION KEY TABLE

Function	Main Unit	Remote
Keystone Correction	●	—
Power On/Standby	●	●
Menu	●	●
Reset	●	●
Enter	●	●
4 Directional Select Keys	●	●
Pointer	—	●
Contrast/Brightness	●	●
Curtain	—	●
Track	●	●
Source	●	●
Zoom In	—	●
Zoom Out	—	●
Freeze	—	●
Volume	●	●
Mute	—	●

HOW TO TURN ON YOUR PROJECTOR.

Flip the power switch located on the left rear side of the projector to the '1' position. Wait 5 seconds for the fan to come up to speed, then push the POWER ON/STANDBY button that is located on the top control panel and/or the remote.

Power Switch

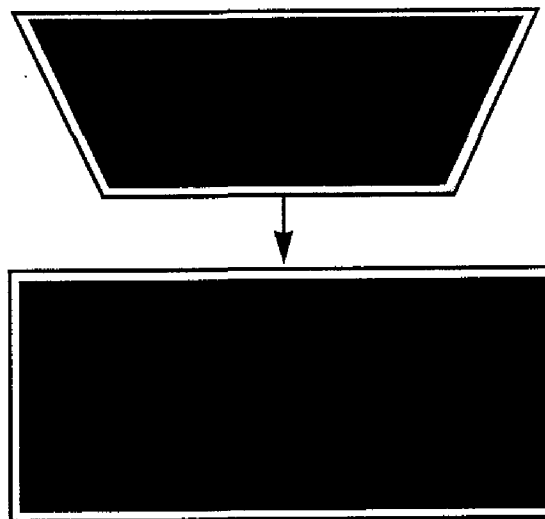


Please take note that if you hold down the POWER ON/STANDBY button too long, the projector may turn on and then very quickly turn off.

Adjust the focus by turning the lens.

KEYSTONE CORRECTION.

Adjust the keystone by sliding the keystone adjuster backward or forward to correct a projected image similar to the one shown here. The keystone adjuster is shown in the figure on page 4.



POWER ON/STANDBY BUTTON.

This button is for power up and standby (power down). It allows you to quickly and instantly turn off the lamp. The fan goes to idle speed for 'cool-down' when placed in the standby position.

DIRECTIONAL SELECT BUTTONS:

These four buttons allow you to use the toggle functions, make adjustments, and center the projected image.

With the on-screen setup menu:

- a. Use UP or DOWN button to select items.
- b. Use RIGHT or LEFT buttons to make adjustments.

In order to center the projected image, use the directional keys to move the image in the desired direction (make certain the menu is de-activated).

RESET:

This function will return the projector to its default settings. When RESET is pressed, a dialog box will appear:

Do you want to reset all values?

Yes

Cancel

Use the LEFT or DOWN buttons to switch between Yes and Cancel.

Press ENTER to confirm your selection.

MENU.

1. HOW TO OPEN:

Press the MENU button to view the on-screen menu. **Please note that the menu is context sensitive. The menu for a particular video or data mode only appears when that mode is**

COMPUTERS:

VGA Mode 3 will be:

Language
Contrast
Tracking
Frequency
Oversize
Text Style
VGA Text/Graph
Audio
Source
Reverse
Exit

COMPUTERS:

*VGA mode 10, mode 12,
VESA / MAC / PC-98 / FMTOWNS
will be:*

Language
Contrast
Tracking
Frequency
Audio
Source
Reverse
Exit

VGA ON 7200:

Language
Contrast
Tracking
Frequency
Oversize
Audio
Source
Reverse
Exit

Oversize
Yes No
☐ ☒

VIDEO:

*NTSC, PAL and
SECAM will be:*

Language
Contrast/Brit
Color/Tint
Audio
Source
Reverse
Exit

2. HOW TO USE THE MENU:

Use UP and DOWN keys to select items and press ENTER to confirm your selection. Use LEFT or RIGHT buttons to make adjustments of the selected item. We will explain each function in the following sections.

3. HOW TO CLOSE THE MENU:

Press the MENU button again, or select EXIT from on-screen menu, then press ENTER. (If no action is taken within 5 seconds, the menu will automatically disappear.)

ENTER/POINTER.

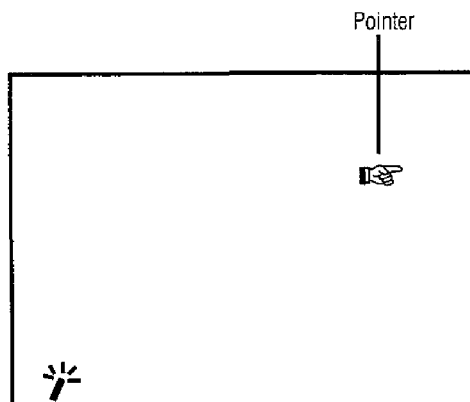
ENTER FUNCTION:

ENTER is used for confirming your selection and it also allows you to start the POINTER function.

