

INTRODUCTION

Before operating this projector, please read this manual carefully and completely. This manual will provide you with the basic instructions for operation of the projector. Installation, preliminary adjustments and procedures which require the opening of the projector and contact with electrical components should be performed by service personnel. For continued safe and reliable operation, use only cables supplied by the manufacturer for power. Adhere to all notes and warnings.

Features

- ▶ Multi scan circuit automatically locks on video, superdata from 15 to 85 kHz (XG85) and graphics signals 15 to 135 kHz (XG135LC).
You can interface video and high resolution RGB signals from various computers, workstations and graphics boards.
- ▶ 8" CRTs with deflection angle 90 degrees produce a detailed picture with a resolution of 2500×2000 (addressable) XG135LC and 1600×1200 (addressable) XG85.
- ▶ Newly developed video output circuit makes possible 110 MHz of Video Bandwidth (XG85) and 150MHz (XG135LC) with 1100 lumens peak light output (XG85) and 1200 lumens (XG135LC).
- ▶ ECP lens produces an image with true color reproduction.
- ▶ AKB circuit provides stable white balance.
- ▶ Display size can be altered to accommodate any picture size from 60" to 300" diagonal. In addition to ceiling mounting, floor, desk top and rear installations are possible. (The ceiling mounting kits can be purchased as an optional item for ceiling installation.)
- ▶ Digital convergence provides high accuracy for projecting fine graphic displays.
- ▶ On-screen menus provide easy access to adjustment items.
- ▶ ISS-6020/ISS-6020G interface allows 100 inputs.
- ▶ Video system compatible with NTSC, PAL, SECAM and NTSC 4.43.
- ▶ Up to 100 sources can be stored in digital memory.
- ▶ Quick copy convergence for fast easy set up from one pre-set signal.
- ▶ Built in self diagnostics for on-sight troubleshooting.
- ▶ Built in test patterns such as "CROSS HAIR", "CROSS HATCH", "DOT", "WINDOW", "ALL WHITE", "GRAY SCALE", and "H (FOCUS)" for accurate setup.
- ▶ Source information status display.
- ▶ The SEQUENCER function allows the projector to automatically select input signals one after another as programmed by the user.
- ▶ Compatible with a component video signal such as DVD.

INTRODUCTION

Important Safeguards

The following are important safety instructions designed to ensure the long life of your projector and to prevent fire and shock hazards. Be sure to read these safety instructions carefully and follow all warnings given below.

Installation

The projector must be installed by trained personnel.

Place the projector on a flat, level surface and in a dry area free from dust and moisture. Do not place the projector in direct sunlight, near stoves or other heat radiating appliances. Smoke, steam and exposure to direct sunlight could adversely affect the internal components. Avoid rough handling when moving your equipment as a strong shock could damage its internal components. If installing the projector on the ceiling, use only optional ceiling kits (two types) supplied by the manufacturer. Observe all instructions and warnings. Since installing the projector on the ceiling requires special techniques and a optional ceiling kit, users must not try to install it. Contact your dealer for ceiling installation. When ordering the ceiling kit, specify the part name, PG CMKIT-F or PG CMKIT.

Power supply

The XG-852 and XG-1352 projector are designed to operate on 120 V 60 Hz, and the XG-852G and XG-1352G are designed to operate on 220-240 V 50 Hz AC power supply. Make sure your local power supply matches these requirements before operation.

Handle the power cord carefully and avoid excessive bending. A damaged cord may cause electric shock or fire. If the projector is not to be used for an extended period, remove the plug from the power outlet.

Cleaning

Unplug the projector from the power outlet before cleaning.

Clean the cabinet and front panel periodically with a soft cloth. If heavily stained, use a mild detergent solution. Never use strong detergents or solvents such as alcohol or thinner to clean your projector.

Lens cleaning: Avoid touching the lens surfaces.

Special coating is applied to the lens surfaces.

Consult your dealer for lens cleaning.

Fire and Shock Precautions

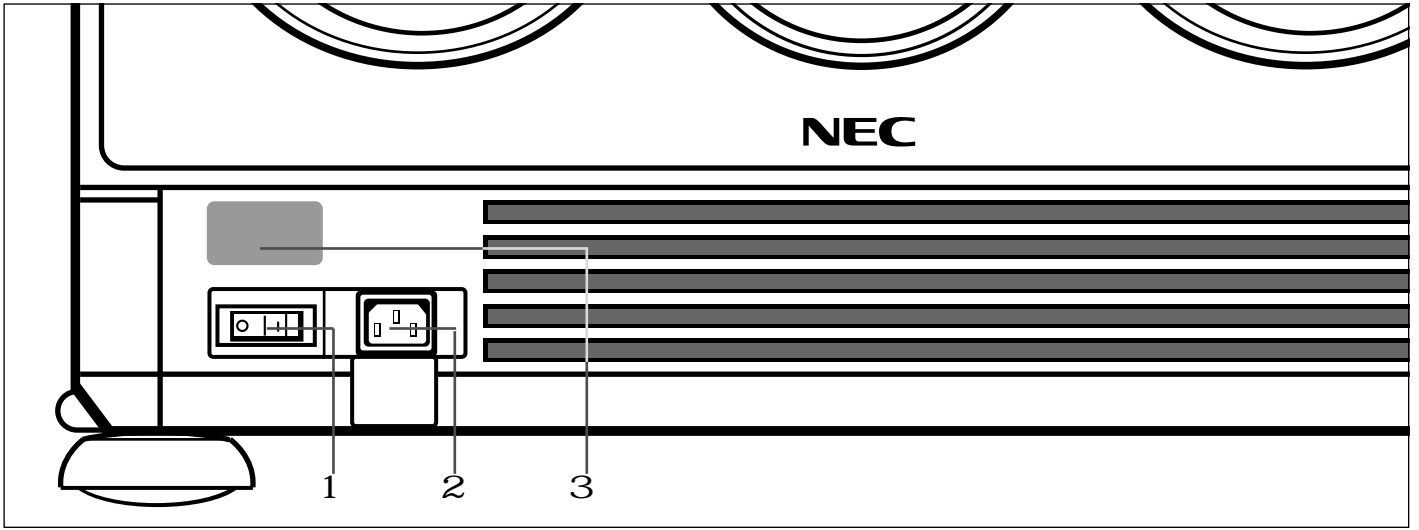
Adequate ventilation must be provided to prevent heat build-up inside the projector. Make sure the ventilation holes are unobstructed.

Keep the inside of the projector free from foreign objects, such as paper clips, nails, paper, etc. Do not attempt to retrieve such objects yourself or insert metal objects such as wire and screw-drivers inside the projector. If a hazardous object falls inside the projector, unplug it immediately and call a qualified electrical repairman for removal.

Do not set liquids on top of the projector.

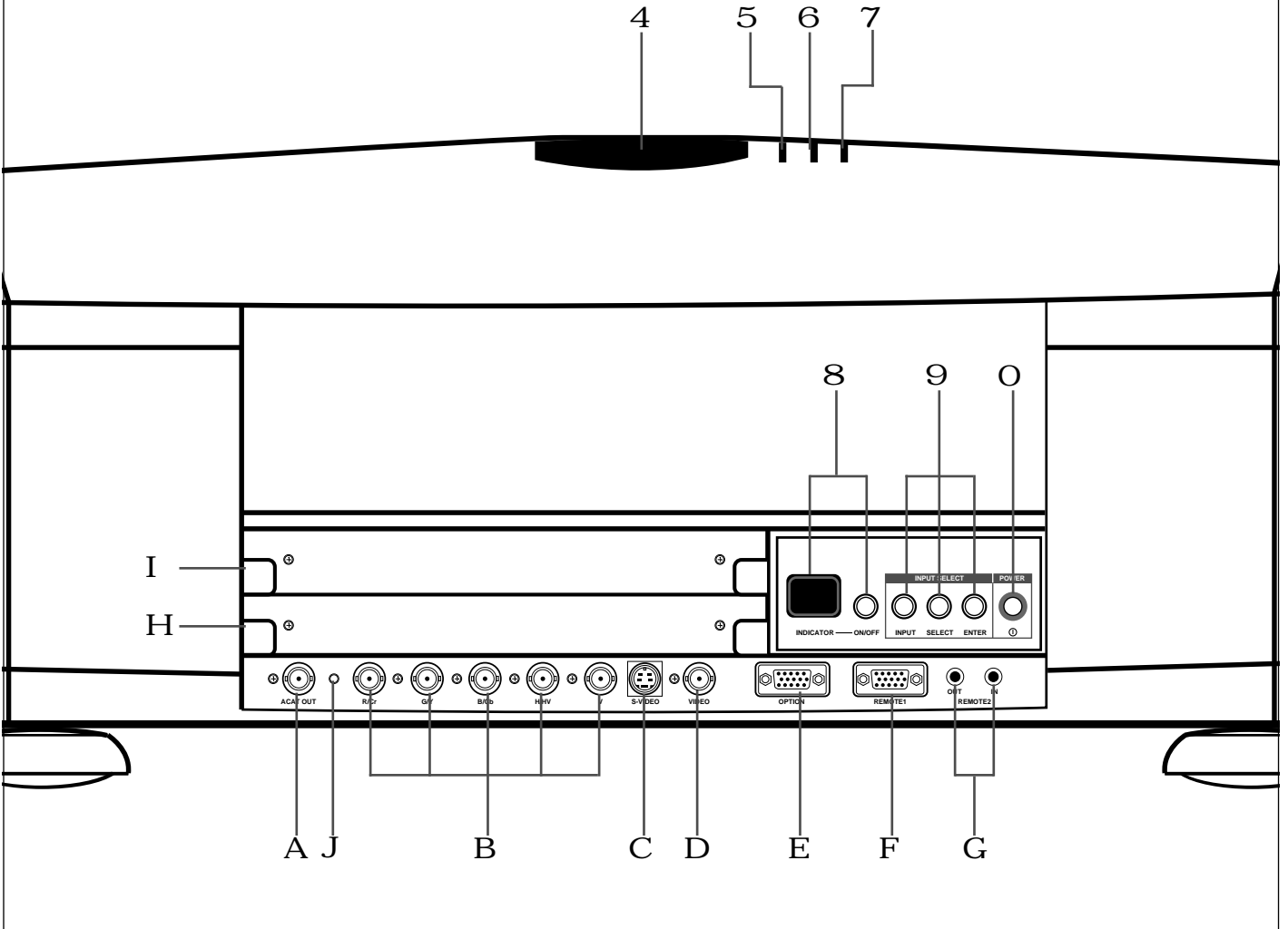
▨ PART NAMES AND FUNCTIONS

Front Terminal Panel



Rear Control Panel

A cover is provided to attach the rear control panel.

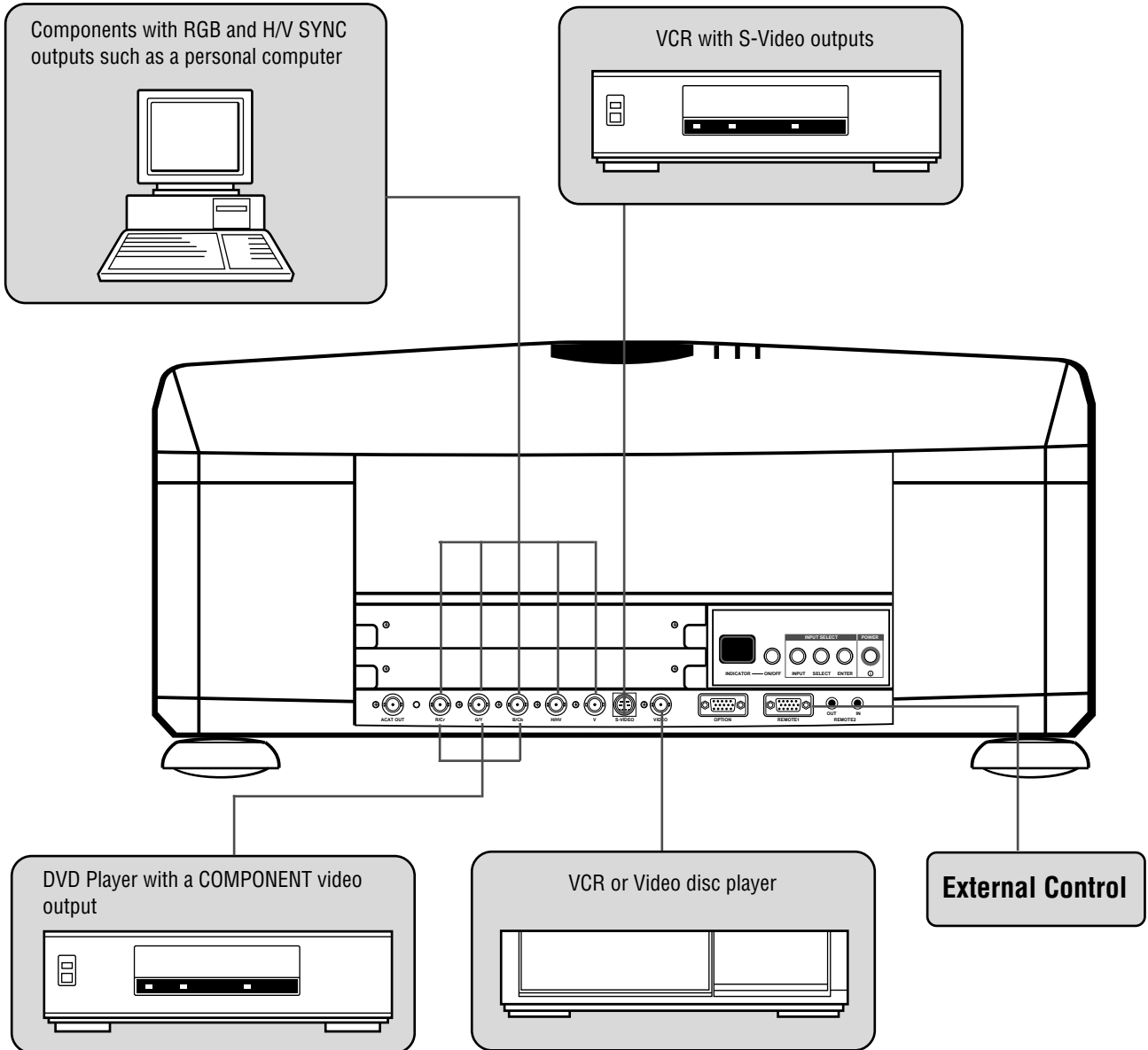


EXAMPLES OF CONNECTIONS

CAUTIONS ON CONNECTIONS:

- Unplug the projector and other equipment from the AC supply before making connections.
- Make sure that the plug of the power cord is properly connected to the power outlet. A loose connection may cause hum or noise.
- Confirm your connection layout with the user's manual accompanying the equipment to be connected with the ISS-6020/ISS-6020G Switcher.

When Used in Stand Alone Operation



NOTE: This projector does not have built-in speakers.

- Make sure that the STANDALONE mode is selected from the CONNECT CONDITION menu. Contact your dealer for the information in detail.

INSTALLATION SET-UP INSTRUCTION

Before Installation

The installation procedure is different according to the projection system and screen size. From the factory the projector is set for ceiling mount, 100 inch diagonal screen size and a projection angle of 12.4 degrees (XG85)/12.2 degrees (XG135LC). Installation and preliminary adjustments are required as shown on table below.

Projection type	Adjustment items		Various adjustments	H Polarity change	Focus ring and CRT angle change
	Screen size (diagonal)				
Ceiling mounting Front projection	100 inch	None	None	None	None (Set the focus ring when changing projection angle)
	other than 100 inch	Yes	None	None	Yes
Desk top Front projection type	100 inch	Yes	Yes	Yes	None (Set the focus ring when changing projection angle)
	other than 100 inch	Yes	Yes	Yes	Yes
Ceiling mounting/Rear projection	100 inch	Yes	Yes	Yes	None (Set the focus ring when changing projection angle)
	other than 100 inch	Yes	Yes	Yes	Yes
Desk top Rear projection	100 inch	Yes	None	None	None (Set the focus ring when changing projection angle)
	other than 100 inch	Yes	None	None	Yes

NOTE: For XG85, the "100 inch" covers the range of screen size between 80 and 129 inches. For XG135LC, The "100 inch" covers the range of screen size between 90 and 109 inches.

NOTE: Focus ring adjustment on pages 15 and 16 for XG85, and 17 and 18 for XG135LC.

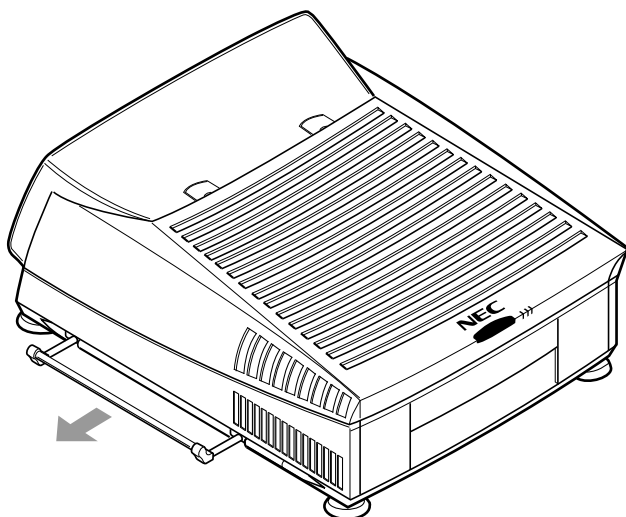
Carrying the Projector

WARNING:

Be sure to use the handles when carrying the projector.

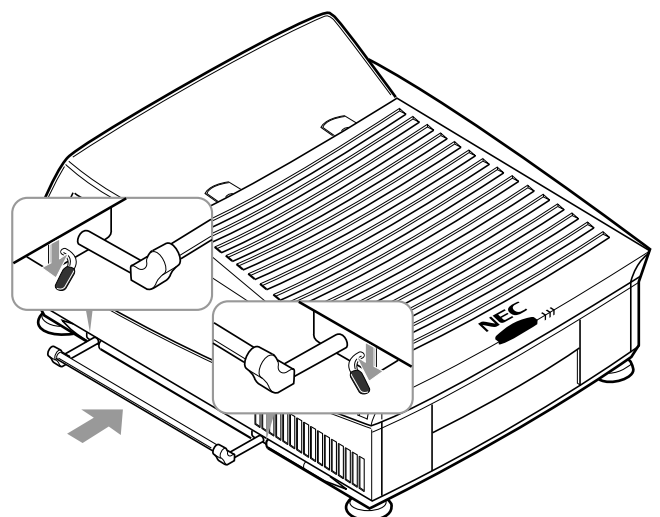
Pulling Out the Handle

Pull out the handle from the bottom side.



Retracting the Handle

Press down the two levers at the same time to retract the handle.