POINTER FUNCTION: (COMPUTER ONLY)

After you press POINTER, you will see a hand-shaped icon at the upper left corner of the screen. Use the directional select buttons to move it.

Press POINTER again to exit the function.



CNTR/BRITE. (CONTRAST/ BRIGHTNESS)

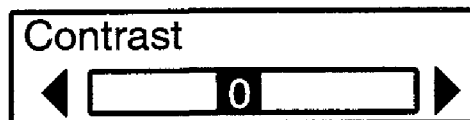
This allows you to adjust the contrast and brightness of the display.

When using a computer source, only Contrast is effected; while in video mode, both Contrast and Brightness adjustments are available.

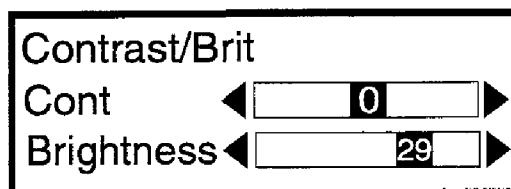
Use LEFT or RIGHT buttons to make adjustments.

For example:

Computer source will be:



Video source will be:



SOURCE.

Source select is used when more than one signal is input into the projector. With only one signal into the projector, the projector will automatically display that signal.

1. Press the SOURCE on the remote control to toggle between video and computer inputs, or...
2. Press MENU to enter the on-screen menu and then select the required SOURCE item.



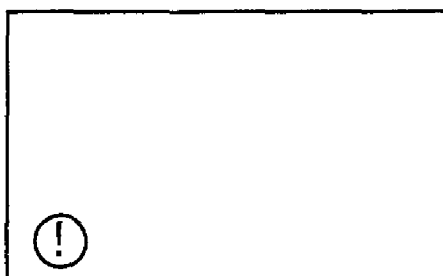
ZOOM. / PAN.

The zooming function allows you to magnify the projected image.

1. Press ZOOM IN on the remote control. You will see an icon at the lower left corner of the screen which means this function has been activated.
2. With zooming activated, you can press the four directional select buttons to PAN within the image window to the exact area you wish to view.
3. Press ZOOM OUT to reduce the magnification or ENTER to return to its original (normal) size. The image can be magnified from 1 to 9 times as large as its original size.

FREEZE.

1. Press FREEZE to stop the update of the LCD (or 'freeze' the picture). An icon appears at the bottom of the screen to remind you that this function has been activated.



2. Press FREEZE again to resume normal display operation.

If desired, you can employ the FREEZE and ZOOM IN/ZOOM OUT functions simultaneously.

VOLUME. (+, -, & MUTE)

1. Select AUDIO from the menu, and then select VOLUME from the AUDIO SUBMENU and adjust the volume with LEFT and RIGHT keys, or...



2. Press + or - to control the volume.
3. Press the MUTE button to shut off the sound altogether. Press MUTE again to resume it.
4. If no action is taken within a few seconds, the VOLUME control on-screen display will disappear.

THE FOLLOWING FUNCTIONS EXIST ONLY ON THE ON-SCREEN MENU.

LANGUAGE.

Lets you select the language used in the on-screen menus.

Language
English
中文
Deutsch
Français
Español

FREQUENCY.

The FREQUENCY adjustment acts as a 'horizontal size' control, changing the digitizer clock frequency of your projector to match the frequency of your computer. Frequency is required to be adjusted for non-standard video signals and those which differ from typical VGA or Mac values.

Press the LEFT or RIGHT buttons to adjust the functions after the menu is accessed and FREQUENCY is selected.

Frequency
◀ [26] ▶

For easy adjustment of FREQUENCY, locate a checker-board pattern (such as is used in some graphic patterns for shading). There will be a 'moire effect' visible within the checkerboard area unless the frequency is adjusted correctly.

VGA TEXT. (VGA MODE 3 AND MODE 13 ONLY)

Press the LEFT or RIGHT buttons to toggle between TEXT and GRAPHIC modes (since these modes are automatically detected, no adjustment is needed).

VGA Text	
Text []	Graphic []

TEXT STYLE. (FOR VGA MODE 3 ONLY)

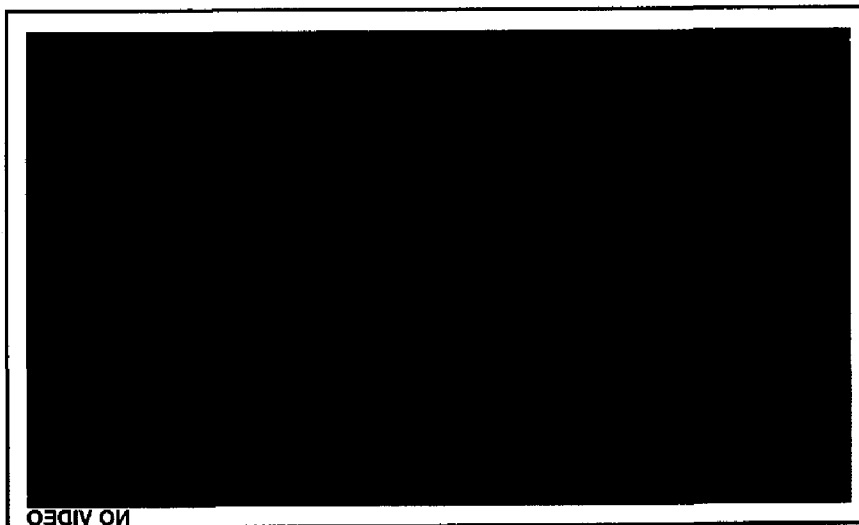
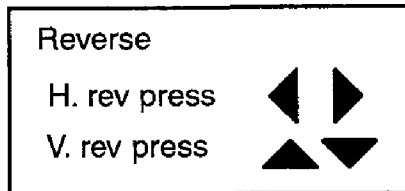
IBM/VGA text (mode 3), typically used to present text in the MS-DOS environment, displays 720X400 pixels. In order to accommodate this matrix into the LCD display for the 7200, some reconfiguring of the matrix has to be done. Pressing the LEFT or RIGHT buttons will select the pixel configuration that best suits the text on your screen.

Text Style								
0	1	2	3	4	5	6	7	8
[]	[]	[]	[]	[]	[]	[]	[]	[]

REVERSE.

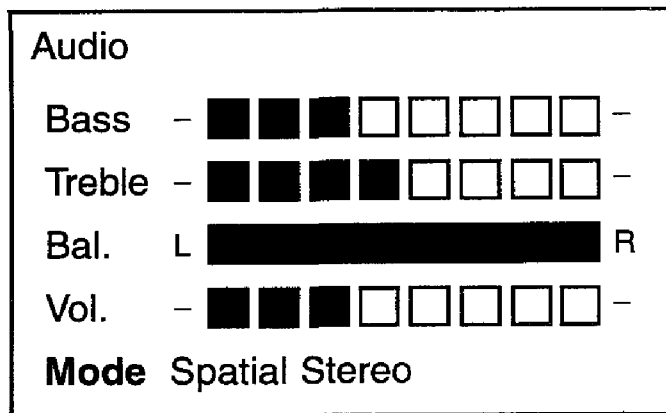
Choose REVERSE from the on-screen menu, which will flip the projected image horizontally (left to right), and/or vertically (top to bottom).

1. For rear projection situation (as shown below) employ the H. REVERSE.
2. For upside-down situations (ceiling mounted operation), choose the V. REVERSE to flip the image vertically (top to bottom).



AUDIO.

1. To control audio functions, choose AUDIO from the menu to see the sub-menu displayed as the figure below:



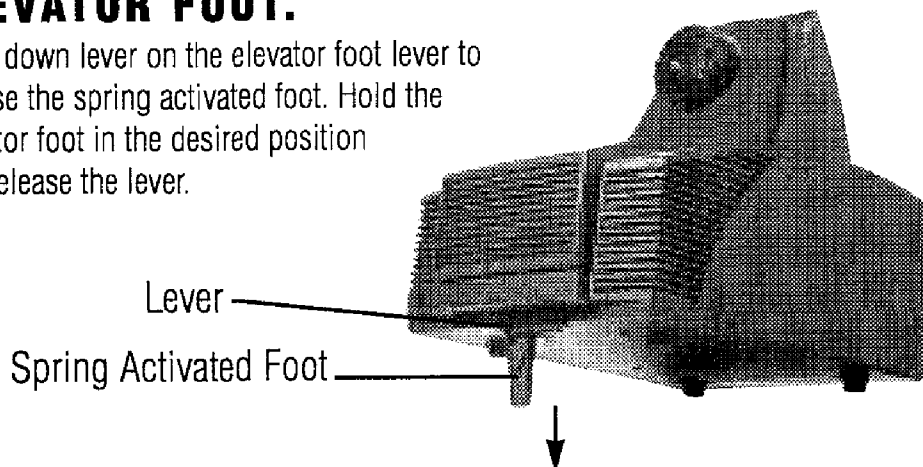
2. Description of functions in this submenu:

- Bass: Bass adjustment
- Treble: Treble adjustment
- Bal.: Balance adjustment
- Vol.: Volume adjustment
- Mode: Sound mode selection (Four modes to choose from, choices listed below)
 - Spatial Stereo: To simulate the "3D space" feeling from a stereo source.
 - Pseudo Stereo: To create a "like stereo" effect from a mono source.
 - Linear Stereo: Normal stereo without any extra processing.
 - Forced Mono: To mix the content of R and L channels.