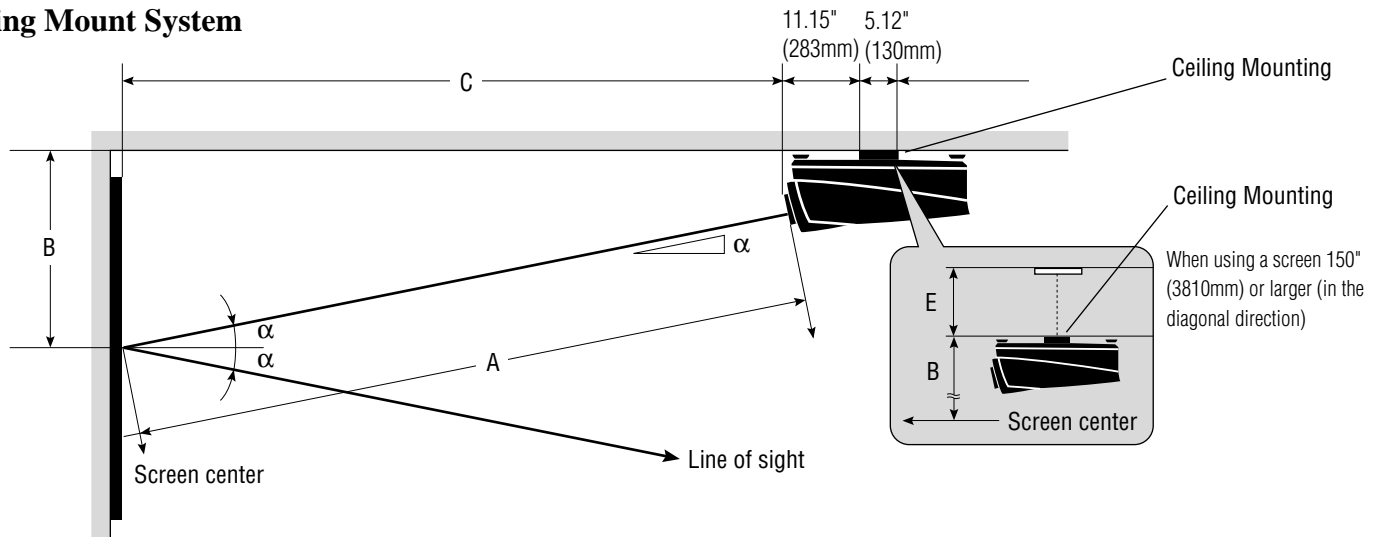


Ceiling Mount Projection Distance and Screen Size for XG85

- Install in such a way that the projector and screen are positioned in the proper direction and at the proper angle. If not, the projector's performance will be affected and its reliability will decrease. Be sure to position the projector properly. The manufacturer will not be held responsible for any problems occurring when the projector is not installed in the proper position.

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

Ceiling Mount System



α	12.1°	12.4°					12.6°	12.7°					
β (=sin α)	0.210	0.215					0.218	0.220					
γ (=cos α)	0.978	0.977					0.976						
Screen size H-Width (4:3 Diagonal)	48" (60")	56" (70")	64" (80")	72" (90")	80" (100")	96" (120")	120" (150")	144" (180")	160" (200")	192" (240")	216" (270")	240" (300")	
A	inch	70.28	81.54	91.6	101.74	112.68	133.43	164.69	196.11	214.02	258.51	290.48	315.67
	mm	1785	2071	2318	2584	2862	3389	4183	4981	5436	6566	7378	8018
B	inch	26.00	28.36	30.86	33.11	35.46	39.91	47.19	54.38	58.31	68.10	75.12	80.66
	mm	661	721	784	841	901	1014	1199	1381	1481	1730	1908	2049
C	inch	68.72	79.73	89.13	99.36	110.05	130.32	160.72	191.31	208.78	252.18	283.37	307.95
	mm	1746	2025	2264	2524	2796	3310	4083	4860	5303	6406	7198	7822
E	inch	–	–	–	–	–	–	–	1.69	3.91	5.88	9.35	
	mm	–	–	–	–	–	–	–	43	100	150	238	

NOTE:

- For screens 150 inches (3810mm) or larger (in the diagonal direction), set so that the distance between the surface of installation of the mounting A and the ceiling is E.
- Set the projection distance based on the width of the screen.
- If the figures on the table do not match the figures in the formulae, use the figures on the table.
- For screen sizes of 60 to 300 inches not indicated on the table, use the following proportional formulae:

<p>Units=inches W"=Screen H-Width</p> <p>$A = (25/96 \times W'' - 12.5) \times 4.99 + 70.28$</p> <p>$B = (\beta \times A) + 11.26$</p> <p>$C = \gamma \times A$</p> <p>$E = (1/2 \times \text{Screen Height}) - B$</p>	<p>Units=mm W"=Screen H-Width</p> <p>$A = (25/96 \times W'' - 12.5) \times 126.64 + 1785$</p> <p>$B = (\beta \times A) + 286$</p> <p>$C = \gamma \times A$</p> <p>$E = (1/2 \times \text{Screen Height}) - B$</p>
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- The margin of error for projection distance (A) is $\pm 3\%$.

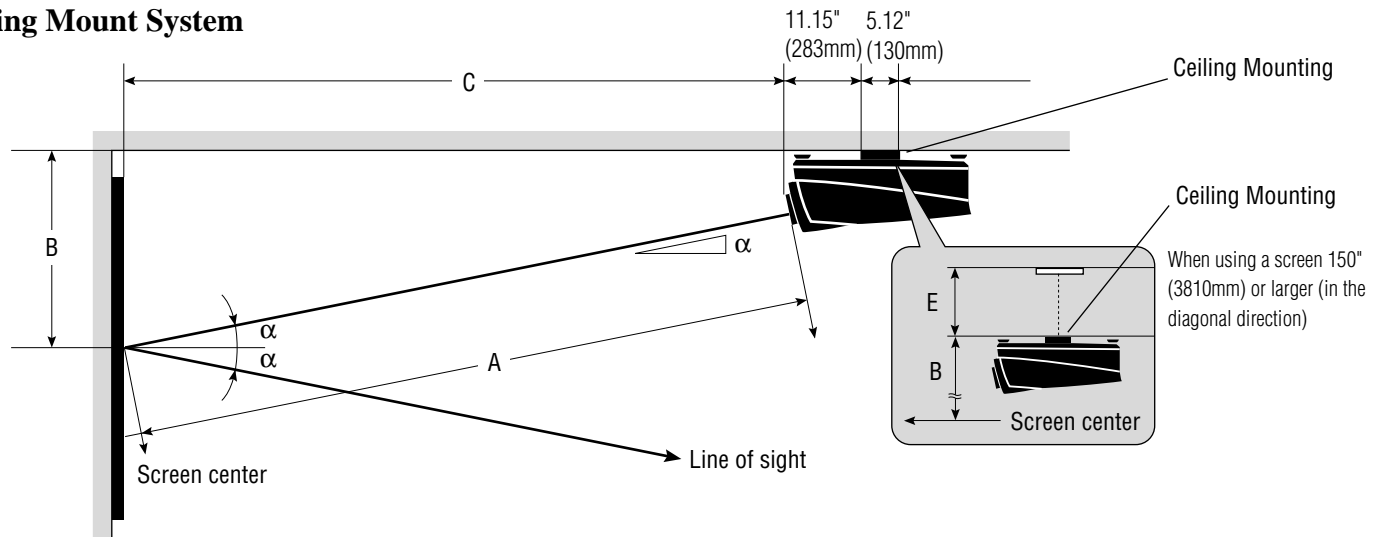
INSTALLATION SET-UP INSTRUCTION

Ceiling Mount Projection Distance and Screen Size or XG135LC

- Install in such a way that the projector and screen are positioned in the proper direction and at the proper angle. If not, the projector's performance will be affected and its reliability will decrease. Be sure to position the projector properly.
The manufacturer will not be held responsible for any problems occurring when the projector is not installed in the proper position.

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

Ceiling Mount System



α	11.8°			12.2°				12.4°		12.6°			
β (=sinα)	0.204			0.211				0.215		0.218			
γ (=cosα)	0.979			0.977						0.976			
Screen size H-Width (4:3 Diagonal)	48" (60")	56" (70")	64" (80")	72" (90")	80" (100")	96" (120")	120" (150")	144" (180")	160" (200")	192" (240")	216" (270")	240" (300")	
A	inch	71.10	82.83	94.61	106.34	118.07	140.91	175.16	209.57	232.48	278.15	309.17	338.62
	mm	1806	2104	2403	2701	2999	3579	4449	5323	5905	7065	7853	8601
B	inch	25.38	27.78	30.18	33.31	35.79	40.61	48.45	56.55	61.55	71.51	78.28	84.70
	mm	645	705	767	846	909	1032	1231	1436	1563	1816	1988	2151
C	inch	69.61	81.10	92.62	103.89	115.36	137.66	171.13	204.54	226.90	271.47	301.75	330.50
	mm	1768	2060	2353	2639	2930	3497	4347	5195	5763	6895	7665	8395
E	inch	–	–	–	–	–	–	–	–	0.47	2.72	5.28	
	mm	–	–	–	–	–	–	–	–	12	69	134	

NOTE:

- For screens 150 inches (3810mm) or larger (in the diagonal direction), set so that the distance between the surface of installation of the mounting A and the ceiling is E.
- Set the projection distance based on the width of the screen.
- If the figures on the table do not match the figures in the formulae, use the figures on the table.
- For screen sizes of 60 to 300 inches not indicated on the table, use the following proportional formulae:

Units=inches W"=Screen H-Width

$$A = (25/96 \times W" - 12.5) \times 5.47 + 71.85$$

$$B = (\beta \times A) + 10.83$$

$$C = \gamma \times A$$

$$E = (1/2 \times \text{Screen Height}) - B$$

Units=mm W"=Screen H-Width

$$A = (25/96 \times W" - 12.5) \times 141 + 1825$$

$$B = (\beta \times A) + 275$$

$$C = \gamma \times A$$

$$E = (1/2 \times \text{Screen Height}) - B$$

- The margin of error for projection distance (A) is $\pm 3\%$.

PROJECTION CONFIGURATION CHANGE

Before Installation Change

The projector is electrically and mechanically set for 100 inch diagonal screen, front throw ceiling mount and a projection angle of 12.4° (XG85)/12.2°(XG135LC). If your application is different from the factory setting(for example, ceiling to floor and screen size between 60 and 300 inch), you will have to reconfigure the projector for your application. Follow the change procedures according to the instructions below.

For XG85

To change screen size only:

1) Set the focus ring to the proper position. (See pages 15 and 16.)		
For 100" screen size	For 120" screen size	For 180" screen size
R – A-3, B-3	R – A-3, B-3	R – A-5, B-5
G – A-1, B-3	G – A-1, B-3	G – A-1, B-5
B – A-3, B-3	B – A-3, B-3	B – A-5, B-5

2) Adjust the angle of the CRT's. (See page 16.)	
For 100" screen size Move the CRT to the 100 position	For 120–180" screen size and the other screen sizes Move the CRT to the 120, 180, or 60–300 position

To change to the desk top system (front)

1) Reverse the scan. (See page 14.)

2) Set the focus ring to the proper position. (See pages 15 and 16.)		
For 100" screen size	For 120" screen size	For 180" screen size
R – A-3, B-3	R – A-3, B-3	R – A-5, B-5
G – A-1, B-3	G – A-1, B-3	G – A-1, B-5
B – A-3, B-3	B – A-3, B-3	B – A-5, B-5

3) Adjust the angle of the CRT's. (See page 16.)	
For 100" screen size Move the CRT to the 100 position	For 120–180" screen size and the other screen sizes Move the CRT to the 120, 180, or 60–300 position

4) Select an installation from the PJ ORIENTATION menu in the SETTING menu. (See "Projection Type Selection" in the setup manual.)
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To change to the ceiling mount system (rear)

1) Reverse the scan. (See page 14.)

2) Set the focus ring to the proper position. (See pages 16 and 17.)		
For 100" screen size	For 120" screen size	For 180" screen size
R – A-3, B-3	R – A-3, B-3	R – A-5, B-5
G – A-1, B-3	G – A-1, B-3	G – A-1, B-5
B – A-3, B-3	B – A-3, B-3	B – A-5, B-5

3) Adjust the angle of the CRT's. (See page 17.)	
For 100" screen size Move the CRT to the 100 position	For 120–180" screen size and the other screen sizes Move the CRT to the 120, 180, or 60–300 position

4) Select an installation from the PJ ORIENTATION menu in the SETTING menu. (See "Projection Type Selection" in the setup manual.)
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To change to the desk top system (rear, 0 projection angle)

1) Set the focus ring to the proper position. (See pages 16 and 17.)		
For 100" screen size	For 120" screen size	For 180" screen size
R – A-3, B-3	R – A-3, B-3	R – A-5, B-5
G – A-1, B-3	G – A-1, B-3	G – A-1, B-5
B – A-3, B-3	B – A-3, B-3	B – A-5, B-5

2) Adjust the angle of the CRT's (See page 17.)	
For 100" screen size Move the CRT to the 100 position	For 120–180" screen size and the other screen sizes Move the CRT to the 120, 180, or 60–300 position

3) Select an installation from the PJ ORIENTATION menu in the SETTING menu. (See "Projection Type Selection" in the setup manual.)
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BEFORE SET-UP

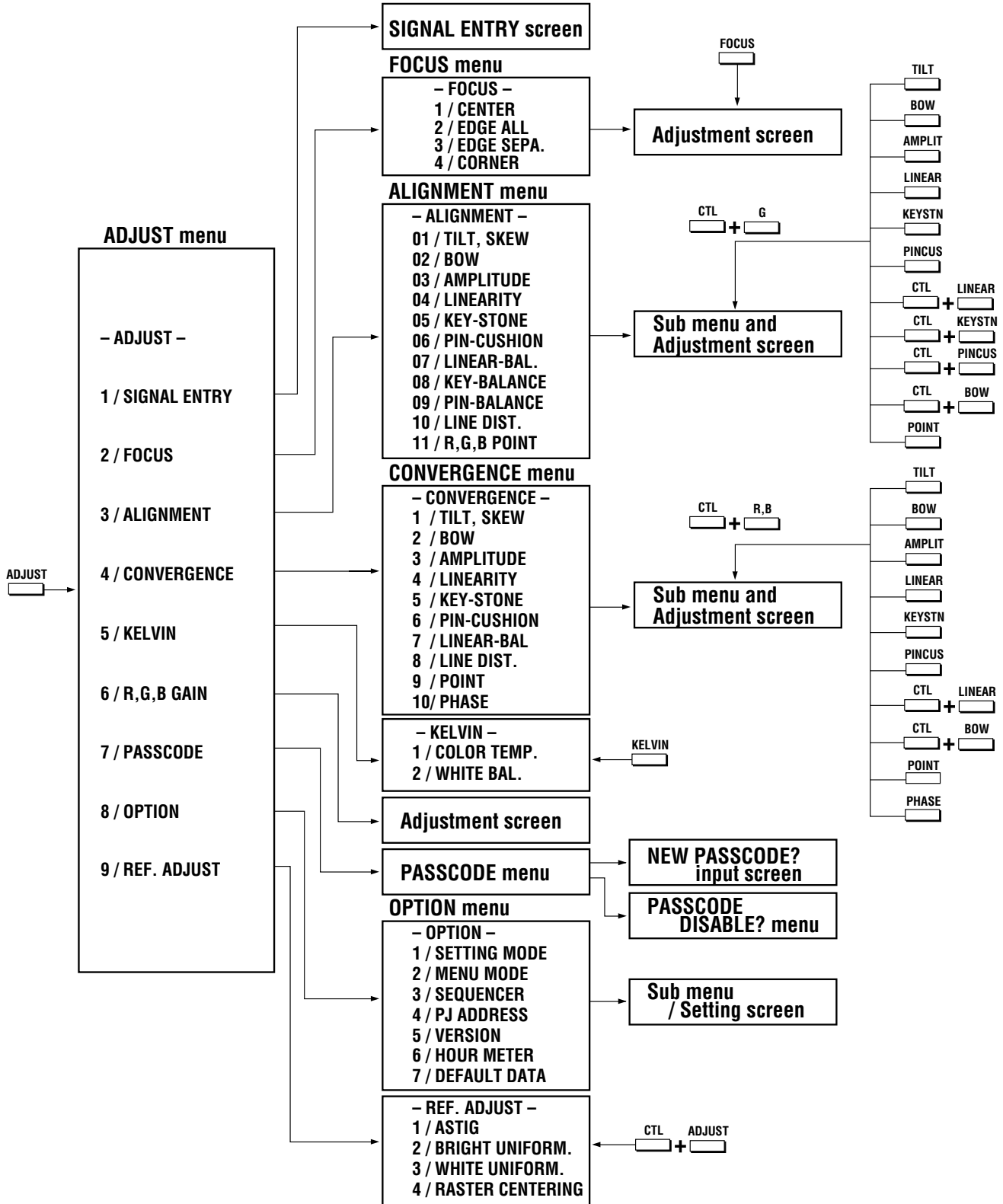
Displaying the Menu and Adjustment Screens

Access of all set-up functions is done through the menu system.

Depending upon button selection, your desired screen will be displayed as shown below:

ADJUST menu

NOTE: Some function items will not be used depending on the input video signal or connected peripheral equipment.



SIGNAL ENTRY

On Signal Entry

The projector uses a micro-processor to automatically read and distinguish between all video signals input at the same time. These signals are then used to make optimum adjustments for focus, convergence, alignment, etc. Various parameters must be registered into the micro-processor beforehand to ensure the video signals are recognized and adjusted to optimum quality.

The Signal Entry registers these video signals in the SIGNAL ENTRY list and at the same time obtains the various parameters pertaining to these signals. Always access this mode first whenever inputting video signals for the first time so that you can register the video signals before making any adjustments. If the current input signal(s) has not been registered, the “UNREGISTERED SIGNAL” message is displayed on screen.

NOTE: If you have software which changes scanning mode due to the graphic board of your PC (such as VGA), it will be necessary to register signal entry for each scanning mode. This can be done using your PC by way of stopping the software in each scanning mode and performing a signal entry operation.

Signal Entry Procedures

To make the signal entry, proceed as follows:

- 1 Press the ADJUST button.
 - The “ADJUST” menu is displayed.

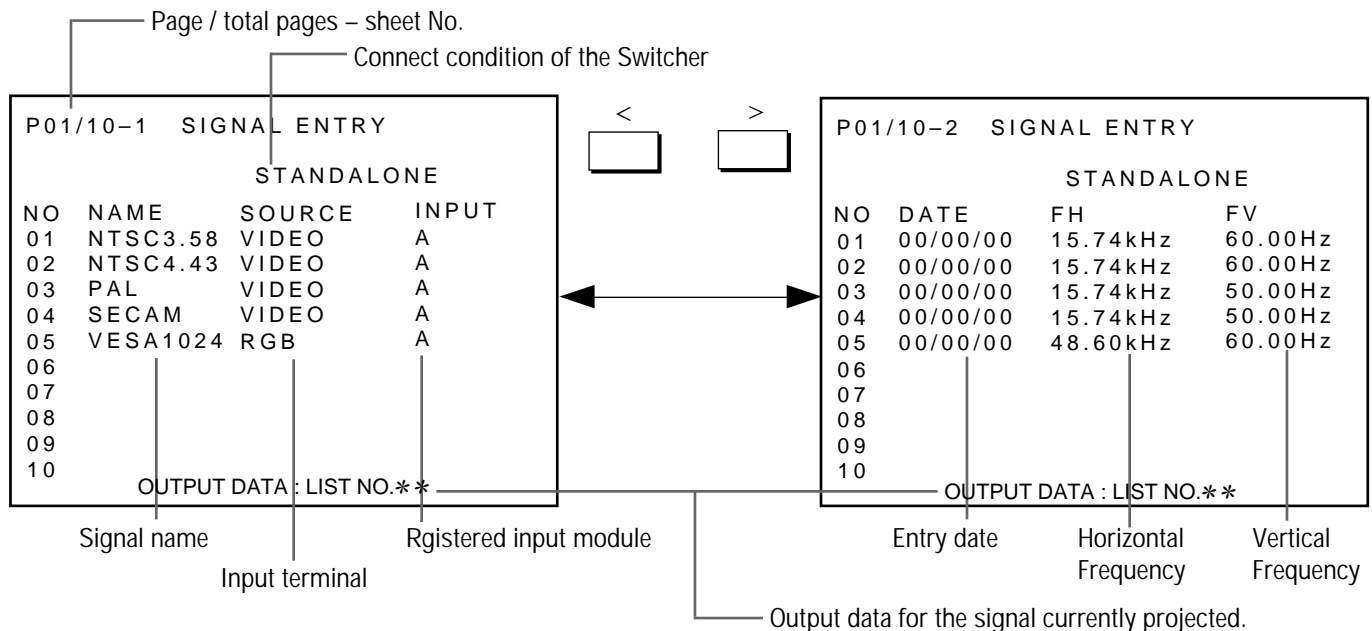
NOTE: The projector may ask you to enter your passcode. See 61 for the explanation of the PASSCODE.

- 2 Use the CURSOR or button to highlight the “1/SIGNAL ENTRY” line and press ENTER.
 - The “SIGNAL ENTRY” list will be displayed.
 - You can also select the “SIGNAL ENTRY” list directly by pressing the INPUT “1” button.

- 3 Use the CURSOR or button to select the desired line and press ENTER.
 - The Signal entry menu will be displayed.

NOTE: To advance to the next page or to the previous page, hold down the CTL button then press the CURSOR or button. To directly access a page, hold down the CTL button then press any one of the INPUT buttons.

- ADJUST -	
1 / SIGNAL ENTRY	
2 /	FOCUS
3 /	ALIGNMENT
4 /	CONVERGENCE
5 /	KELVIN
6 /	R, G, B GAIN
7 /	PASSCODE
8 /	OPTION
9 /	REF. ADJUST



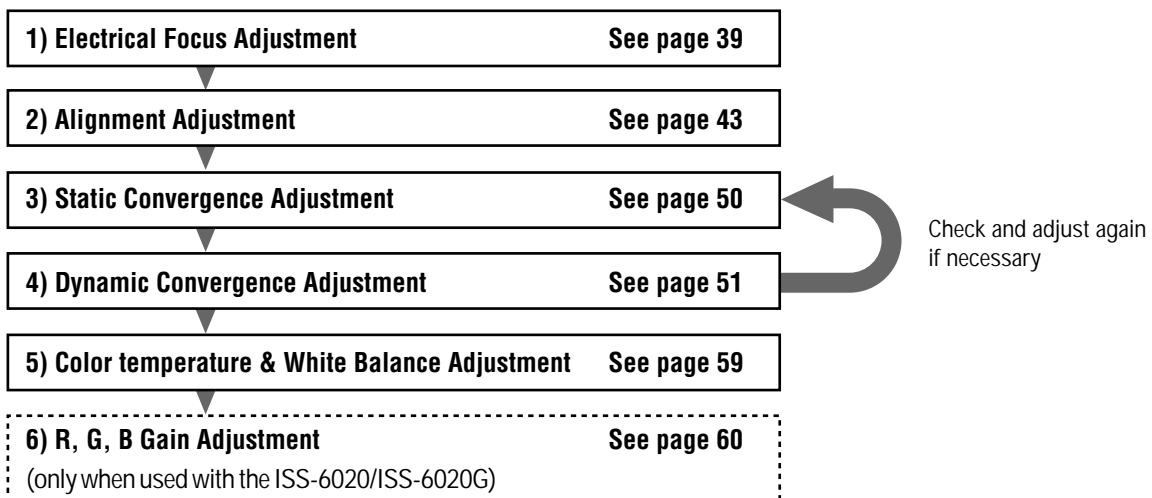
ADJUSTMENT

Set-Up Procedure

Before adjusting

- 1 Installation of the projector.
 - This projector is pre-adjusted at the factory for 100 inch screen front projection at 12.4° for XG85 and 12.2° for XG135LC, and ceiling mounting. If your application is the same as the factory setting, you will not have to reconfigure the projector for your application. However, if you want to do some fine or further adjustments, carry out the following adjustments.
- 2 Connect the external equipment to the projector.
- 3 Turn on power to the external equipment and the projector.
 - If you want to institute the use of a passcode, register the passcode. See page 62.
 - Carry out the adjustments after displaying an image for 20 minutes or more.
- 4 Select the input signal.
 - If your input signal has not been recorded, it is necessary to perform the signal entry beforehand. See page 19.

If you want to use the projector in any other configuration than the factory setting, perform the following after installation.



*If a wrong button is pressed accidentally, an error message will appear.

*Pressing the HELP button will display a brief description of the selected function and button operation instructions.

PASSCODE

Entering Passcode

To prevent any unauthorized operation or mis-adjustment, the projector is equipped with a passcode option. If your passcode has not been entered correctly, the “ADJUST” and “REF. ADJUST” menus will not be displayed. When the ADJUST button is pressed, and no passcode has been entered, the “PASSCODE?” screen is displayed. Enter your passcode.

To do this, proceed as follows:

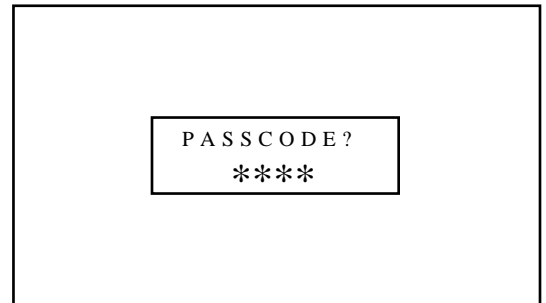
- 1 Press the ADJUST button.
 - The “PASSCODE?” screen is displayed.

- 2 Enter the four digit passcode you have already registered by using the “1” through “0” buttons.
 - 1) Each time you press the INPUT button, an asterisk appears under the “PASSCODE?” message.
 - 2) After you have finished entering the four digit passcode, press ENTER.

NOTE: If you have made an error, press the NORMAL button to delete the asterisk “*”. Then re-enter the correct passcode. To delete all the entered digits, hold down the CTL button then press the NORMAL button.

- 3) If the entered passcode is correct, the “ADJUST” menu is displayed.

NOTE: If the passcode is not correct, the “WARNING DIFFERENT PASSCODE!!” message is displayed and you are required to enter the correct passcode.



- 3 Proceed to each adjustment and setting.

SETTING

Displaying the Various Setting Features

You can view some of the setting features and check to make sure that the settings are appropriate.

To display setting features on the screen, hold down CTL and press INFO.

To eliminate the display, press END.

The parameters cannot be changed on the SETTING VIEW screen shown on the right.

For changing parameters of the setting features, refer to the following pages.

NOTE: The INPUT TERMINAL item on the "SETTING MODE" menu cannot be changed.

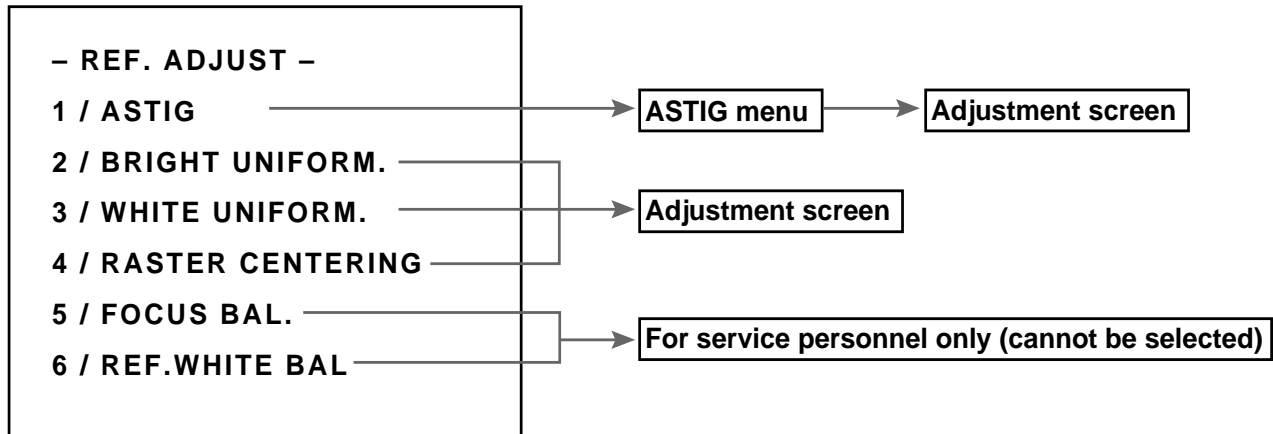
P01/P03	OPTION	– SETTING MODE –
	PJ ORIENTATION	CEILING FRONT
	CONNECT CONDITION	STANDALONE
	DEFAULT INPUT SELECT	LAST
	FOCUS EDGE MODE	ALL
	S-VIDEO MODE SELECT	S2
	VIDEO MODE SELECT	AUTO

REFERENCE ADJUSTMENT

REF. ADJUST menu

Adjustments contained in this menu are criteria. The adjustments are performed once after installation. The projector has only one data area for all the registered signals.

Further adjustments are not necessary in normal use. Leave the settings as they are at the factory.



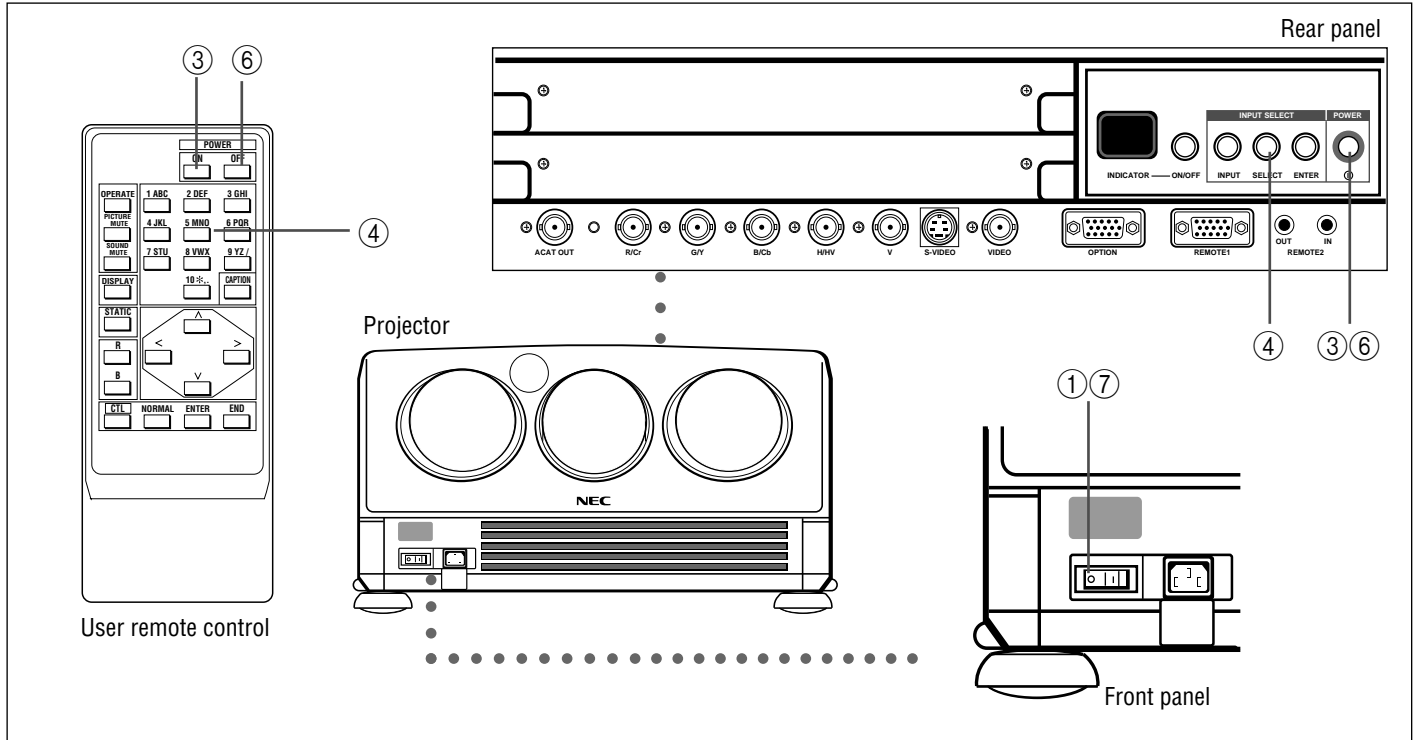
NOTE

Items 5 and 6 cannot be selected as they are for service personnel only. If you try to select one, the "For service personnel only" message is displayed at the bottom of the screen.

- Press and hold the CTL button then press to display the "REF. ADJUST" menu.
The "REF. ADJUST" menu can also be displayed by selecting the "9/REF. ADJUST" item in the ADJUST menu.

BASIC OPERATION

Picture Projection



To project a picture source, proceed as follows:

- ① Turn on the main power of the projector.
 - Press the POWER switch on the front panel to the ON position (I).
- ② Turn on the power of the connected equipment.
- ③ Turn on the power of the projector.
 - Press the POWER ON button on the remote control or the POWER button on the rear panel.
- ④ Select an input signal source by pressing one of the ten INPUT buttons on the remote control. You can also select a signal from the “INPUT SELECT” list.
 - See “INPUT SELECTION” on page 24 for more details.
- ⑤ Adjust the picture and sound.
 - See pages 20 through 23 for more details.

NOTE: The volume function works only with the ISS-6020/ISS-6020G Switcher.

- ⑥ To turn off the power, press the POWER OFF button on the remote control or the POWER button on the rear panel.
- ⑦ Press the POWER switch on the front panel to the OFF position (O) to turn off the main power of the projector.
- ⑧ Last, turn off the connected equipment power.

TIMING CHARTS

Pre-set Signals

The following signals have been set by factory.

P01/10-1 INPUT SELECT			
STANDALONE			
NO	NAME	SOURCE	INPUT
01	NTSC3.58	VIDEO	A
02	NTSC4.43	VIDEO	A
03	PAL	VIDEO	A
04	SECAM	VIDEO	A
05	VESA1024	RGB	A
06			
07			
08			
09			
10			

SPECIFICATIONS

projection type	Refraction type Projector and screen are separated
Projection system	3 lens and 3 CRTs in-line
Scanning frequency	(XG-1352/XG-1352G) H 15 to 135 kHz/V 40 to 160Hz (XG-852/XG-852G) H 15 to 85 kHz/V 40 to 160Hz
Retrace time	H 6.0 μS (fH 15 to 30kHz) H 2.6 μS (fH 30 to 77kHz) H 2.0 μS (fH 77 to 120kHz) H 1.4 μS (fH 120 to 135kHz) V 270 μS
Video bandwidth	150MHz (-3dB) XG-1352/XG-1352G 110MHz (-3dB) XG-852/XG-852G
CRT	8 inch liquid cooled Deflection angle 90 degrees
Lens	Hybrid lens with ECP and ARC , F1.1 HD-134: XG-1352/XG-1352G HD-144N: XG-852/XG-852G (ECP: Enhanced Color Purity except B-lens/ARC: Anti-Reflective Coating)
Picture size	60 to 300 inches diagonal
Resolution	1500TV lines at center (HDTV) 1350TV line at corner (HDTV)
Pixel resolution	2500 × 2000 dots (Addressable) (XG-852/XG-852G: 1600 × 1200 dots)
Light output	240 ANSI lumens (XG-1352/XG-1352G, 230 ANSI lumens (XG-852/XG-852G)
High voltage	32kV
Input	RGB signal 0.7Vp-p 75 ohm positive (BNC) H/V sync 0.7 to 4.0Vp-p 75 ohm/High Z negative or positive (BNC) COMP sync 0.7 to 4.0Vp-p 75 ohm/High Z negative or positive (BNC) Sync on G 0.3 to 0.6Vp-p 75 ohm negative (BNC) COMP Video 1.0Vp-p 75 ohm positive (BNC) S-video: Y 1.0Vp-p 75 ohm positive C 0.28Vp-p 75 ohm (burst level) COMPONENT; 1.0Vp-p 75ohm negative (BNC) Cr,Cb 0.7Vp-p 75ohm (BNC) Video system NTSC, PAL, SECAM and NTSC4.43
Convergence	Digital convergence (Pre-set 100 positions) Quick copy convergence Static and wave convergence Point convergence, Zone convergence
Convergence limits	Less than 0.2% of V-height
Warm up time	20 minutes
Setup signal	Cross hairs, Cross hatch, Dot, Window Pattern, H test pattern
Power supply	AC 120V 60Hz (XG-1352/XG-852) AC 220-240V 50Hz (XG-1352G/XG-852G)
Power consumption	750W (XG-1352), 690W (XG-852) 730W(XG-1352G), 660W (XG-852)

Input current	6.7A (AC 120V)XG-1352 6.2A (AC 120V)XG-852 3.4A (AC 220-240V)XG-1352G 3.1A (AC 220-240V)XG-852G
Safety and regulation	XG-1352/XG-852; Meets FCC class A requirements UL Approved (UL 1950, CSA 950) DHHS Approved Meets DOC (Canada) Meets RED ACT XG-1352G/XG-852G; Meets EMC Directive (EN55022,EN61000-3-2, EN61000-3-3, EN50082-1) Meets Low Voltage Directive (EN60950, TÜV GS Approved) PTB Approved
Cabinet dimensions	610(W)X812(D)X325(H) mm 24.02(W)X31.97(D)X12.80(H) inch
Weight	63.0 kg/139.0 lbs(XG-852/XG-852G) 67.4 kg/148.7 lbs (XG-1352/XG-1352G)
Remote control	Wired application Wireless (operating distance 7m/23ft.)
Remote control functions	User remote (RC-6320); Power ON/OFF, Input signal select, Picture mute, Bright, Contrast, Color 1), Sharpness 1), Tint 2), Volume 3), Sound mute 3), Source information, Static convergence, Normal- ize, Enter, End, Closed Caption Full function remote (RC-6321); Test, Display, Help, Information, Input list, Static focus, Edge focus, H/ V position, White balance select, Static conver- gence, Wave convergence, Point convergence, H/V amplitude, H/V linearity, H/V key-stone, H/V pin- cushion, H/V blanking, Tilt, Skew, H/V bow, Store, Normalize, Enter, End
Main control function	Power ON/OFF, Input signal select,
External control	Power ON/OFF, Input signal select, Picture mute, Sound mute ³⁾ , Remote control data input
PC control	Acceptable
Supplied accessories	Full function remote control unit (RC-6321), User remote control unit (RC-6320), Remote cable 16m/52ft., AC line cable, Terminal cover, Operation manual, Set-Up manual*, Installation manual*
Environment	Temperature 0 to 40 degrees C Humidity 0 to 90% non-condensing Storage -10 to 50 degrees C
Sound emission	XG-1352/XG-852 less than 45dB XG-1352G/XG-852G less than 70dB (A). Complies with ISO 3744 or ISO 7779

- | |
|---|
| <p>1) This works only for VIDEO signals.
2) This works only for NTSC video signals.
3) This works only with the Switcher operation.</p> |
|---|

*Set-Up manual and Installation manual are not included with XG-852G/XG-1352G.

Specifications are subject to change without notice.
The dimensions given for the projector do not include protruding parts.

SUPPLEMENT SHEET

This document reflects changes to the XG85/XG135LC Set-up Manual and Operation Manual and contains the latest information about our POINT ACAT and Picture Mute.

Set-Up Manual:

Page 54







Adjusting POINT ACAT

This feature automatically corrects convergence for overall screen adjusting 13 convergence points on R and B CRT respectively.

Before adjusting

- To improve accuracy on convergence correction, you must first adjust the convergence phase and the cursor phase for the best image.
- You can also correct the static convergence using ACAT feature. For more accurate ACAT convergence correction, first perform the static convergence using STATIC feature on OPERATE menu or pressing the STATIC button on the remote control.
- You must adjust the convergence to all the 13 points because ACAT feature calculates all the adjustment values on the entire screen based on the adjustments values of 13 points on the screen.
- If convergence points on the edges go out of screen, reduce the horizontal and the vertical amplitude settings using the amplitude feature of the ALIGNMENT menu so that all the 13 convergence points can be seen on the screen. After adjusting ACAT, return the horizontal and the vertical amplitude settings to their original and store them.
- The POINT ACAT convergence adjustment is done roughly. So performing the POINT ACAT can change the convergence adjustment settings even if you finely adjust the convergence adjustment.