After a few seconds of no action, the AUDIO submenu will automatically disappear.

ELEVATOR FOOT.

Push down lever on the elevator foot lever to release the spring activated foot. Hold the elevator foot in the desired position and release the lever.

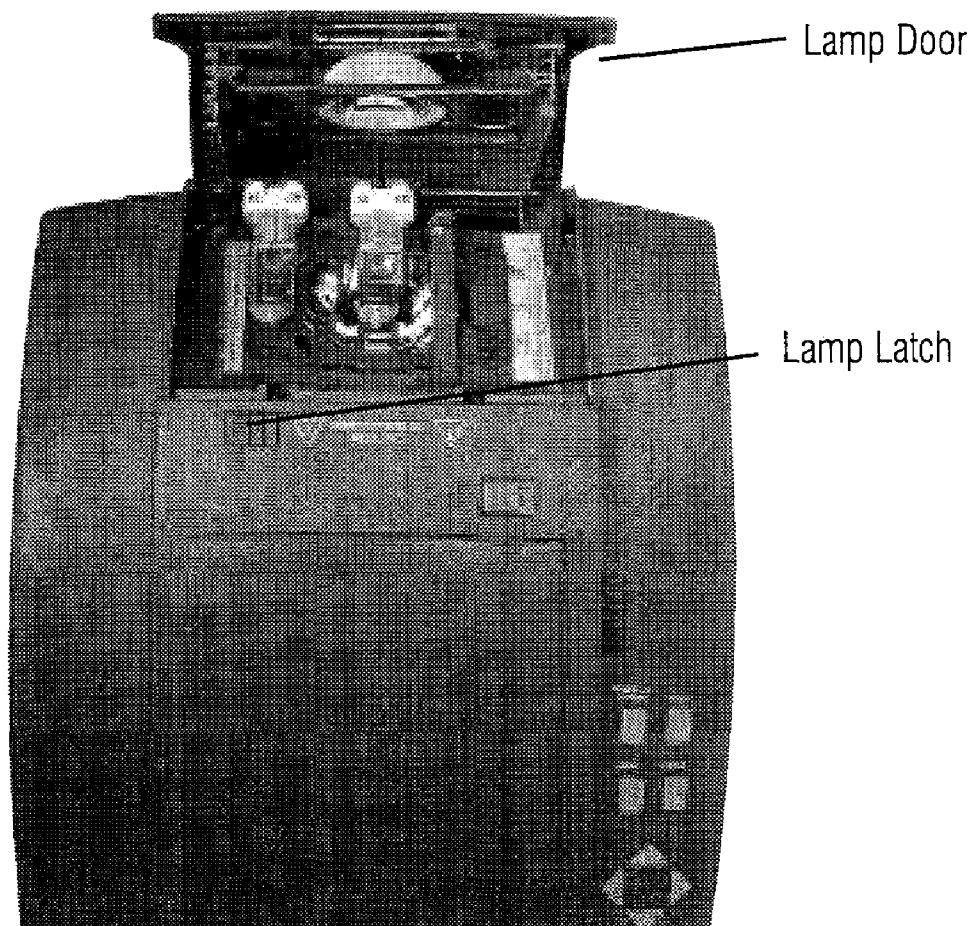


HOW TO CHANGE TO A NEW PROJECTION LAMP.

1. If the lamp fails during a presentation, please wait about one minute before opening the lamp door, in order to change the lamp. (This will allow the unit to cool down.)
2. You will notice that there are two lamps installed inside the product: one is in use; the other is a spare. Make sure you have a spare lamp ready when you prepare for your presentation.
3. If the internal temperature gets too high, the thermal switch will automatically shut off the lamp supply. When internal temperatures return to normal, the lamp will turn on again.

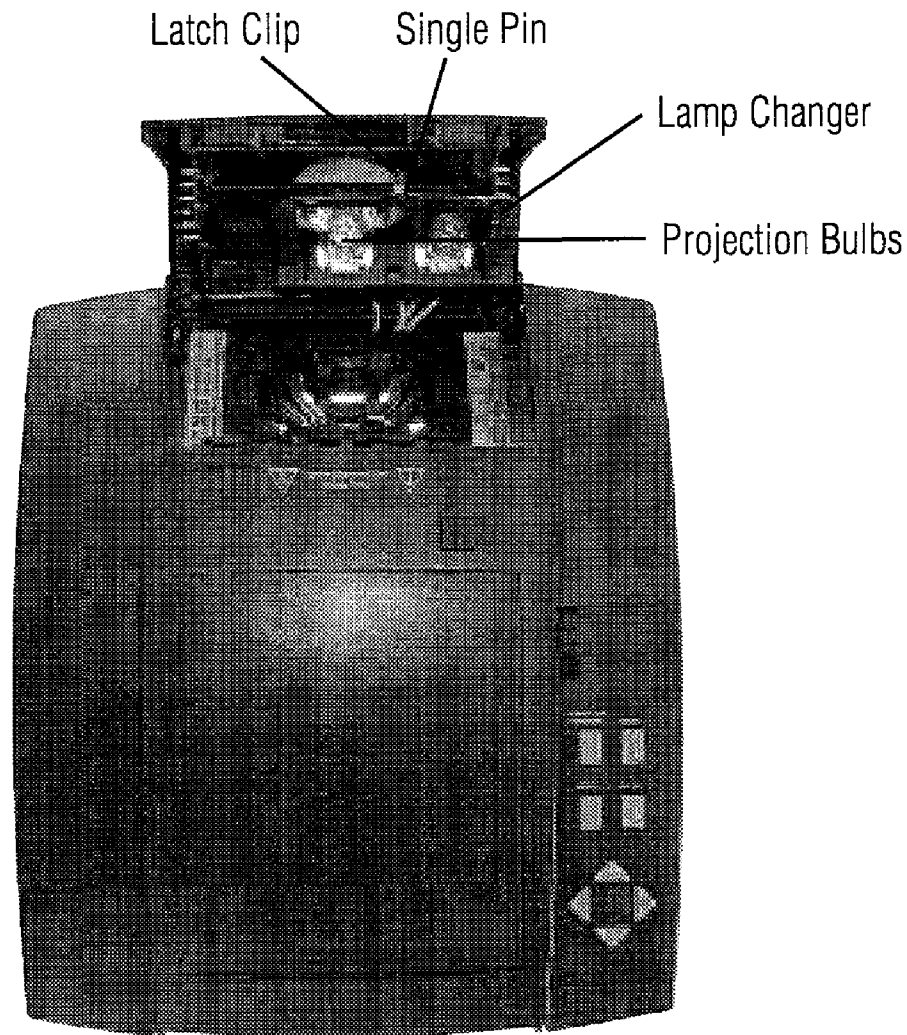
FIRST, YOU NEED TO OPEN THE LAMP SET.

Slide the lamp latch over and open the lamp door.



SECOND, MOVE THE HANDLE ON THE LAMP CHANGER LATERALLY.

There is a single pin at the top center of the lamp "slider" changer. This pin functions as a handle to assist in your moving the spare lamp into place. If the projector is still hot, the single pin will remain cool for your safety. Lamps are quickly and easily changed even during a presentation.



LAST, CLOSE THE LAMP DOOR.

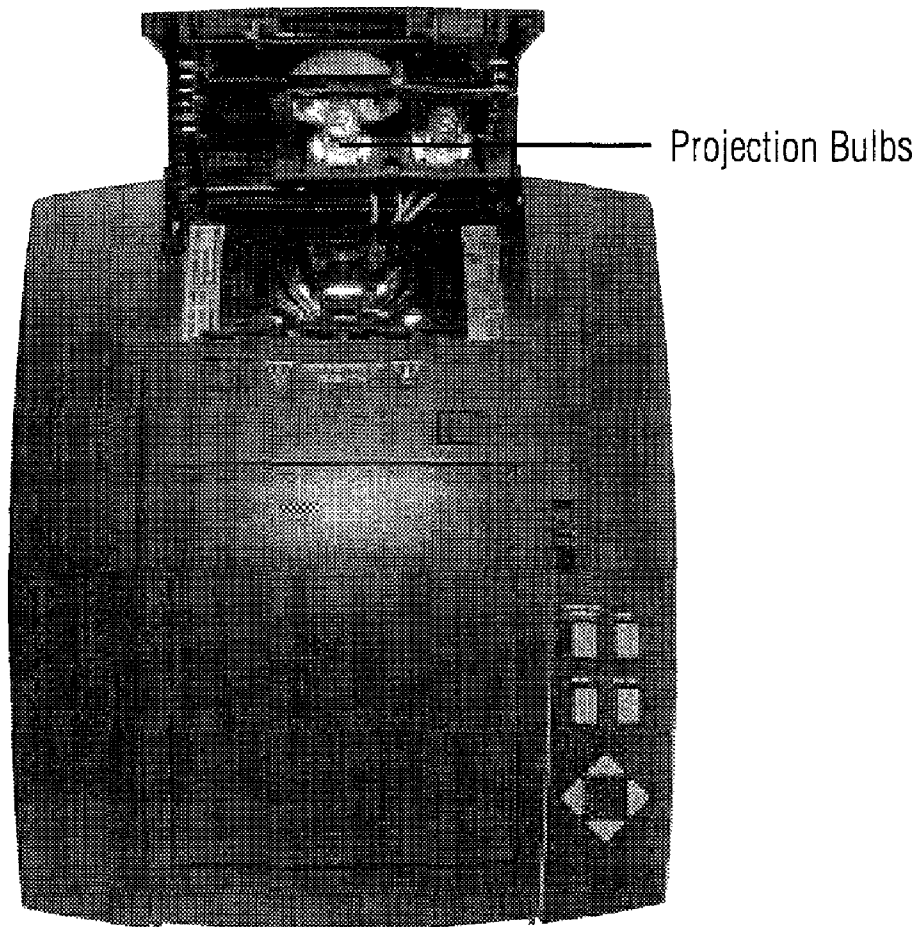
After the change is complete, close the lamp door carefully. Make certain that the lamp changer is completely shifted to one side (not in-between positions) Do not force the door (if it doesn't close smoothly, the lamp changer is not in position).