Proceed as follows:

- ① Press the ADJUST button to display the “ADJUST” menu.
 - If the projector asks you to enter your passcode, enter your passcode.
- ② Use the CURSOR  or  button to highlight the “4/CONVERGENCE” line. Press ENTER to display the “CONVERGENCE” menu. You can also select the “CONVERGENCE” menu directly by pressing the INPUT “4” button.
 - The Convergence menu will be displayed.
- ③ Use the CURSOR  or  button to select the “09/POINT” item and then press ENTER. You can also select “POINT” item directly by pressing an INPUT “9” button.
 - The Point menu will be displayed.
- ④ Use the CURSOR  or  button to select the “4/ACAT” item and then press ENTER. You can also select “ACAT” item directly by pressing an INPUT “4” button.
 - The ACAT adjustment screen will be displayed.
 - You can also select the ACAT adjustment screen directly by pressing and holding CTL and pressing POINT button on the full function remote control.
- ⑤ Hold down the CTL button then press the R or B button to select the CRT you wish to adjust.

```

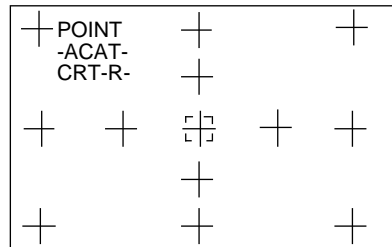
- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R, G, B GAIN
7 / PASSCODE
8 / OPTION
9 / REF. ADJUST
    
```





```

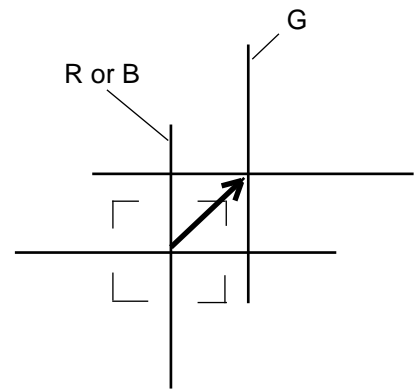
- CONVERGENCE-
01 / TILT, SKEW
02 / BOW
03 / AMPLITUDE
04 / LINEARITY
05 / KEY-STONE
06 / PIN-CUSHION
07 / LINEAR-BAL
08 / LINE DIST.
09 / POINT
10 / PHASE
    
```

```

-POINT-
1/COARSE
2/MEDIUM
3/FINE
4/ACAT
    
```





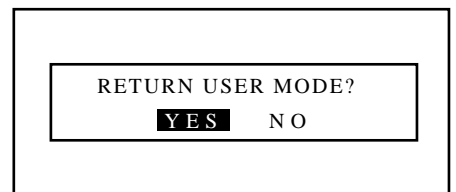
- ⑥ Use the CURSOR buttons to move the point cursor to the point where you want to adjust, then hold down the CTL button and press any one of the CURSOR buttons to align a point of intersection of the Red or the Blue pattern with a point of intersection of the Green pattern (reference color).
 - Hold down the CTL button and press the CURSOR  or  to move the point cursor on the selected CRT color horizontally.
 - Hold down the CTL button and press the CURSOR  or  to move the point cursor on the selected CRT color vertically.
- ⑦ After adjusting all the points, press the ENTER button.
 - The projector automatically corrects the convergence of the whole screen.



NOTE:

- The POINT ACAT adjustment may be required two or three times to improve accuracy depending on the installation condition.
- There may be some cases where you cannot get completely corrected convergence on the edges of the screen. If this happens, perform convergence adjustments other than POINT ACAT.
- If you decreased the horizontal or/and vertical amplitude and then performed the POINT ACAT adjustment, return the adjustment to its previous state.

- ⑧ To end this adjustment, press the END button.
 - Whenever the END button is pressed, the menus will sequence in this order:
“POINT” menu → “CONVERGENCE” menu → “ADJUST” menu → Sourcescreen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR  or  button to select either “YES” or “NO” and then press ENTER. This will exit the ADJUST mode.



Items to select

- YES When you try to enter the ADJUST mode again, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode again, you will not need to re-enter your passcode.

Page 8 of Operation Manual and page 9 of Set-Up Manual:

3 PICTURE MUTE Button

You can also mute the picture by holding down CTL and pressing PICTURE MUTE buttons. To restore the picture, holding down CTL and press PICTURE MUTE again. Or simply press END.

NOTE: When the picture is muted by using CTL and PICTURE MUTE buttons, even if an input is switched to another or the power is turned off using the remote POWER OFF button, the mute cannot be canceled. Turning off the main power will cancel the mute.

5 DISPLAY Button

On-screen display mute function can be canceled by turning off the main power.

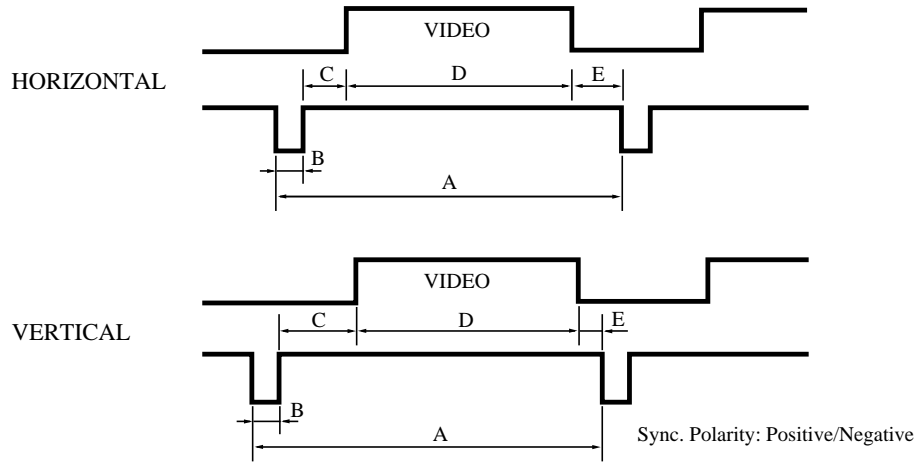
p.32 on Operation Manual:

You can also mute the picture by holding down CTL and pressing PICTURE MUTE.

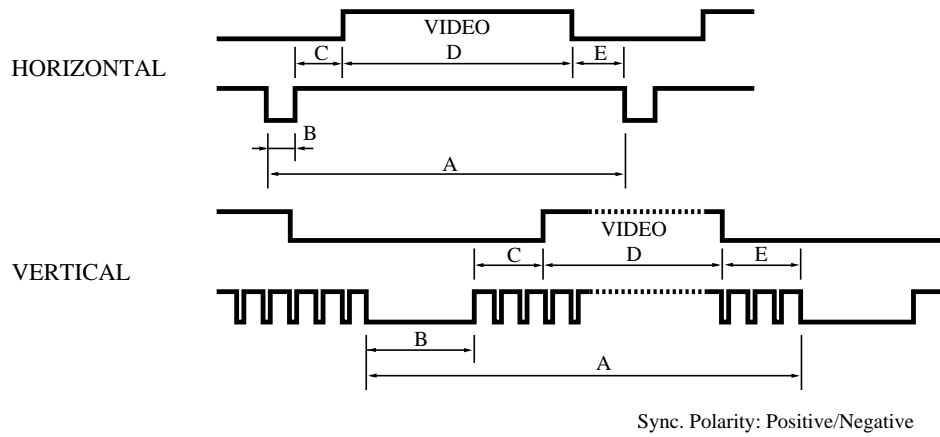
See also “Remote Control Unit” of “Part Names and Functions” for more details.

Input Signal Reference Chart

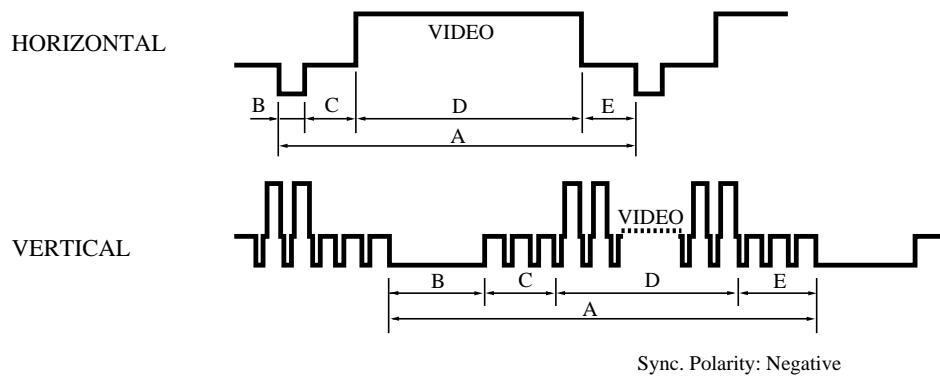
Separate Sync.



Composite Sync.



Composite Sync. & Video (Sync. on Green)



TIMING CHART

Input Signal Timing

		A	B	C	D	E	Polarity
IBM VGA 350	H μ s	31.8	3.8	1.6	26.1	0.3	+
	V ms	14.3	0.06	1.72	11.53	0.99	-
IBM VGA 400	H μ s	31.8	3.8	1.6	26.1	0.3	-
	V ms	14.3	0.06	0.89	13.19	0.16	+
IDTV	H μ s	31.78	2.76	1.6	26.29	1.13	-
	V ms	16.67	0.64	0.77	15.14	0.12	-
Macintosh II	H μ s	28.57	2.12	3.17	21.16	2.12	
	V ms	15	0.09	1.11	13.71	0.09	
IBM VGA 480	H μ s	31.8	3.8	1.6	26.1	0.3	-
	V ms	16.7	0.06	0.79	15.79	0.06	-
Macintosh Quadra	H μ s	14.64	1.30	1.32	11.56	0.46	
	V ms	13.342	0.044	0.574	12.68	0.044	
VESA 800 \times 600 (72 Hz)	H μ s	20.8	2.4	1.28	16.00	1.12	
	V ms	13.887	0.124	0.479	12.510	0.722	
VESA 1024 \times 768 (60 Hz)	H μ s	20.677	2.092	2.462	15.754	0.369	
	V ms	16.667	0.124	0.600	15.880	0.062	

- IBM CGA, EGA and VGA are registered trademarks of International Business Machines Corporation.
- Apple is a registered trademark of Apple Computer Inc. Macintosh II and Macintosh Quadra are trademarks of Apple Computer Inc.
- VESA is an abbreviation for Video Electronics Standards Association.

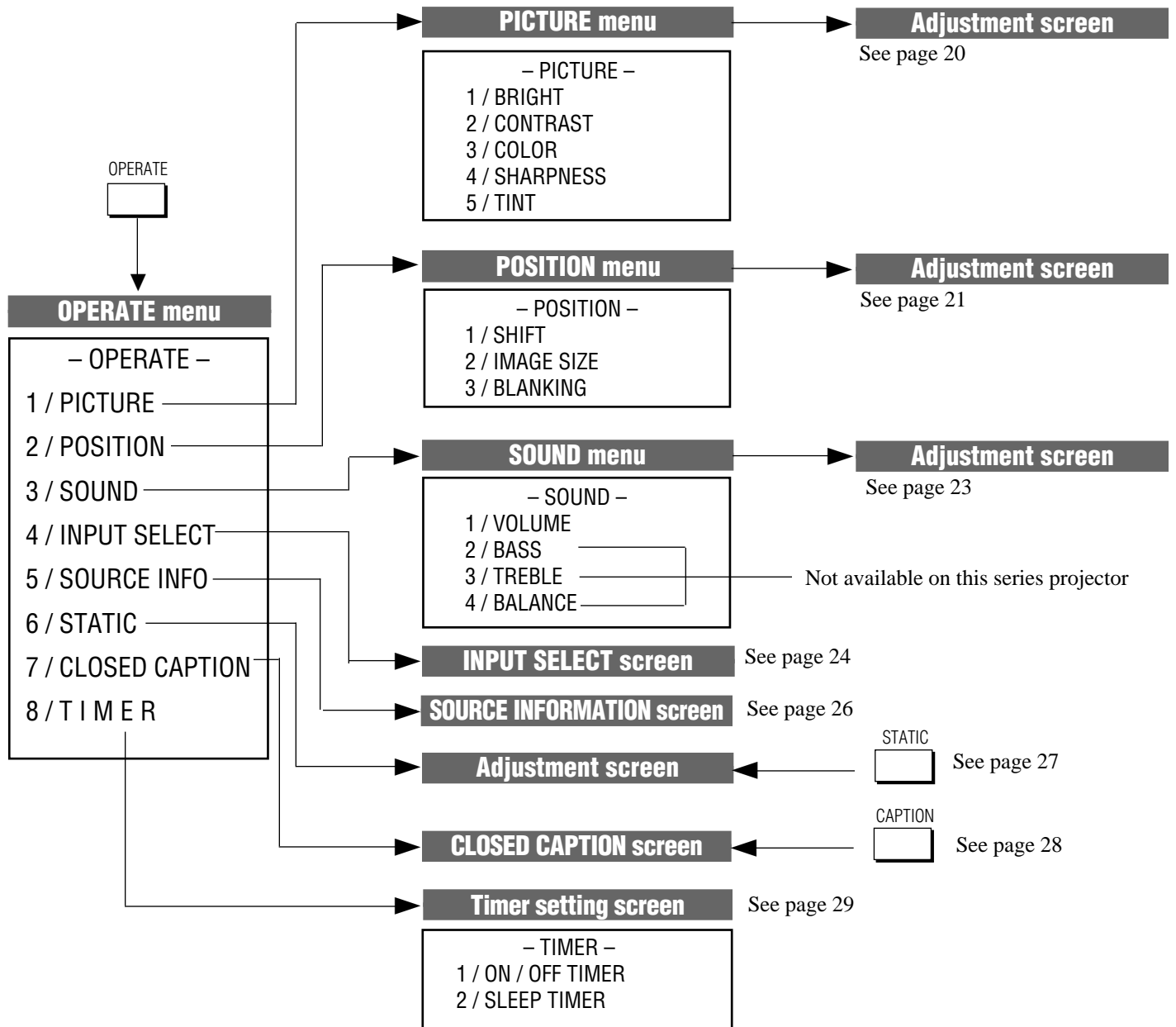
Displaying the Menu and Adjustment Screens

You can easily access your desired screen by selecting menus.

Depending upon button selection, your desired screen will be displayed as shown below:

OPERATE menu

NOTE: Some function items will not be used depending on the input signal or peripheral equipment connected.



CAUTION: Do not display a bright and still picture for longer than 20 minutes. This could damage the CRTs.

NOTE: The explanation of the operation on the following pages is for use with the remote control.

Storing Projector Settings (Automatic Save Feature)

You have two options to store projector settings in the memory: automatically and manually.

- Storing time is four seconds.
- The Automatic Save Feature mode has been set to DISABLE by factory. For information on setting, see “Automatic Save Feature” in the Set-Up manual included only with the XG-1352/XG-852 models, and if you own XG-1352G/XG-852G, contact your dealer.

■ When the Automatic Save Feature mode is set to “ENABLE”, projector settings will be stored in the projector’s memory automatically.



Settings are stored automatically when any one of the following procedures is performed:

- The END button is pressed several times to return the adjustment screen to the source screen.
- One input is switched to another.
- The projector is turned off.
- After every 10 minutes of elapsed time.

■ When the Automatic Save Feature mode is set to “DISABLE”, projector settings can be stored in the projector’s memory manually.

When you try to return the source screen by pressing END several times, the “STORE ?” menu is displayed.

To manually save settings, proceed as follows:

1. Use the END button to display the “STORE” menu from the current adjustment screen or menu.
2. Use the CURSOR  or  button to highlight “CURRENT”, “NEW”, or “CANCEL” and press ENTER.



- Items to select**
- CURRENT ----- Overwrites the currently projected signal and saves the settings. NOTE: An unregistered signal cannot be stored under the "CURRENT" settings.
 - NEW ----- Starting at memory location No.51, this function saves an unregistered signal as a new signal in memory.
 - CANCEL ----- Does not save settings.

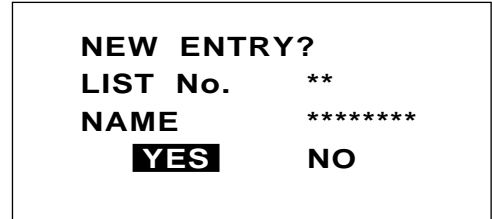
■ When selecting “NEW”

The current settings are registered as a new signal and are saved to an unassigned line starting at memory location No.51.

A registered name is automatically given.

The “NEW ENTRY?” menu will be displayed.

Use the CURSOR or button to highlight “YES” or “NO” and press ENTER.



Items to select

- YES ----- Registers settings as a new signal and saves the signal in an unassigned location starting at memory location No.51.
- NO ----- Does not register settings.

A registered name is given as follows:

- VIDEO/S-VIDEO ----- Video standard with a list number e.g. NTSC51 or PAL52.
- RGB ----- ”RGB” with a list number e.g. RGB60.

NOTE:





- If the Input list does not have any unassigned memory location starting at No. 51 then, the “NEW” item will be selectable. For signal registration see “SIGNAL ENTRY” in the Set-Up manual included only with the XG-1352/XG-852 models, and if you own XG-1352G/XG-852G, contact your dealer.
- The Automatic Save Feature is available only for signals listed in the INPUT LIST.

BASIC OPERATION

Picture Adjustment

To adjust the picture for each input, proceed as follows:





NOTE: The color, sharpness, and tint controls are not selected in the "PICTURE" menu for RGB signal. The tint control is not selected in the "PICTURE" menu for SECAM/PAL signal.

- ① Press the OPERATE button.
 - The "OPERATE" menu is displayed.
- ② Use the CURSOR  or  button to highlight the "1/PICTURE" line and press ENTER to display the "PICTURE" menu. You can also select the "PICTURE" menu directly by pressing the INPUT "1" button.
- ③ Use the CURSOR  or  button to select a picture function and then press ENTER. You can also select an item directly by pressing the corresponding number button.
 - The picture adjustment screen will be displayed.

Items to select:

- BRIGHT (Brightness control)
- CONTRAST (Contrast control)
- COLOR (Color intensity control)
- SHARPNESS (Picture detail control)
- TINT (Red and green values control)

NOTE: When you are in the BRIGHT adjustment mode, all the CRTs will be in use. The CRT beam cannot be cut-off.

- ④ Use the CURSOR buttons to adjust a picture to your preference.
 - The CURSOR  or  button increases the level.
 - The CURSOR  or  button decreases the level.
- ⑤ To end this adjustment, press the END button.
 - Wherever the END button is pressed, the screen changes in this order:
"PICTURE" menu → "OPERATE" menu → Source screen

```
  - OPERATE -  
  1 / PICTURE  
  2 / POSITION  
  3 / SOUND  
  4 / INPUT SELECT  
  5 / SOURCE INFO  
  6 / STATIC  
  7 / CLOSED CAPTION  
  8 / T I M E R
```

```
  - PICTURE -  
  1 / BRIGHT  
  2 / CONTRAST  
  3 / COLOR  
  4 / SHARPNESS  
  5 / TINT
```

PICTURE





- BRIGHT -

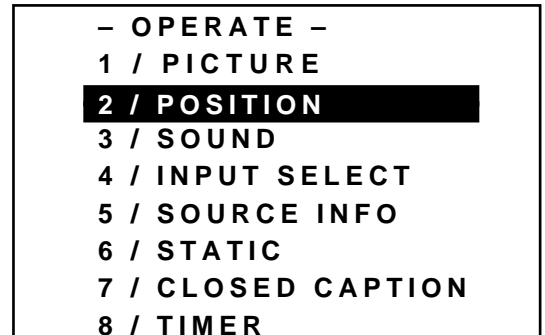
.....▼..... 60%

Position Adjustment

Adjust the position(SHIFT), the size (IMAGE SIZE) and the screen area (BLANKING).

Proceed as follows:

- ① Press the OPERATE button.
 - The “OPERATE” menu is displayed.
- ② Use the CURSOR  or  button to highlight the “2/POSITION” line and press ENTER to display the “POSITION” menu. You can also select the “POSITION” menu directly by pressing the INPUT “2” button.
- ③ Use the CURSOR  or  button to select either “SHIFT”, “IMAGE SIZE”, or “BLANKING” and then press ENTER. You can also select each item directly by pressing the INPUT “1” , “2” or “3” button.
 - The selected adjustment screen will be displayed.