FINALLY, RESUME YOUR PRESENTATION.

HOW TO INSTALL A NEW PROJECTION LAMP.

FIRST, ALLOW THE BULB TO COOL DOWN.

ALWAYS allow the projector and the bulb to cool down completely before attempting to remove used lamps. If the projector is in use, turn to standby mode and wait 5 - 10 minutes for the projector to cool down.



SECOND, REMOVE THE OLD LAMP AND REPLACE IT.

FINALLY, CLOSE THE LAMP DOOR.

After you have removed the bulb, close the lamp door carefully. Make certain that the lamp changer is completely shifted to one side (not in-between positions) Do not force the door (if it doesn't close smoothly, the lamp changer is not in position).

TROUBLESHOOTING.

Warning: Except to change the projection lamp, do not attempt to open the projector cabinet to service it yourself. There are potentially dangerous voltages and other hazards. If you encounter problems with the projector, please refer to the section below. If you cannot solve the problem, please contact your supplier or contact Dukane Technical Support at 800-676-2487.

PROBLEM: Using a laptop computer, only the blank startup screen is projected.

SOLUTION: Check that the VGA output port on the computer has been activated. The blank startup screen will only appear if there is no signal present on either the VGA or video inputs. Most laptop manufacturers have a method for activating the external monitor (VGA) port. Activating the VGA port is usually accomplished using the function (FN) key on the laptop keyboard in conjunction with one of the regular function keys, e.g. hold down the FN key while pressing F12. Some laptops require a reboot to allow the computer to check for an attached external monitor and then activate the external port.

Macintosh computers turn on the external port by opening the **Mac Control Panel** and selecting **Video Mirroring**.

PROBLEM: Part of the projected image on the 7200 seems to be cut off or missing or the 7200 shows nothing or displays random colors with barely discernible graphics.

SOLUTION: Be sure the computer resolution is the same as that required by the projector, i.e. 640X480. Many laptops still use their 800X600 driver for the internal laptop screen even though the resolution is set for 640X480. Therefore when using a 7200 with a laptop that has an 800X600 screen you may have to set the resolution to 640X480, turn off the laptop display and run it in external display mode only, to achieve acceptable results.

To change display resolution in Windows 95, open **settings---control panel---display---settings**. In the settings window go to the desktop area and drag the pointer over to the 640X480 end of the slider bar. Click on **apply**. The screen will either resize immediately or prompt you to reboot. If it resizes immediately it

will ask if you want to keep this setting. Click on **yes**. In Windows 3.x open the **main** window and click on Windows setup. Select **options---change system settings**. Select 640X480 driver that is compatible with your video card or the generic VGA driver then restart Windows.

PROBLEM: When viewing text on the projected display, some of the characters seem darker or thicker than others.

SOLUTION: This symptom indicates that the frequency of the projector does not match the frequency of the computer. To correct this press the **menu** button on the remote control or the keypad on the projector. Select **frequency** from the menu. Using the left and right arrows on the remote control or on the projector keypad, adjust the frequency up or down until all of the text characters are the same.

PROBLEM: The projected display has vertical lines or shaded areas in the background.

SOLUTION: This symptom indicates that the frequency of the projector does not match the frequency of the computer. To correct this press the **menu** button on the remote control or the keypad on the projector. Select **frequency** from the menu. Using the left and right arrows on the remote control or on the projector keypad, adjust the frequency up or down until the vertical lines or shaded areas spread apart and disappear.

PROBLEM: Video Jitter

Video jitter can have several names e.g. frying, jumping, noise, etc. The following are possible causes and solutions:

Misadjusted Frequency: Some “jitter” problems can be solved by adjusting the frequency on the projector. Press the **menu** button on the remote control or the keypad on the projector. Select **frequency** from the menu. Using the left and right arrows on the remote control or the keypad on the projector, adjust the frequency until the jitter stops.

Misadjusted Tracking: Some “jitter” problems can be solved by adjusting the tracking on the projector. Press the **menu** button on the remote control or the keypad on the projector. Select **tracking** from the menu. Using the left and right arrows on the remote control or the keypad on the projector, adjust the tracking until the jitter stops.

PROBLEM: Noisy display in video mode.

SOLUTION: Check for poor ground on the video cable.

PROBLEM: Display is lacking red, blue or green color.

SOLUTION: Check VGA cable for bent or broken pins.

PROBLEM: The bottom of the projected display is straight but the top is crooked.

SOLUTION: Align the projector so that it is perpendicular to the screen.

PROBLEM: Projection lamp sounds like it wants to turn on, but doesn't.

SOLUTION: Holding the **standby** button down too long will cause the lamp to misfire. Press and release the **standby** button quickly.

PROBLEM: The projected display is narrow at the top or at the bottom.

SOLUTION: Adjust the **keystone** correction adjustment on the top right side of the projector near the keypad.

PROBLEM: Remote control is intermittent or inoperative.

SOLUTION: Make sure the IR window on the front of the projector is not blocked. Check the batteries.

PROBLEM: The buttons on the remote control are sticking.

SOLUTION: Make sure the protective plastic film has been removed from the keypad.

PROBLEM: The projected image is rolling vertically or horizontally.

SOLUTION: Check for bent or broken pins on the VGA cable.

PROBLEM: Poor color using a Mac computer.

SOLUTION: The default mode for gamma correction in the Mac is corrected gamma. This will sometimes cause problems with the color displayed on the projector. To correct this enter the **control panel** and select **monitors**. A dialogue box with squares will appear that represent **monitors**. Click on the **option** button and choose uncorrected gamma.

SPECIFICATIONS.

Computer Compatibility	IBM VGA compatibles, VESA 72Hz and 75Hz, Apple Mac family (640x480) (LC, LCII, LCIII, II, IIx, IIcx, IICI, IISI, IIvx, IIVI, Quadra, Centris, and Powerbook, Power MAC.) NEC PC9801 Series (640x400) NEC PC9821 Series (640x480) Fujitsu FM Towns Series(640x400, 640x480) VESA Standard SVGA Modes
Video Compatibility Standards:	NTSC, PAL (B, D, G, H, I) SECAM (B, D, G, K, K1, L) Connectors: Composite and s-video
Audio	Built-in stereo audio system with two internal speakers 3 Watt x 2 amplifier for internal speaker
Number of Colors	16.7 million colors
Display Type	Active matrix color TFT LCD panel
Display Format	800x3 (RGB) x 600
Response Time	tr = 30ms; tf = 50 ms
Contrast Ratio	150:1 (typical)
Brightness	7200: 270 ANSI Lumens (typical)
Screen Size	40 inches at 1.5 meters distance 55 inches at 2 meters distance 95 inches at 3.5 meters distance
Keystone	Correctable, up to 20 degrees
Horizontal Freq.	24.366-37.900KHz
Vertical Freq.	55.378-75.000Hz
Cooling	Internal fans and ventilation slots
Electrical Supply	Input: AC 110V/220V, 50 to 60Hz; Output: 12V DC/+5V DC/-5V DC
Power Consumption	550 Watts for normal operation 35 Watts for standby mode
Temperature	Operating (Ambient) : 5°C to 40°C Storage (Ambient) :-20°C to +60°C
Dimensions	12.5 x 10.2 x 6.4 inches (317 x 259 x 162 mm)
Weight	9.25 lb. (4.25Kg)

TIMING TABLE.

Your projector has been designed to be compatible with the widest possible variety of computers. The timing of each video adapter will be different, therefore it may be necessary for you to make fine adjustments to the settings in order to optimize visual performance.

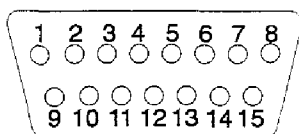
No.	VGA Mode	Resolution	f-Vsync (Hz)	f-Hsync (KHz)	f-D clk (MHz)
1	Mode 12	640x480	59.94	31.469	25.175
2	Mode 10	640x350	70.00	31.469	25.175
3	Mode 3	720x400	70.00	31.469	28.322
4	Mode 13	320x200	70.00	31.469	25.175
5	VESA	640x480	72.00	37.900	31.500
6	VESA	640x480	75.00	37.500	31.500
No.	MAC	Resolution	f-Vsync (Hz)	f-Hsync (KHz)	f-D clk (MHz)
1	Group 1	640x350	66.68	35.000	30.240
2	Group 2	640x350	60.00	34.971	31.334
No.	FM TOWNS	Resolution	f-Vsync (Hz)	f-Hsync (KHz)	f-D clk (MHz)
1	-----	640x400	56.40	24.830	21.053
2	-----	640x480	59.94	31.469	25.175

Mac Group1: LC III, IIci, IIsi, II, IIx, IIfx, Ilcx, Quadra, Centris, PowerBooks.
 Mac Group2: LC, LC II, IIvi, IIvx, PowerMAC.