Items to select

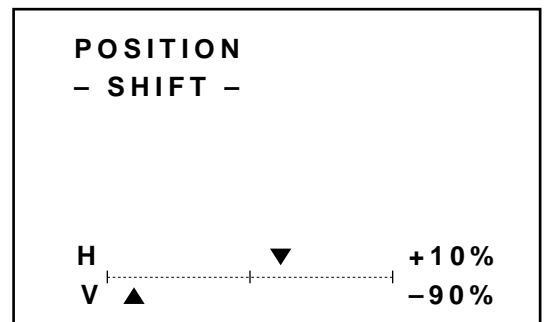
- SHIFT (Position of the picture)
- IMAGE SIZE (Picture size)
- BLANKING(Screen area)

- ④ Adjust the position, size, or screen area.

When selecting SHIFT:

Use the CURSOR buttons to move the position of the picture.



- Pressing  or  moves the picture left or right.
- Pressing  or  moves the picture up or down.





You can also finely adjust the shift .

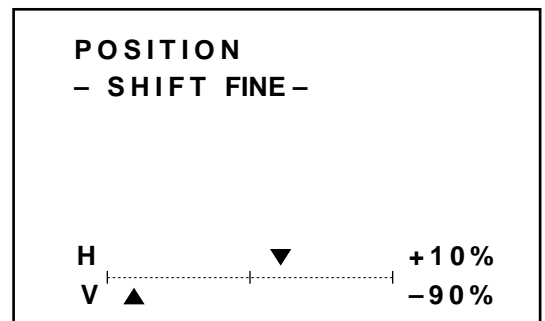
To do so:

While displaying the SHIFT screen, press and hold CTL and press any one of the CURSOR buttons to display the SHIFT FINE screen.

Pressing  or  moves the picture left or right finely.

Pressing  or  moves the picture up or down finely.





To return to the SHIFT screen, press and hold CTL, then press any one of the CURSOR buttons.

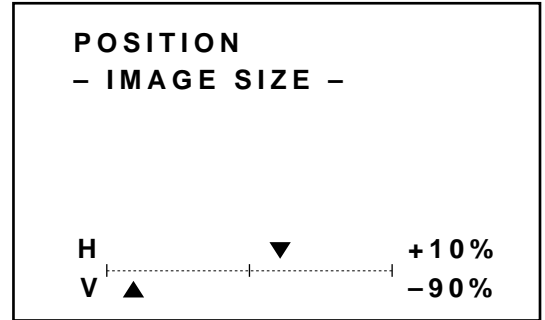


BASIC OPERATION

When selecting IMAGE SIZE:

Use the CURSOR buttons to adjust the size of image.



- Pressing  or  button increases or decreases the horizontal size.
- Pressing  or  button increases or decreases the vertical size.







When selecting BLANKING:



- 1) Hold down the CTL button and press CURSOR buttons to choose the right, left, top, or bottom edge.
 - The marker on the selected side will turn to a solid color.

- 2) Adjust the blanking using the CURSOR buttons.

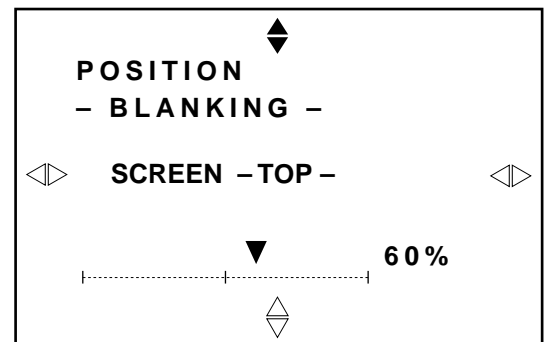
Top and Right Pressing  or  increases the adjustment values.

Pressing  or  decreases the adjustment values.

Bottom and Left Pressing  or  increases the adjustment values.

Pressing  or  decreases the adjustment values.





- ⑤ To end this adjustment, press the END button.
 - Whenever the END button is pressed, the screen changes in this order:
"POSITION" menu → "OPERATE" menu → Source screen



Sound Adjustment (only when used with the ISS-6020/ISS-6020G Switcher)





Adjust the volume to your preference.

Proceed as follows:

- ① Press the OPERATE button.
 - The “OPERATE” menu is displayed.
- ② Use the CURSOR  or  button to highlight the “3/SOUND” line and press ENTER to display the “SOUND” menu. You can also select the “SOUND” menu directly by pressing the INPUT “3” button.
- ③ Use the CURSOR  or  button to select a sound function and press ENTER. You can also select an item directly by pressing the corresponding number button.
 - The sound adjustment screen will be displayed.

Items to select

- VOLUME
- BASS (Not available on XG135LC, XG110LC and XG75A)
- TREBLE (Not available on XG135LC, XG110LC and XG75A)
- BALANCE (Not available on XG135LC, XG110LC and XG75A)

- ④ Use the CURSOR button to adjust sound controls.
 - The CURSOR  or  button increases the level.
 - The CURSOR  or  button decreases the level.
- ⑤ To end this adjustment, press the END button.
 - Whenever the END button is pressed, the screen changes in this order:
“SOUND” menu → “OPERATE” menu → Source screen.

```

- OPERATE -
1 / PICTURE
2 / POSITION
3 / SOUND
4 / INPUT SELECT
5 / SOURCE INFO
6 / STATIC
7 / CLOSED CAPTION
8 / TIMER
  
```

```

- SOUND -
1 / VOLUME
2 / BASS
3 / TREBLE
4 / BALANCE
  
```

```

SOUND
- VOLUME -

          ▼           60%
|-----|-----|
  
```





NOTE: Volume level is indicated in a red gauge during muting.

BASIC OPERATION



Input Selection

You can switch from one input to any other input signal.

Proceed as follows:

- ① Press the OPERATE button.
 - The “OPERATE” menu is displayed.
- ② Use the CURSOR  or  button to highlight the “4/INPUT SELECT” line and press ENTER to display the “INPUT SELECT” list. You can also select the “INPUT SELECT” list directly by pressing the INPUT “4” button.
- ③ Use the CURSOR  or  button to highlight the signal to be switched to and press ENTER to switch to the selected input signal.

Press the  or  button to change the sheet.

NOTE: To advance to the next page or to the previous page, hold down the CTL button then press the CURSOR  or  button. To directly access the page, hold down the CTL button then any one of the INPUT buttons.

- ④ To end the INPUT SELECT list, press the END button.
 - Whenever the END button is pressed, the screen changes in this order:
“OPERATE” menu → Source screen

To select inputs using the INPUT SELECT buttons on the rear control panel:

- 1) Press the INPUT button.
 - The INPUT SELECT menu is displayed.
- 2) Press the SELECT button to select an input terminal you wish to input.
- 3) Press the ENTER button to execute selection and to switch to the selected input.

NOTE: Pressing the INPUT button deletes the INPUT SELECT menu during input selection.

```

- OPERATE -
1 / PICTURE
2 / POSITION
3 / SOUND
4 / INPUT SELECT
5 / SOURCE INFO
6 / STATIC
7 / CLOSED CAPTION
8 / TIMER
  
```

```

P01/10-1  INPUT SELECT

                                STANDALONE
NO  NAME          SOURCE  INPUT
01  NTSC3.58  VIDEO  A
02  NTSC4.43  VIDEO  A
03  PAL        VIDEO  A
04  SECAM     VIDEO  A
05  VESA1024  RGB    A
06
07
08
09
10

                                OUTPUT DATA : LIST NO.* *
  
```

```

INPUT SELECT
INPUT A RGB
INPUT A VIDEO
INPUT A S-VIDEO
INPUT A COMPONENT
INPUT B RGB
INPUT B VIDEO
INPUT B S-VIDEO
INPUT B COMPONENT
INPUT C RGB
INPUT C VIDEO
INPUT C S-VIDEO
INPUT C COMPONENT
  
```

NOTE:

- While you are viewing a source screen, you can also select the input signal directly by pressing the INPUT “1” through “10” button. In this case INPUT buttons function as follows:

When using the projector in stand alone operation:

Input Mode		RGB	VIDEO	S-VIDEO	COMPONENT	
Input Module						
A		1	2	3	1*/10	Standard
With RGB board	B	4	4	5	4	Optional (XGRGBIN(A))
	C	7	7	8	7	
With VIDEO board	B	–	4	5	–	Optional (XGVIDIN(B))
	C	–	7	8	–	

*When INPUT “1” button is selected, RGB and COMPONENT signals are retrieved in this order; when INPUT “10” button is selected, a COMPONENT signal is retrieved only.

Numbers designate INPUT buttons on the remote control.



When using the projector with the ISS-6020/ISS-6020G:

INPUT 1 through 10 → Selects the corresponding number slot of the ISS-6020/ISS-6020G

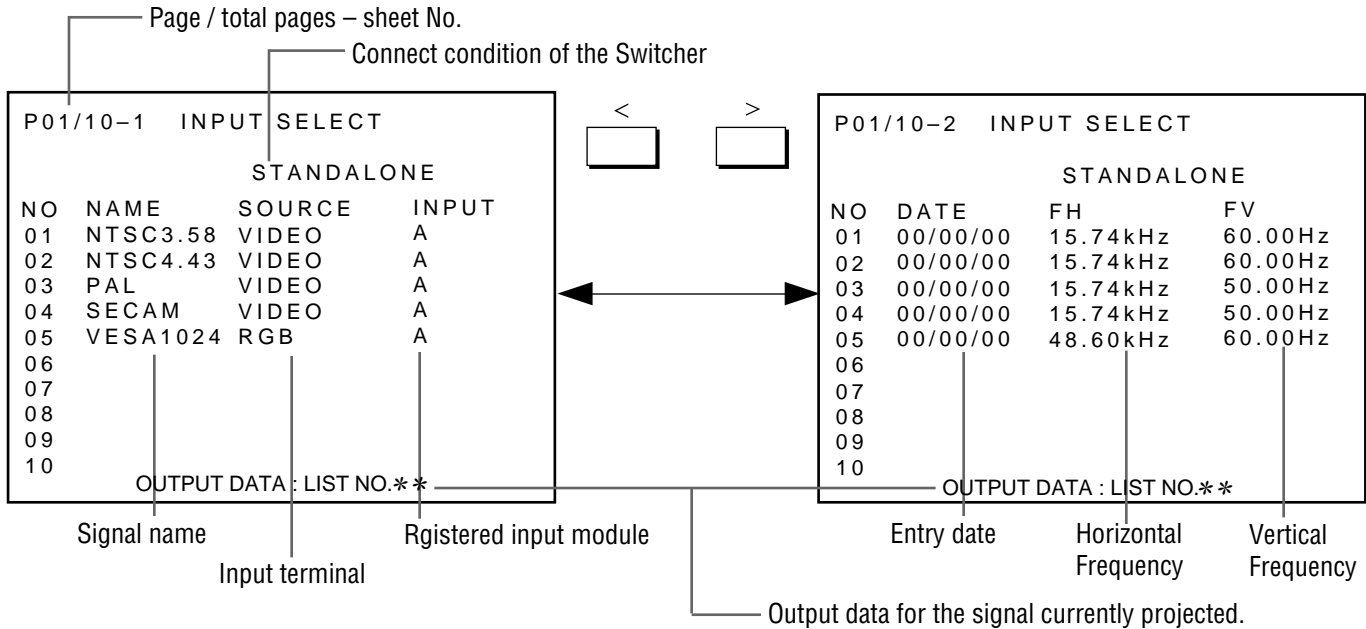
When using the projector with two ISS-6020/ISS-6020G or more:

To switch to another input signal, enter the master slot number, then the slave slot number by using INPUT buttons and press ENTER.

Example: If you want to select a signal from the no.3 slot of the slave Switcher which is connected to the no.2 slot of the master Switcher, first press the INPUT “2” button, then the INPUT “3” button and then press ENTER.

- You can switch to any input signal of NO 01 through 10 on the INPUT SELECT list by holding down the CTL button and pressing one of the INPUT buttons corresponding to the input number. To activate this function you must first select ENABLE in the DIRECT ENTRY ACCESS mode. For further details, contact your dealer.
- If there are two or more memory locations that contain the same signal information the projector will reference the signal nearest the beginning of the list. To select the next signal use the CURSOR  or  button and press ENTER.

INPUT SELECT List Format



BASIC OPERATION

Source Information

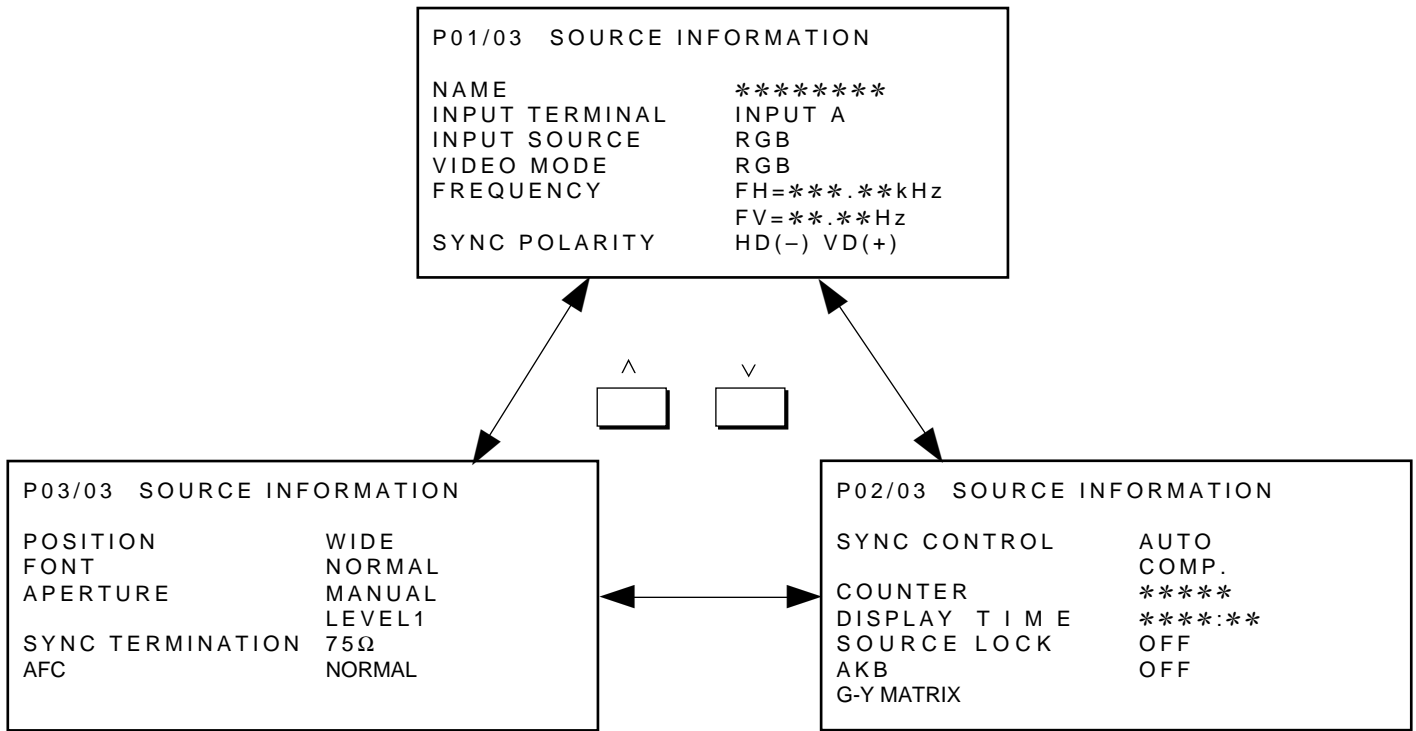
This is for viewing the signal information and the current status of various settings.

Proceed as follows:

- ① Press the OPERATE button.
 - The “OPERATE” menu is displayed.
- ② Use the CURSOR \blacktriangleleft or \blacktriangleright button to highlight the “5/SOURCE INFO” line and press ENTER to display the “SOURCE INFORMATION” screen. You can also select the “SOURCE INFORMATION” screen directly by pressing the INPUT “5” button.
- ③ Press the CURSOR \blacktriangleleft or \blacktriangleright button to select the page.
- ④ To end the “SOURCE INFORMATION” screen, press the END button.
 - Whenever the END button is pressed, the screen changes in this order:
“OPERATE” menu → Source screen

- OPERATE -	
1 /	PICTURE
2 /	POSITION
3 /	SOUND
4 /	INPUT SELECT
5 /	SOURCE INFO
6 /	STATIC
7 /	CLOSED CAPTION
8 /	TIMER

NOTE: The items below cannot be set in the OPERATE mode.









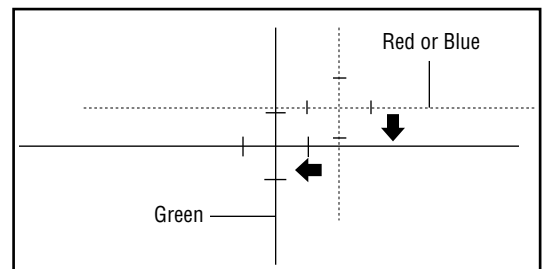
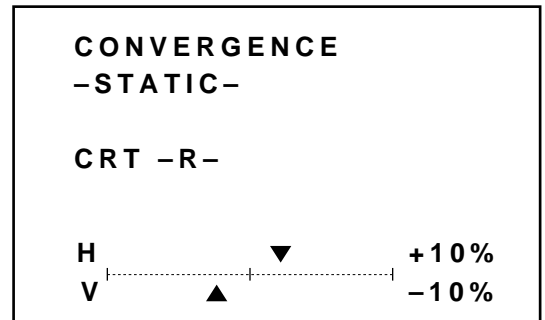
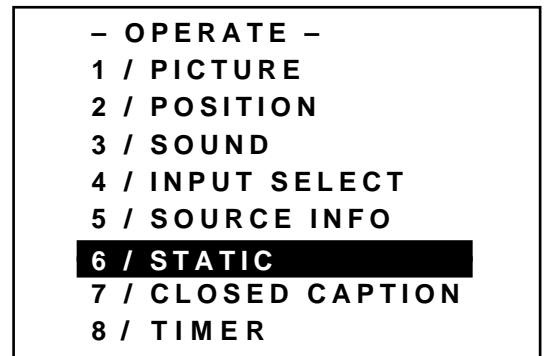
Static Convergence Adjustment

Adjust for the red and blue CRTs to place their pattern on top of the green test pattern (center only).

NOTE: The static convergence adjustment should be performed for R and B CRT. Carry out the adjustment after displaying an active image for 20 minutes or more.

Proceed as follows:

- ① Press the OPERATE button.
 - The “OPERATE” menu is displayed.
- ② Use the CURSOR  or  button to highlight the “6/STATIC” line and then press ENTER to display the STATIC adjustment screen. You can also select the STATIC adjustment screen directly by pressing the INPUT “6” button, or by pressing the STATIC button on the remote control.
 - The CROSS-HAIR test pattern will be automatically displayed.
- ③ Press the R or B button to display the pattern to be aligned with the Green pattern (as used a reference color).
 - You can turn on or off each CRT beam (R and B) separately.
- ④ Hold down the CTL button then select the CRT you wish to adjust with the R and B buttons.
- ⑤ Align the center of the Red or the Blue pattern with the center of the Green pattern using the CURSOR buttons.
 - The CURSOR  or  button moves the pattern right or left.
 - The CURSOR  or  button moves the pattern up or down.
- ⑥ Repeat steps ③ to ⑤ for the other CRTs if necessary.
- ⑦ To end this adjustment, press the END button.
 - Whenever the END button is pressed, the screen changes in this order:
“OPERATE” menu → Source screen







BASIC OPERATION

Closed Caption Mode Selection

Several closed caption modes can be set for text to be superimposed on the projection screen.

To select and set a mode, proceed as follows:

- ① Press the OPERATE button.
 - The “OPERATE” menu is displayed.
- ② Use the CURSOR  or  button to highlight the “7/CLOSED CAPTION” item and then press ENTER to display the “CLOSED CAPTION” menu. You can also select the “CLOSED CAPTION” menu directly by pressing the INPUT “7” button.
 - You can also select the CLOSED CAPTION menu by pressing the CAPTION button on the remote control.
- ③ Use the CURSOR  or  button to select a mode, then press ENTER.
 - The mode selection is executed.

Items to select

- CAPTION 1–4 Text is superimposed
- TEXT 1–4 Text is displayed in full screen
- OFF This exits the CLOSED CAPTION mode

NOTE:

- 1) The closed caption feature will only work with an NTSC3.58 source.
- 2) Pressing ENTER executes store function. Switching to source other than NTSC3.58 will cancel this setting. To activate, select the NTSC3.58 source again.

```
– OPERATE –  
1 / PICTURE  
2 / POSITION  
3 / SOUND  
4 / INPUT SELECT  
5 / SOURCE INFO  
6 / STATIC  
7 / CLOSED CAPTION  
8 / TIMER
```

CLOSED CAPTION

```
CAPTION1  
CAPTION2  
CAPTION3  
CAPTION4  
TEXT1  
TEXT2  
TEXT3  
TEXT4  
OFF
```

- ④ To return to the operate menu, press the END button.
 - Wherever the END button is pressed, the screen changes in this order:
“OPERATE” menu → source screen

Setting Timer





Your projector can be programmed to turn on or off automatically at a specified time. The two timer functions are available: ON/OFF TIMER and SLEEP TIMER.

NOTE:

When the ON TIMER is set and the projector is in standby, the two digit indicator flashes "00" to indicate that the ON TIMER is active.

Proceed as follows:

- Before setting ON/OFF TIMER, make sure that the DATE, TIME PRESET feature is set.
- Even after setting ON/OFF TIMER, turning the projector on or off with the remote control is possible.
- This timer setting is defeated when the projector carries out a Sequencer program. See "Auto Sequence Setting" in Set-Up manual for more information.
- There are two time display formats: 24-hour or AM/PM format. You can set either format in the "DATE TIME DISPLAY" of the OPTION menu. See "Various Settings-Setting DATE, TIME DISPLAY Setting" in the Set-Up manual.

- ① Press the OPERATE button.
 - The "OPERATE" menu is displayed.
- ② Use the CURSOR  or  button to highlight the "8/TIMER" item and then press ENTER to display the "TIMER" menu. You can also select the "TIMER" menu directly by pressing the INPUT "8" button.
- ③ Use the CURSOR  or  button to select "ON/OFF TIMER" or "SLEEP TIMER".





Items to select

- ON/OFF TIMER Programs to turn on or off the power at a predetermined time.
- SLEEP TIMER Programs to turn off the power at a predetermined time, up to two hours later in 30-minute increments.

- OPERATE -
 1 / PICTURE
 2 / POSITION
 3 / SOUND
 4 / INPUT SELECT
 5 / SOURCE INFO
 6 / STATIC
 7 / CLOSED CAPTION
 8 / **TIMER**

- TIMER -
 1 / **ON / OFF TIMER**
 2 / SLEEP TIMER

■ Setting ON/OFF TIMER

- 1) Use the CURSOR  or  button to select "ON/OFF TIMER" and press ENTER to display the "ON/OFF TIMER" menu. You can also select the "ON/OFF TIMER" menu directly by pressing the INPUT "1", or by holding down CTL and pressing POWER ON on the remote control.
- 2) Use the CURSOR  or  button to highlight the program number and press ENTER to display the selected "PROGRAM" screen. You can also select the "PROGRAM" screen by INPUT "1" through "8" button.

BASIC OPERATION

- 3) Use the CURSOR or button to select “EDIT” or “CLEAR”, and then press ENTER.

Items to select

- EDIT ----- Enters the mode for changing setting time.
- CLEAR ----- Deletes the current setting time.

When making a new setting or selecting “EDIT”:

Select “EDIT”, and press ENTER to display the “DAY” setting menu which allows you to set the day of the week for TIMER.

- a) Use the CURSOR or button to select the day of the week to be registered and press ENTER.
- The “EVERY WEEK” menu is displayed.

Items to select

- MON ----- Monday
- TUE ----- Tuesday
- WED ----- Wednesday
- THE ----- Thursday
- FRI ----- Friday
- SAT ----- Saturday
- SUN ----- Sunday
- MON-FRI ----- Monday thru Friday
- MON-SAT ----- Monday thru Saturday
- MON-SUN ----- Monday thru Sunday

- b) Use the CURSOR or button to select an item and then press ENTER.
- When “YES” is selected, the item on the day field in the ON/OFF TIMER menu is marked with the letter “E” which indicates that the setting time is enabled.

Items to select

- YES ----- Programs to turn on or off every week.
(not deleted after executing the program)
- NO ----- Does not program to turn on or off every week.
(deleted after executing the program)

- The “ON TIMER” setting screen is displayed.
- c) Enter the ON TIMER time in the HH:MM format using INPUT buttons and the CURSOR or button and then press ENTER. Pressing NORMAL cancels the ON TIMER time.

-ON/OFF TIMER-			
PRG	DAY	ON	OFF
1			
2			
3			
4			
5			
6			
7			
8			
		ACTIVE	INACTIVE

-PROGRAM-	
EDIT	CLEAR



DAY
TUE
WED
THE
FRI
SAT
SUN
MON-FRI
MON-SAT
MON-SUN

EVERY WEEK?	
YES	NO

- The time display format varies depending on the setting in “DATE TIME DISPLAY” of the “OPTION” menu.
- The “OFF TIMER” setting screen is displayed.

NOTE:

When the ON TIMER is set alone, the timer is programmed to turn off after four hours. While this setting is effective, if any button on the remote control or the rear panel is pressed, or if any operation is made from the external control, the timer will extend the current setting time to add four more hours.

- d) Enter the OFF TIMER time in the HH:MM format using INPUT buttons and the CURSOR  or  button and then press ENTER. Pressing NORMAL cancels the OFF TIMER time.
- The time display format varies depending on the setting in “DATE TIME DISPLAY” of the “OPTION” menu.
 - The “ON/OFF TIMER” setting screen is displayed.



ON TIMER 09 : 00

OFF TIMER 12 : 00

When selecting “CLEAR”:

Select “CLEAR” and press ENTER to clear the setting time for the selected program number.

- The “ON/OFF TIMER” menu is displayed.

4) Use the CURSOR  or  button to select “ACTIVE” or “INACTIVE” and then press ENTER.

Items to select

- ACTIVE ----- Enables ON/OFF TIMER
- INACTIVE ----- Disables ON/OFF TIMER

When selecting “ACTIVE”:

Select “ACTIVE” and press ENTER to enable the programmed timer function.

- The “ON/OFF” display appears on the top left of the screen. When the all the programs are completed, this display disappears.
- When the OFF TIMER is set, the “THE PROJECTOR WILL TURN OFF SOON” display appears three minutes before turning off.

When selecting “INACTIVE”:

Select “INACTIVE” and press ENTER to disable the programmed timer function.

- The scree is returned to the “TIMER” menu and the “ON/OFF” display disappears.



-ON/OFF TIMER-			
PRG	DAY	ON	OFF
1	MON	09:00	12:00
2	MON-FRI	14:00	15:30
3	MON-SAT	18:00	19:00
4	TUE	22:00	06:00
5			
6			
7			
8			
		ACTIVE	INACTIVE

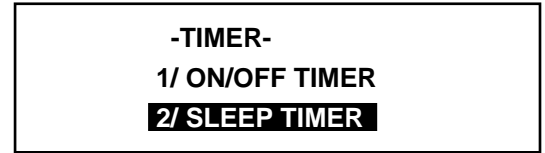
-ON/OFF TIMER-			
PRG	DAY	ON	OFF
1	MON	09:00	12:00
2	MON-FRI	14:00	15:30
3	E MON-SAT	18:00	19:00
4	TUE	22:00	06:00
5			
6			
7			
8			
		ACTIVE	INACTIVE



MON 01/16/97	12:00:00
ON/OFF	

BASIC OPERATION

■ Setting SLEEP TIMER

- 1) Use the CURSOR  or  button to highlight the “2/ SLEEP TIMER” and press ENTER to display the “SLEEP TIMER” menu. You can also select the “SLEEP TIMER” menu directly by pressing the INPUT “2” or by holding down CTL and pressing POWER OFF on the remote control.

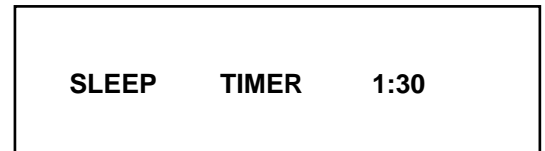


- 2) Use the CURSOR  or  button to select the time between 30 minutes and 2 hours in 30 minutes.

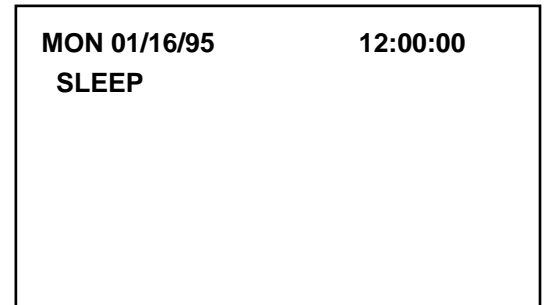




Items to select

- --:-- ----- Does not use SLEEP TIMER
- 0:30 ----- 30 minutes
- 1:00 ----- 1 hour
- 1:30 ----- 1 and half an hour
- 2:00 ----- 2 hours



- 3) Select the desired time and press ENTER.
 - The “SLEEP” display appears on the top left of the screen.
 - When the SLEEP TIMER is set, the “THE PROJECTOR WILL TURN OFF SOON” display appears three minutes before turning off.
- 4) To refer the remaining time, select the “2/SLEEP TIMER” in the “TIMER” menu and press ENTER to display the SLEEP TIMER screen. This indicates the remaining time.
 - You can also display the remaining time by holding down CTL and pressing POWER OFF on the remote control.
 - To change the setting time, repeat the step 2).



- 5) To cancel the setting sleep time, select the “2/SLEEP TIMER” in the “TIMER” menu and press ENTER to display the SLEEP TIMER screen. This indicates the remaining time. Use the CURSOR  or  button to clear the settings. The display changes to “--:--”. Then press ENTER.
 - The “SLEEP” display disappears on the top left of the screen.
 - You can also cancel the time by holding down CTL and pressing POWER OFF on the remote control.



- ④ To return to the source screen, press the END button while the TIMER menu is displayed.
 - Wherever the END button is pressed, the screen changes in this order:
“TIMER” menu → “OPERATE” menu → source screen

Mute

This function mutes the picture, sound or on-screen display.

To mute picture:

- Press the PICTURE MUTE button. To restore the picture, press the PICTURE MUTE button again or the END button.
- You can also mute the picture by holding down CTL and pressing PICTURE MUTE.

To mute sound:

- Press the SOUND MUTE button. To restore the sound, press the SOUND MUTE button again or the END button. Note that this function works only with the ISS-6020/ISS-6020G.

To mute on-screen display:

- Press the DISPLAY button. To restore the on-screen display, press the DISPLAY button again or the END button. Pressing CTL + DISPLAY button together will eliminate the on-screen display: pressing this combination again will restore the display.

NOTE: The OPERATE menu can be accessed in the PICTURE MUTE mode.

See “Remote Control Unit” of “Part Names and Functions” for more details.

Normal, Load, and Cancel Function

Adjustment settings can be returned to the factory preset level, or previously stored level, or can be cancelled.

To return to the standard level (NORMAL):

- ① Press the NORMAL button.
 - A confirmation message will be displayed.
- ② Use the CURSOR or button to select “YES”.
- ③ Press ENTER.
 - The NORMAL function is performed.
 - If you select “NO”, you will exit this mode suspending current status.

To return to the last stored level (LOAD):

- ① Press and hold the CTL button then press the NORMAL button.
 - The “LOAD/CANCEL” menu is displayed.
- ② Use the CURSOR or button to select “LOAD”.
 - A confirmation message is displayed.
- ③ Use the CURSOR or button to select “YES”.
 - If you select “NO”, you will exit this mode suspending current status.
- ④ Press ENTER.
 - The LOAD function is performed.

To cancel the adjustment data (CANCEL):

- ① Press and hold the CTL button then press the NORMAL button.
 - The “LOAD/CANCEL” menu is displayed.
- ② Use the CURSOR or button to select “CANCEL”.
 - A confirmation message is displayed.
- ③ Use the CURSOR or button to select “YES”.
 - If you select “NO”, you will exit this mode suspending current status.
- ④ Press ENTER.
 - The CANCEL function is performed.

XXXXXXXX
DATA NORMALIZE?

YES

NO

XXXXXXXX refers to a specific adjustment item to be normalized

XXXXXXXX

LOAD
CANCEL

XXXXXXXX refers to a specific adjustment item to be loaded or cancelled

XXXXXXXX
DATA LOAD?

YES

NO

XXXXXXXX refers to a specific adjustment item to be loaded

XXXXXXXX
DATA CANCEL?

YES

NO

XXXXXXXX refers to a specific adjustment item to be cancelled

Data Area for Output and Storage

Adjustment data have different reference data areas depending on each operation.

Adjustment Area

All Gain : All adjustment data except Ref.Adjust data
 Ref. Adjust : Ref.Adjust data

Adjustment data fall into two: REF. ADJUST menu adjustment and the other adjustment data (Operate and Adjust menu).
 Data area falls into five:

Data Area

INPUT LIST (00-99) : Registered data (100) areas corresponding to INPUT LIST
 DEFAULT DATA (1-6) : Default (6) areas divided by horizontal frequency.
 Cancel Data : Data to be returned to default
 Ref.Adjust Data : REF.ADJUST data (1) area
 Ref.Adjust (FACTORY AREA) : REF.ADJUST data (1) area for factory preset.

NOTE: See the Set-up manual for ADJUST and REF.ADJUST menus.

Output Data Area

	Ref.Adjust Data	All Gain
Signal Select	Input List (00-99) or Default Data (1-6)	Ref. Adjust Data
Normalize	Default Data (1-6)*	Ref. Adjust Data (Factory Area)
Load	Input List (00-99)*	Ref. Adjust Data
Cancel	Cancel Data*	←

* The above list may be different if NORMAL/LOAD/CANCEL operation is performed during POINT convergence.
 Output data during adjusting is the amount of data in each data area and data other than the current adjustment item (data in working area).

Example for FINE adjustment

	Point Data while adjusting Fine
Normalize	Default Data (1-6) + Point data except the current Fine data
Load	Input List (00-99) + Point data except the current Fine data
Cancel	Cancel Data + Point data except the current Fine data

Storage Area of Data

	All Gain	Ref. Adjust
STORE	INPUT LIST (00-99)*	REF. ADJUST

* Point adjustment has more than one item and each item has its own working area. However, there is only one area where data is saved with the Store function, which means no distinction is made among items in data.

Searching Registered Signals

When a source is switched with the remote control or a signal is input, the projector searches the registered signals and outputs its adjustment data as follows:

By using the horizontal frequency the projector searches up to 100 signals previously stored in the INPUT LIST and up to six signals stored in the DEFAULT AREA for a matching or close data to output.

- * When a matching data is found in the INPUT LIST, the matching data will be displayed.
- * When a data with a different input terminal is found, the input terminal and input signal name will be displayed in yellow and output its data.
- * When the data is found in the DEFAULT AREA, the data will be displayed as NEW SIGNAL.
- * When no matching data is found, the nearest thing to a NEW SIGNAL data will be displayed.

This section helps you resolve problems you may encounter while inputting a COMPONENT signal.

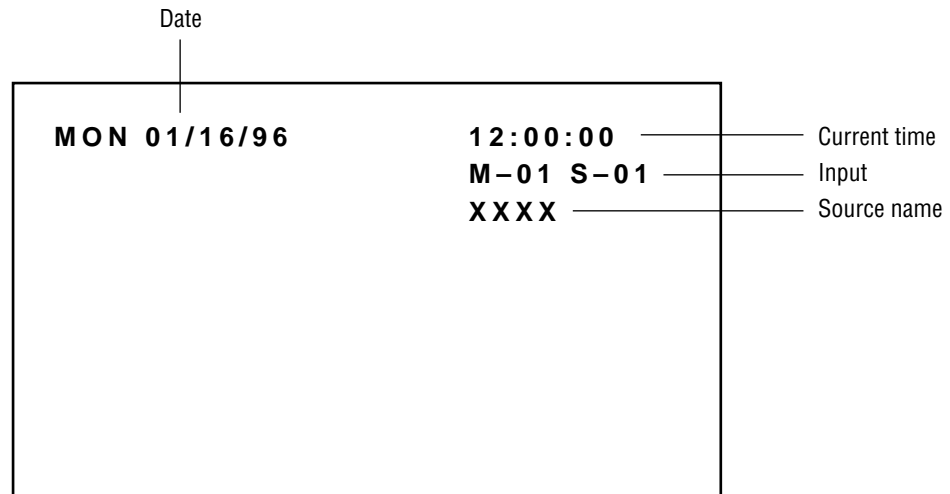
- * When a copy-guard-capable software source is played on a DVD player, white lines outside of a picture may appear. If this happens, perform the blanking adjustment.

Regardless of whether or not using a DVD player, when a copy-guarded signal is input, a picture may be distorted at the top of the screen. If this happens, enlarge the image size to display the portion of distortion outside of the screen.

- * When switching signals with the external equipment, there may be cases where G-Sync and DVD signals with horizontal frequencies of approximately 15 kHz cannot be discriminated. There may be cases where an unregistered G-Sync signal with a horizontal frequency of approximately 15 kHz may be mistaken for a DVD signal and may not be displayed correctly. When using G-Sync and DVD signals with horizontal frequencies of approximately 15 kHz at the same time, do not use the same input terminal.
- * A COMPONENT signal can be input with the RGB input board installed when the projector is used with the ISS-6020 switcher on the SW level mode. To enable this, you must first specify the RGB input board as the COMPONENT input board on the projector. See “Setting Mode-RGB/COMPONENT Searching of the Set-up manual.

Screen Format in Projecting a Picture

NOTE: The example of the screen display is only when used with the ISS-6020/ISS-6020G.





NOTE:

- See the Set-Up manual (not included with XG-1352G/XG-852G) or contact your dealer for changing the on-screen display mode.
- If the main power is not supplied to the projector for three days or more, the built-in clock may be reset. If this happens, contact your dealer for setting date and time.



Astig Adjustment

This feature allows you to adjust the beam shape.
 Proceed as follows:

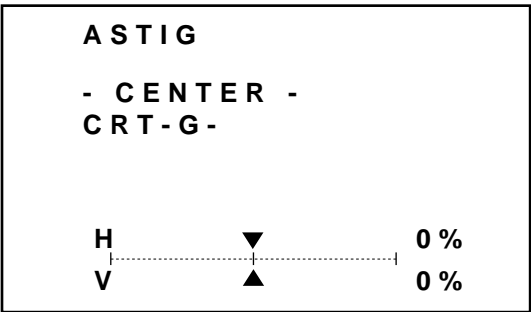
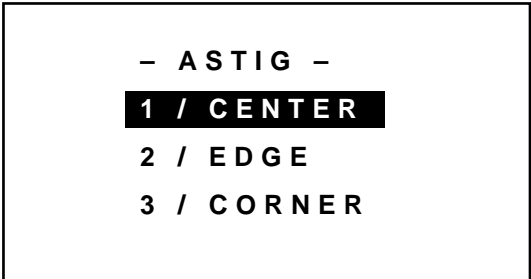
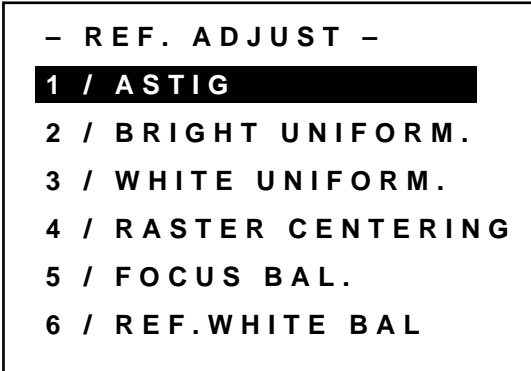
- 1 Press and hold the CTL button then press the ADJUST button to display the “REF. ADJUST” menu.
 - The projector may ask you to enter your passcode.
 - See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “1/ASTIG” item. Press the ENTER or INPUT “1” button to display the “ASTIG” menu.