No.	VGA Mode	Resolution	f-Vsync (Hz)	f-Hsync (KHz)	f-D clk (MHz)
1	VESA	800x600	56.25	35.16	36.00
2	VESA	800x600	60.32	37.88	40.00
3	VESA	800x600	72.19	48.08	50.00
4	VESA	800x600	75.00	46.88	49.50

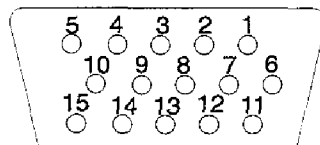
PIN ASSIGNMENTS.

COMPUTER INPUT CONNECTOR



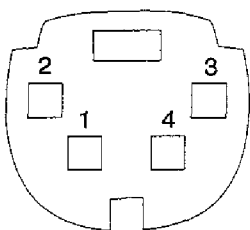
- | | |
|----|---------------------|
| 1 | Analog Red Return |
| 2 | Analog Red |
| 3 | Hsync/Csync |
| 4 | Digital Ground |
| 5 | Analog Green |
| 6 | Analog Green Return |
| 7 | Test 1 |
| 8 | Test 2 |
| 9 | Analog Blue |
| 10 | Not Connected |
| 11 | Digital Ground |
| 12 | Vsync |
| 13 | Analog Blue Return |
| 14 | Digital Ground |
| 15 | Not Connected |

EXTERNAL MONITOR OUTPUT CONNECTOR



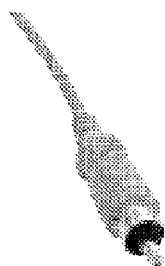
- | | |
|----|---------------------|
| 1 | Analog Red |
| 2 | Analog Green |
| 3 | Analog Blue |
| 4 | Not connected |
| 5 | Digital Ground |
| 6 | Analog Red Return |
| 7 | Analog Green Return |
| 8 | Analog Blue Return |
| 9 | Not Connected |
| 10 | Digital Ground |
| 11 | Not Connected |
| 12 | Not Connected |
| 13 | Hsync/Csync |
| 14 | Vsync |
| 15 | Not Connected |

S-VIDEO INPUT CONNECTOR

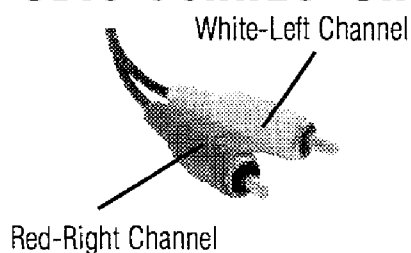


- | | |
|---|--------|
| 1 | Y |
| 2 | Ground |
| 3 | Ground |
| 4 | C |

COMPOSITE VIDEO INPUT CONNECTOR



AUDIO CONNECTORS



LEGAL INFORMATION.

ONE-YEAR LIMITED WARRANTY

The Dukane LCD Projector is warranted to the original purchaser for a period of one (1) year from the original purchase date—in normal use and service—against defects in material and workmanship. DUKANE CORPORATION EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

During the warranty period, Dukane Corporation will repair or replace (at the Manufacturer's option) any such defective parts (except for the lamp, which is subject to whatever warranties the manufacturer may provide) without charge to the purchaser for parts or labor when the product is returned, prepaid and insured, with proof-of-purchase date. This remedy of repair or replacement is exclusive of all other remedies that the purchaser may have. This exclusive remedy is void if the product has been damaged by accident, unreasonable use, neglect, improper service or other causes not arising out of defects in material or workmanship.

Dukane Corporation disclaims all liability for incidental or consequential damage of any kind, including all damages arising out of any interruptions in operation of the product and all damages to software.

No person, firm, or representative is authorized to assume any obligation or to make any warranty on behalf of the Dukane Corporation other than as stated above.

**THIS LIMITED WARRANTY IS VALID FOR U.S.A. AND CANADA.
FOR OTHER LOCATIONS, LOCAL WARRANTIES APPLY.**

LAMP REPLACEMENT SERVICE & REPAIR POLICY & PROCEDURE

For service and parts, contact the Dukane AV Service Department at 1 (800) 676-2487 within the USA or 1 (630) 584-2300 worldwide. If you would like to send a facsimile (FAX), dial 1 (630) 584-5156 worldwide.

When requesting warranty service, please have sales receipt available along with the model name and serial number.

If it becomes necessary to return the Projector, use the original packing material and box (if retained) or pack securely. Dukane Corporation will not be liable for any pick-up or delivery charges or any expenses incurred for service calls or service supplied by anyone other than the Dukane AV Service Department.

Audio Visual Products

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