Items to select

- CENTER Adjusts the whole screen
- EDGE Adjusts the top, bottom, left, and right sides on the screen
- CORNER Adjusts the four corners on the creen

- 3 Use the CURSOR  or  button to select the “CENTER”, “EDGE”, or “CORNER” item. Press the ENTER button to display the “ASTIG” adjustment screen.
 - The “DOT COARSE” test pattern is automatically displayed.
 - Pressing The CTL and FOCUS buttons rotates three items as follows:
 CENTER→EDGE→CORNER

- 4 Select the CRT you wish to adjust with R, G, or B button.
- 5 Press the R, G, or B button to project the only CRT beam to be adjusted.
 - You can turn on or off each CRT beam (R, G, or B).

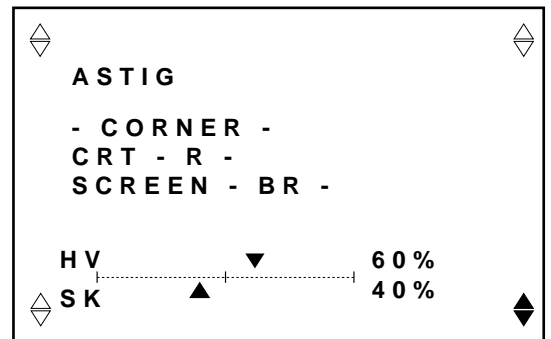
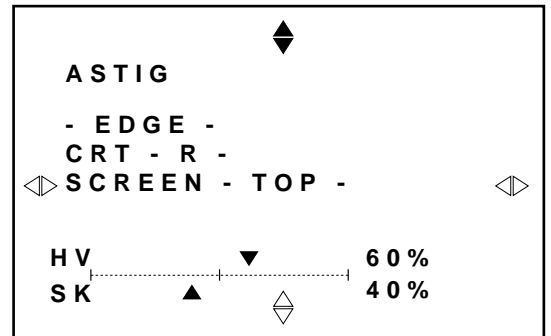


CRT beam to adjusted



- You can turn on or off each CRT beam (R, G, B).



6 Press and hold the CTL then press any one of the CURSOR buttons to select the position to be adjusted. (The marker on the selected side will turn to a solid color.)

- CTL +  Top
- CTL +  Bottom
- CTL +  Right
- CTL +  Left





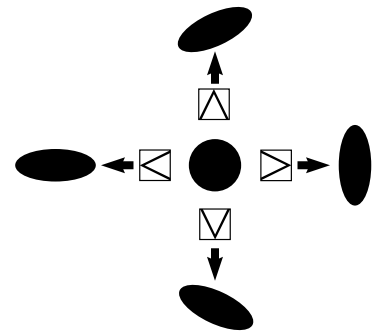
7 Use the CURSOR buttons to adjust the selected position.

- Adjust the center, edge, and corner in this order. If necessary, repeat the procedure.
- Press CURSOR  or  button to adjust the selected position horizontally or vertically.

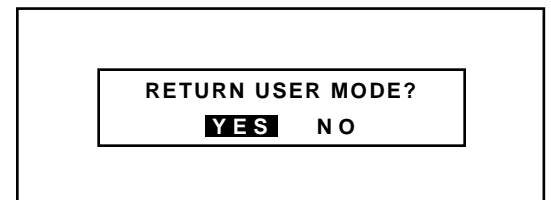
Press CURSOR  or  button to adjust the selected position diagonally.

8 To end this mode, press the END button.

- Whenever the END button is pressed, the menu will sequence in this order:
“REF. ADJUST” menu→Source screen
- If the “RETURN USER MODE?” menu appears, use the CURSOR  or  button to select either “YES” or “NO” and then press ENTER. This will exit the REF. ADJUST mode.



- Items to select**
- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
 - NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.



REFERENCE ADJUSTMENT









Bright Uniformity Adjustment

This feature allows you to equalize the brightness between the center and the edge.

Before adjustment:

- Select the “ALL WHITE” pattern using the TEST button on the full function remote control.

Proceed as follows:

- 1 Press and hold the CTL button then press the ADJUST button to display the “REF. ADJUST” menu.
 - The projector may ask you to enter your passcode.
 - See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “2/BRIGHT UNIFORM.” item. Press the ENTER or INPUT “2” button to display the “BRIGHT UNIFORMITY” adjustment screen.
- 3 Use the CURSOR buttons to adjust the right, left, top, or bottom edge.
 - Press CURSOR  or  button to increase or decrease the brightness on the right and the left side.
 - Press CURSOR  or  button to increase or decrease the brightness on the top and the bottom side.
- 4 To end this mode, press the END button.
 - Whenever the END button is pressed, the menus will sequence in this order:
“REF. ADJUST” menu→Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR  or  button to select either “YES” or “NO” and then press ENTER. This will exit the REF. ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

```
- REF. ADJUST -  
1 / ASTIG  
2 / BRIGHT UNIFORM.  
3 / WHITE UNIFORM.  
4 / RASTER CENTERING  
5 / FOCUS BAL.  
6 / REF. WHITE BAL
```

BRIGHT UNIFORMITY

```
BR  
H |-----| ▼ | 60%  
V |-----| ▲ | 60%
```

RETURN USER MODE?

YES NO









White Uniformity Adjustment

This feature allows you to adjust color balance on the left and the right side of the screen.

Before adjustment:

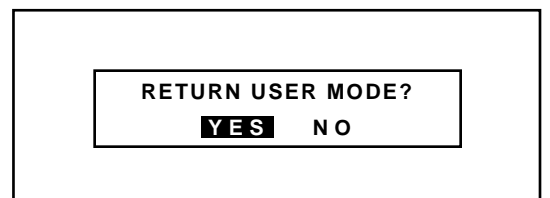
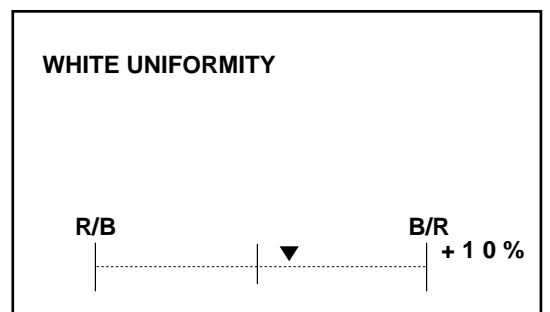
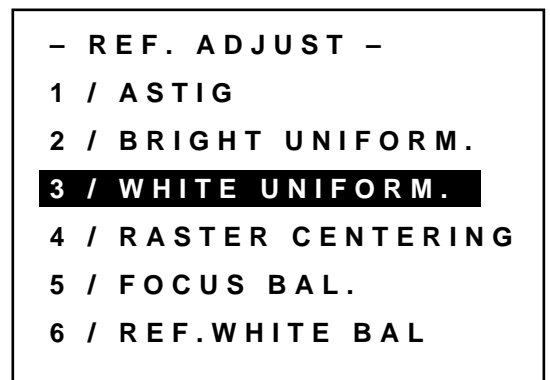
- When you are in this mode, all the three CRTs are beamed, and the CRTs cannot be cut off.
- Select the “ALL WHITE” pattern using the TEST button on the full function remote control.

Proceed as follows:

- 1 Press and hold the CTL button then press the ADJUST button to display the “REF. ADJUST” menu.
 - The projector may ask you to enter your passcode.
 - See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “3/WHITE UNIFORM.” item. Press the ENTER or INPUT “3” button to display the “WHITE UNIFORMITY” adjustment screen.
- 3 Use the CURSOR buttons to adjust the left and the right edge.
 - Press CURSOR  or  button to increase the amount of blue on the right side and the amount of red on the left side. Press CURSOR  or  button to increase the amount of red on the right side and the amount of blue on the left side.
- 4 To end this mode, press the END button.
 - Whenever the END button is pressed, the menus will sequence in this order:
“REF. ADJUST” menu → Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR  or  button to select either “YES” or “NO” and then press ENTER. This will exit the REF. ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.



REFERENCE ADJUSTMENT

Raster Centering Adjustment

Proceed as follows:

APPLY
APPLY
APPLY
APPLY

2 CURSOR ~~RIGHT~~
TURNER

RASTER
CENTERING

point to adjust

RASTER ~~RIGHT~~
CURSOR ~~RIGHT~~

ENTER
SEARCH

SEARCH SEARCH
CURSOR ~~RIGHT~~

SEARCH

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

- REF. ADJUST -

1 / ASTIG

2 / BRIGHT UNIFORM.

3 / WHITE UNIFORM.

4 / RASTER CENTERING

5 / FOCUS BAL.

6 / REF. WHITE BAL

RASTER
CENTERING
CRT -ALL-

V |-----▼-----| 0 %

RETURN USER MODE?

YES NO

Appendix

CONTENTS

Timing Charts







Pre-set Signals	130
Input Signal Reference Chart	131
Input Signal Timing	132
Message List	133



Projection Type Selection

This feature allows you to set the installation type according to the projection configuration.

NOTE:

- After changing the installation condition, be sure to perform this setting. Setting this automatically reverses the vertical polarity. However, you will have to reverse the horizontal polarity connectors. If you select a wrong installation type, the projector gives a warning message. (See the installation manual for the horizontal scan reversal.)

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.
- 3 Use the CURSOR  or  button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.
- 4 Use the CURSOR  or  button to select the “PJ ORIENTATION” item, then press ENTER to display the “PJ ORIENTATION” menu.

NOTE: The SETTING MODE has three menus. The “PJ ORIENTATION” item is on the first menu (P01). To access P02 or P03 from P01, press and hold down the CTL button then press the  button; to return to P01 from P02 or P03, press and hold down the CTL button then press the  button.

```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R, G, B GAIN
7 / PASSCODE
8 / OPTION
9 / REF. ADJUST
  
```

```

- OPTION -
1 / SETTING MODE
2 / MENU MODE
3 / SEQUENCER
4 / PJ ADDRESS
5 / VERSION
6 / HOUR METER
7 / DEFAULT DATA
  
```

P01/P03	OPTION	- SETTING MODE -
	PJ ORIENTATION	CEILING FRONT
	CONNECT CONDITION	STANDALONE
	DEFAULT INPUT SELECT	LAST
	FOCUS EDGE MODE	ALL
	S-VIDEO MODE SELECT	S2
	VIDEO MODE SELECT	AUTO

SETTING

- 5 Use the CURSOR or button to select one of the four projector installation types and press ENTER.

Items to select

- CEILING/REAR Ceiling mounting type and rear projection
- FLOOR/REAR Desk top type and rear projection
- CEILING/FRONT .. Ceiling mounting type and front projection
- FLOOR/FRONT Desk top type and front projection



```
PJ ORIENTATION
CEILING/REAR
FLOOR/REAR
CEILING/FRONT
FLOOR/FRONT
```

- 6 To complete, press the END button.

- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “ADJUST” menu → Source screen
- If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.

Items to select



- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.



```
RETURN USER MODE?
YES NO
```



Connecting to the Switcher

This setting explains how the projector is used with the ISS-6020/ISS-6020G Switcher.

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.



```



- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R,G,B GAIN
7 / PASSCODE
8 / OPTION
9 / REF.ADJUST
  
```

- 3 Use the CURSOR  or  button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.



```

- OPTION -
1 / SETTING MODE
2 / MENU MODE
3 / SEQUENCER
4 / PJ ADDRESS
5 / VERSION
6 / HOUR METER
7 / DEFAULT DATA
  
```

- 4 Use the CURSOR  or  button to select the “CONNECT CONDITION” item, then press ENTER to display the “CONNECT CONDITION” menu.

NOTE: The SETTING MODE has three menus. The “CONNECT CONDITION” item is on the first menu (P01). To access P02 or P03 from P01, press and hold down the CTL button then press the  button; to return to P01 from P02 or P03, press and hold down the CTL button then press the  button.

P01/P03	OPTION	- SETTING MODE -
	PJ ORIENTATION	CEILING FRONT
	CONNECT CONDITION	STANDALONE
	DEFAULT INPUT SELECT	LAST
	FOCUS EDGE MODE	ALL
	S-VIDEO MODE SELECT	S2
	VIDEO MODE SELECT	AUTO

- 5 Use the CURSOR  or  button to select your desired connection condition of Switcher and press ENTER.
 - The “RE-START ?” prompt is displayed after setting of the connection condition is modified from the current status to your desired condition.



```

CONNECT CONDITION
STANDALONE
SW1 LEVEL
SW2 LEVEL
  
```

Items to select

- STANDALONE The projector used in stand alone operation.
- SW1LEVEL The projector used with one Switcher.
- SW2LEVEL The projector used with two or more Switchers.

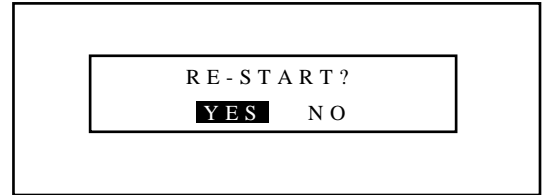
SETTING



- 6 Use the CURSOR  or  button to select either “YES” or “NO” and press ENTER.

Items to select

- YES Restart the projector.
- NO Does not restart the projector.

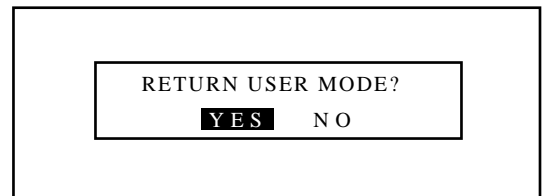
NOTE: The selected connection condition becomes effective only after the projector is restarted.



- 7 To exit, press the END button.
- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “Adjust” menu → Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR  or  button to select “YES” or “NO” and then press ENTER.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.





Default Input Selection



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

Proceed as follows:



- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.



- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.

– ADJUST –
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R,G,B GAIN
7 / PASSCODE
8 / OPTION
9 / REF. ADJUST

- 3 Use the CURSOR  or  button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.



– OPTION –
1 / SETTING MODE
2 / MENU MODE
3 / SEQUENCER
4 / PJ ADDRESS
5 / VERSION
6 / HOUR METER
7 / DEFAULT DATA

- 4 Use the CURSOR  or  button to select the “DEFAULT INPUT SELECT” item, then press ENTER to display the “DEFAULT INPUT SELECT” menu.

NOTE: The SETTING MODE has three menus. The “DEFAULT INPUT SELECT” item is on the first menu (P01). To access P02 or P03 from P01, press and hold down the CTL button then press the  button; to return to P01 from P02 or P03, press and hold down the CTL button then press the  button.

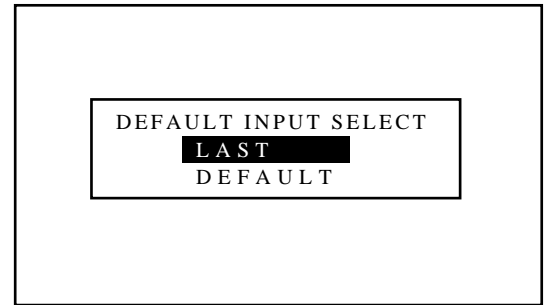
P01/P03	OPTION	– SETTING MODE –
PJ ORIENTATION		CEILING FRONT
CONNECT CONDITION		STANDALONE
DEFAULT INPUT SELECT		LAST
FOCUS EDGE MODE		ALL
S-VIDEO MODE SELECT		S2
VIDEO MODE SELECT		AUTO



SETTING

- 5 Use the CURSOR  or  button to select either “LAST” or “DEFAULT” and press ENTER.
- Selecting “LAST” completes setting. Go on to step 7
 - Selecting “DEFAULT” displays the “Default input” screen. Go on to step 6

Items to select



- **LAST** Sets the projector to default to the previous last active input each time the projector is turned on.
Note: An input must be active for a minimum of 10 minutes before it is recognized as the last active signal.
- **DEFAULT** . Displays the same source input every time the projector is started up.

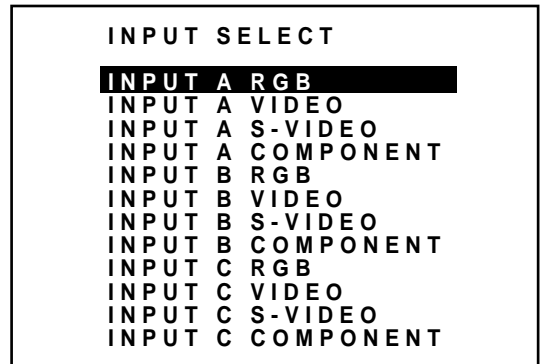


- 6 Use the CURSOR  or  button to select an input and then press the ENTER button.

When used in stand alone operation:



The default input screen will be displayed.

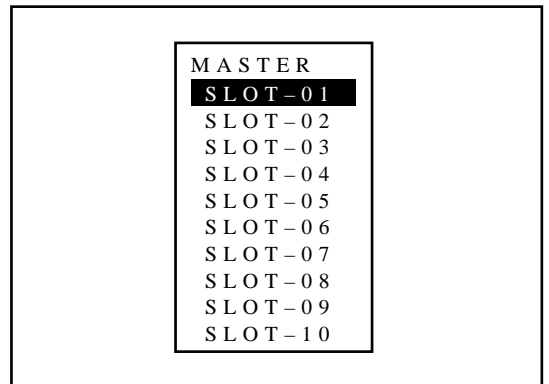
Use the CURSOR  or  button to select an input and press ENTER.



When used with a single Switcher:



The “MASTER” slot menu will be displayed.

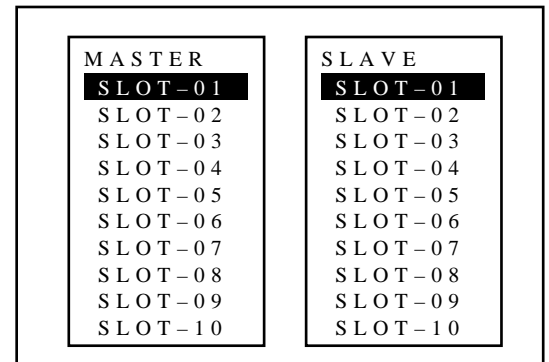
Use the CURSOR  or  button to select the desired slot number “1” through “10(0)” and then press ENTER.



When used with two or more Switchers:

The “MASTER” and “SLAVE” slot number menu will be displayed.

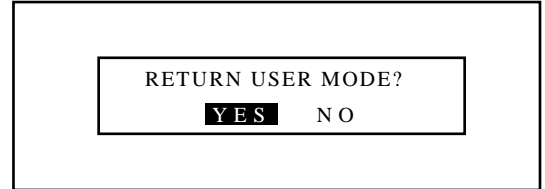
Use the CURSOR  or  button to select the master slot number first and then select the slave slot number “1” through “10(0)”. Press ENTER.



- 7 To complete, press the END button.
- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “ADJUST” menu → Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.





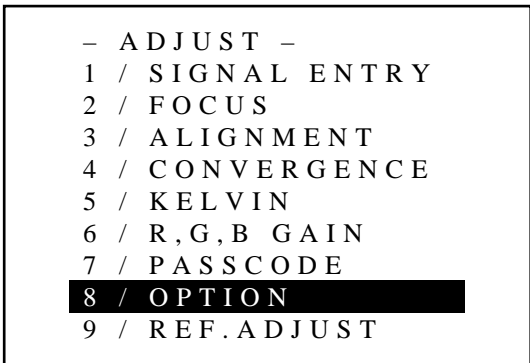
Focus Edge Mode



This function allows you to set either of two electrical edge focus modes; one affects all the RGB patterns at the same time and the other each CRT separately.

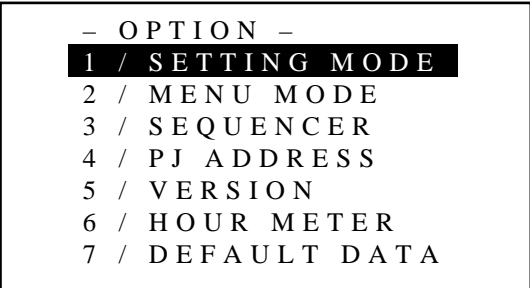
To set this, proceed as follows:



- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.



- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.

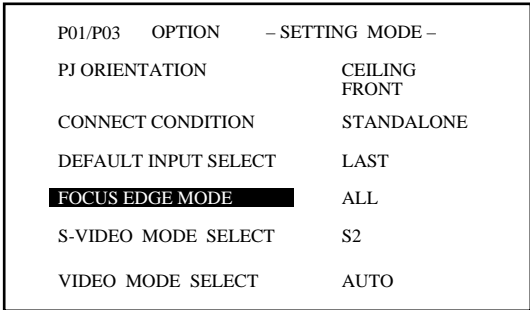


- 3 Use the CURSOR  or  button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.



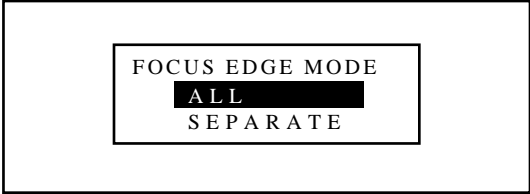
- 4 Use the CURSOR  or  button to select the “FOCUS EDGE MODE” item on Page 1, then press ENTER to display the “FOCUS EDGE MODE” menu.

NOTE: The SETTING MODE has three menus. The “FOCUS EDGE MODE” item is on the first menu (P01). To access P02 or P03 from P01, press and hold down the CTL button then press the  button; to return to P01 from P02 or P03, press and hold down the CTL button then press the  button.



5 Use the CURSOR or button to select either “ALL” or “SEPARATE” and press ENTER.

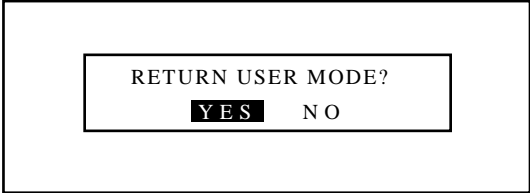
- Items to select**
- ALL Affects all of the CRTs at the same time
 - SEPARATE Affects each CRT separately



6 To complete, press the END button.

- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “ADJUST” menu → Source screen
- If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.

- Items to select**
- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
 - NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.



SETTING







S-Video Mode Selection



This function is used to select the S-video signal detection mode.

This allows identifying of the S-video signals with different aspect ratio: squeeze or full mode (CINEMA 16 : 9) and letter box (WIDE 4 : 3) signals.

To set, proceed as follows:

NOTE: An identifying result will be displayed in the SOURCE INFORMATION screen.

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.
- 3 Use the CURSOR  or  button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.
- 4 Use the CURSOR  or  button to select the “S-VIDEO MODE SELECT” item, then press ENTER to display the “S-VIDEO MODE SELECT” menu.

NOTE: The SETTING MODE has three menus. The “S-VIDEO MODE SELECT” menu is on the first menu (P01). To access P02 or P03 from P01, press and hold down the CTL button then press the  button; to return to P01 from P02 or P03, press and hold down the CTL button then press the  button.

```
– ADJUST –  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF. ADJUST
```

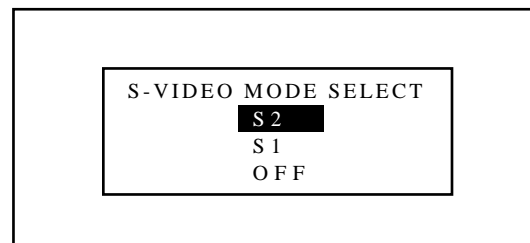
```
– OPTION –  
1 / SETTING MODE  
2 / MENU MODE  
3 / SEQUENCER  
4 / PJ ADDRESS  
5 / VERSION  
6 / HOUR METER  
7 / DEFAULT DATA
```

P01/P03	OPTION	– SETTING MODE –
	PJ ORIENTATION	CEILING FRONT
	CONNECT CONDITION	STANDALONE
	DEFAULT INPUT SELECT	LAST
	FOCUS EDGE MODE	ALL
	S-VIDEO MODE SELECT	S2
	VIDEO MODE SELECT	AUTO

- 5 Use the CURSOR or button to select one of the three items: S2, S1, and OFF, and then press ENTER.

Items to select

- S2 Identifies squeeze and letter box signals.
 S1 Identifies a squeeze signal only.
 OFF Does not identify any S-video signal.

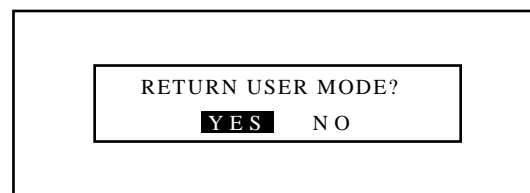


- 6 To end, press the END button.

- Whenever the END button is pressed, the menus will sequence in this order:
 “OPTION” menu → “ADJUST” menu → Source screen
- If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.



NOTE :



- The input signal must be compatible with the S2/S1 MODE standard.
 Refer to the user manual included with the connected equipment for more information.
- The identification function may not work correctly with a non-compatible signal. If this happens, select “OFF” from the “S-VIDEOMODESELECT” menu.

SETTING



Video Mode Selection

This function is used to select the NTSC 3.58, NTSC 4.43, PAL or SECAM video standard.



To select any one of the video standards, proceed as follows:



- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.

```
– ADJUST –  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF.ADJUST
```

- 3 Use the CURSOR  or  button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.

```
– OPTION –  
1 / SETTING MODE  
2 / MENU MODE  
3 / SEQUENCER  
4 / PJ ADDRESS  
5 / VERSION  
6 / HOUR METER  
7 / DEFAULT DATA
```

- 4 Use the CURSOR  or  button to select the “VIDEO MODE SELECT” item, then press ENTER to display the “VIDEO MODESELECT” menu.

NOTE: The SETTING MODE has three menus. The “VIDEO MODE SELECT” menu is on the first menu (P01). To access P02 or P03 from P01, press and hold down the CTL button then press the  button; to return to P01 from P02 or P03, press and hold down the CTL button then press the  button.

```
P01/P03  OPTION  – SETTING MODE –  
PJ ORIENTATION          CEILING  
                          FRONT  
CONNECT CONDITION       STANDALONE  
DEFAULT INPUT SELECT     LAST  
FOCUS EDGE MODE         ALL  
S-VIDEO MODE SELECT     S2  
VIDEO MODE SELECT       AUTO
```

- 5 Use the CURSOR or button to select either “AUTO” or “MANUAL” and then press ENTER.

When selecting “AUTO”

One of the video standards is selected automatically and is displayed in the SOURCE INFORMATION screen.

Video Modes

- NTSC3.58 Indicates the NTSC3.58 video standard
- NTSC4.43 Indicates the NTSC4.43 video standard
- PAL Indicates the PAL video standard
- SECAM Indicates the SECAM video standard
- RGB Indicates the RGB mode

- Select “AUTO” in normal operation.

When selecting “MANUAL”

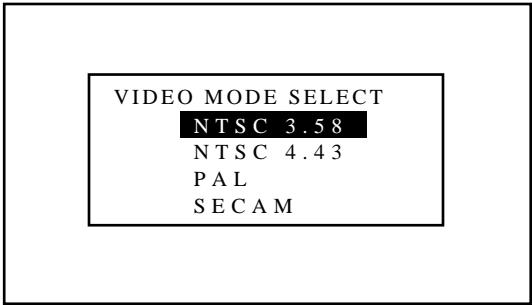
The “VIDEO MODE SELECT” menu will be displayed. Use the CURSOR or button to select the preferred video mode and then press ENTER.

Items to select

- NTSC3.58 Switches to the NTSC3.58 mode
- NTSC4.43 Switches to the NTSC4.43 mode
- PAL Switches to the PAL mode
- SECAM Switches to the SECAM mode

- Select “MANUAL” when connecting to poor quality signal or non-standard signals such as video games.

NOTE: The projector may not function correctly with a monochrome signals in the AUTO mode.

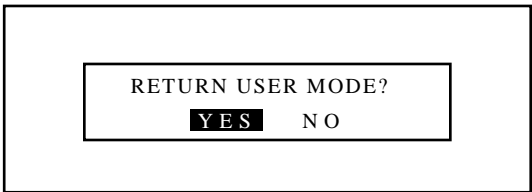


- 6 To complete, press the END button.

- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “ADJUST” menu → Source screen
- When your passcode is in effect, the “RETURN USER MODE?” menu is displayed. If this happens, use the CURSOR or button to select either “YES” or “NO” and press ENTER.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.





SETTING



Auto Power ON Mode Setting

The AUTO POWER ON MODE is a convenient way to start up the projector without pressing the POWER button. You can turn the projector on and off by supplying AC power to the projector.



To do this, proceed as follows:



- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.

```
– ADJUST –  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF. ADJUST
```

- 3 Use the CURSOR  or  button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.

```
– OPTION –  
1 / SETTING MODE  
2 / MENU MODE  
3 / SEQUENCER  
4 / PJ ADDRESS  
5 / VERSION  
6 / HOUR METER  
7 / DEFAULT DATA
```

- 4 Use the CURSOR  or  button to select the “AUTO POWER ON MODE” item on Page 2, then press ENTER to display the “AUTO POWER ON MODE” menu.

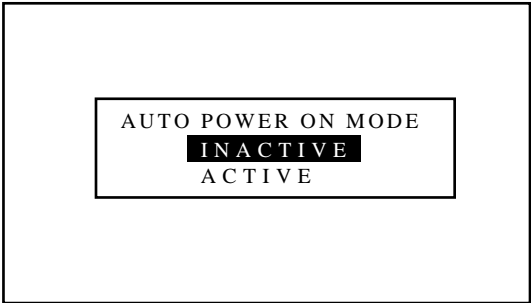
NOTE: The SETTING MODE has three menus. The “AUTO POWER ON MODE” item is on the second menu (P02). To access P02 from P01, press and hold down the CTL button then press the  button; to return to P01 from P02, press and hold down the CTL button then press the  button.

```
P02/P03  OPTION  – SETTING MODE –  
AUTO POWER ON MODE  INACTIVE  
WARM-UP MODE  INACTIVE  
AUTOMATIC DATA STORE  DISABLE  
PHOSPHOR SAVER  OFF  
SIGNAL SWITCHING  SOUND  
MUTE ON  
PICTURE  
MUTE ON
```

5 Use the CURSOR or button to select either “ACTIVE” or “INACTIVE” and press the ENTER button.

Items to select

- **INACTIVE** . Normal operation setting. Power ON is accomplished through the rear panel or the POWER button on the remote control.
- **ACTIVE** Bypasses rear panel power button (or the POWER button on the remote control) to allow power ON to be controlled by an AC switched outlet.

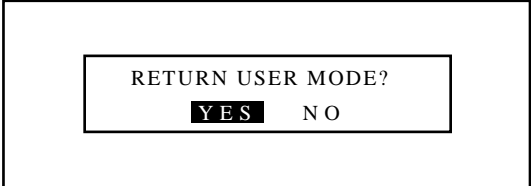


6 To complete, press the END button.

- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “ADJUST” menu → Source screen
- If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and then press ENTER.

Items to select

- **YES** When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- **NO** When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.





SETTING



Warm-up Mode Setting

This function allows you to automatically warm up the projector from 5 to 15 minutes when the projector is turned on.



To set the Warm-up mode, proceed as follows:



- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.

```
- ADJUST -  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF. ADJUST
```

- 3 Use the CURSOR  or  button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.

```
- OPTION -  
1 / SETTING MODE  
2 / MENU MODE  
3 / SEQUENCER  
4 / PJ ADDRESS  
5 / VERSION  
6 / HOUR METER  
7 / DEFAULT DATA
```

- 4 Use the CURSOR  or  button to select the “WARM-UP MODE” item on Page 2, then press ENTER to display the “WARM-UPMODE” menu.

NOTE: The SETTING MODE has three menus. The “WARM-UP MODE” item is on the second menu (P02). To access P02 from P01, press and hold down the CTL button then press the  button; to return to P01 from P02, press and hold down the CTL button then press the  button.

```
P02/P03  OPTION  - SETTING MODE -  
AUTO POWER ON MODE  INACTIVE  
WARM-UP MODE  INACTIVE  
AUTOMATIC DATA STORE  DISABLE  
PHOSPHOR SAVER  OFF  
SIGNAL SWITCHING  SOUND  
MUTE ON  
PICTURE  
MUTE ON
```

- 5 Use the CURSOR or button to select either “ACTIVE” or “INACTIVE” and press ENTER.

Items to select

- **INACTIVE** . Displays the input source after the projector is turned on.
- **ACTIVE** Activates the warm-up program after the projector is turned on. The ALL WHITE test pattern will be displayed. You can select a warm-up time from the WARM-UPTIME menu.

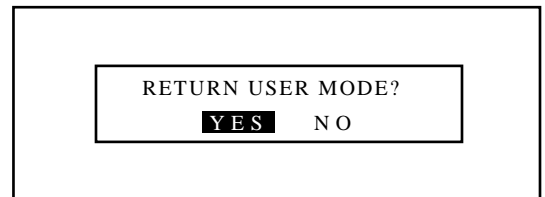
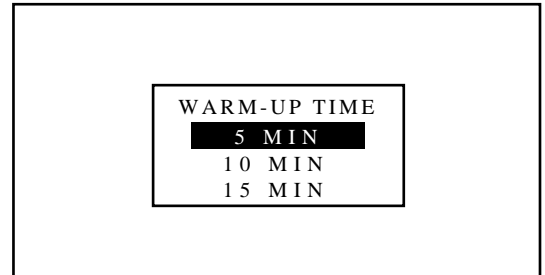
NOTE: To interrupt and cancel the warm-up cycle, press the END button.

- 6 To complete, press the END button.

- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “ADJUST” menu → Source screen
- If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and then press ENTER.

Items to select

- **YES** When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- **NO** When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.







Automatic Save Feature

This feature allows you to select two ways to store settings; automatically and manually.

After “ENABLE” is selected in the AUTOMATIC DATA STORE menu, all projector settings are stored in the projector's memory automatically. To set the AUTOMATIC DATA STORE, proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE section.

- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line and then press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.



- 3 Use the CURSOR  or  button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.



```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R,G,B GAIN
7 / PASSCODE
8 / OPTION
9 / REF. ADJUST
    
```

```

- OPTION -
1 / SETTING MODE
2 / MENU MODE
3 / SEQUENCER
4 / PJ ADDRESS
5 / VERSION
6 / HOUR METER
7 / DEFAULT DATA
    
```

- 4 Use the CURSOR  or  button to select the “AUTOMATIC DATA STORE” item on Page 2, then press ENTER to display the “AUTOMATIC DATA STORE” menu.

NOTE: The SETTING MODE has three menus. The “AUTOMATIC DATA STORE” item is on the second menu (P02). To access P02 from P01, press and hold down the CTL button then press the  button ; to return to P01 from P02, press and hold down the CTL button then press the  button.

```

P02/P03  OPTION  - SETTING MODE -
AUTO POWER ON MODE  INACTIVE
WARM-UP MODE  INACTIVE
AUTOMATIC DATA STORE  DISABLE
PHOSPHOR SAVER  OFF
SIGNAL SWITCHING  SOUND
MUTE ON
PICTURE
MUTE ON
    
```

- 5 Use the CURSOR or button to select either “DISABLE” or “ENABLE” and then press ENTER.

Items to select

- **DISABLE** .. Projector does not store the settings automatically.
- **ENABLE** ... Projector stores the settings automatically.

Automatic storing data is done when any one of the following procedures is performed:

- Pressing the END button several times returns the adjustment screen to the source screen.
- One input is switched to another.
- The projector is turned off.
- Every 10 minutes.

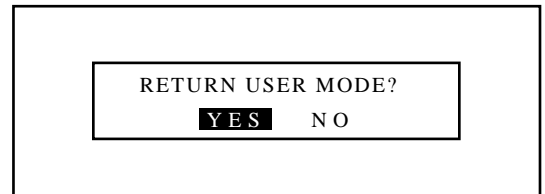
NOTE: After “DISABLE” is selected in the AUTOMATIC DATA STORE menu, the settings will not be stored in the memory unless you select “YES” in the “STORE ?” menu.



- 6 If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.

Items to select

- **YES** When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- **NO** When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.



SETTING

Phosphor Saver Setting

This function allows you to safeguard the CRTs against burns by shifting the image vertically and horizontally on the screen in the regular intervals. This can prolong the life of CRT of the projector.

To set the Phosphor saver, proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR \leftarrow or \rightarrow button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.
- 3 Use the CURSOR \leftarrow or \rightarrow button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.

```
- ADJUST -  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF. ADJUST
```

```
- OPTION -  
1 / SETTING MODE  
2 / MENU MODE  
3 / SEQUENCER  
4 / PJ ADDRESS  
5 / VERSION  
6 / HOUR METER  
7 / DEFAULT DATA
```

- 4 Use the CURSOR \leftarrow or \rightarrow button to select the “PHOSPHOR SAVER” item on Page 2, then press ENTER to display the “PHOSPHORSAVER” menu.

NOTE: The SETTING MODE has three menus. The “PHOSPHOR SAVER” item is on the second menu (P02). To access P02 from P01, press and hold down the CTL button then press the \rightarrow button; to return to P01 from P02, press and hold down the CTL button then press the \leftarrow button.

```
P02/P03  OPTION  - SETTING MODE -  
AUTO POWER ON MODE  INACTIVE  
WARM-UP MODE  INACTIVE  
AUTOMATIC DATA STORE  DISABLE  
PHOSPHOR SAVER  OFF  
SIGNAL SWITCHING  SOUND  
MUTE ON  
PICTURE  
MUTE ON
```

- 5 Use the CURSOR or button to select either “OFF” or “ON” and press ENTER.

Items to select

- OFF Deactivates the PHOSPHOR SAVER function.
- ON Activates the PHOSPHOR SAVER function. Interval and number of steps can be set.



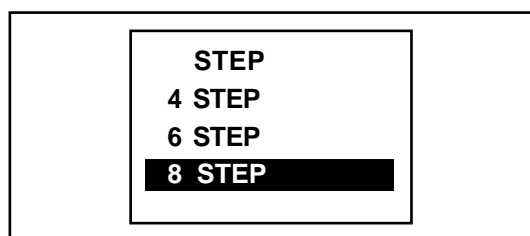
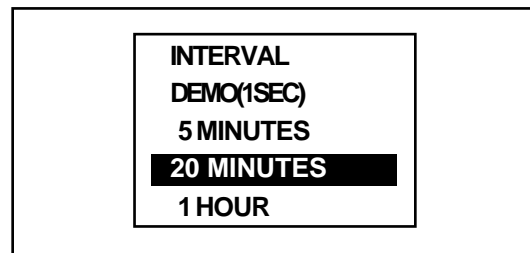
NOTE: When the on-screen display appears or you are in the adjustment mode, this function is cancelled. This can cause the source screen to be shifted.

- 6 Use the CURSOR or button to select your desired interval time from the “INTERVAL” menu and press ENTER.

- The “STEP” menu is displayed on the screen.

Items to select

- DEMO (1 SEC) Works every one second
- 5MINUTES Works every 5 minutes.
- 20MINUTES Works every 20 minutes
- 1 HOUR Works every 1 hour



- 7 Use the CURSOR or button to select the number of steps you wish.

Items to select

- 4 STEP Moves 4 steps of POSITION adjustment value
- 6 STEP Moves 6 steps of POSITION adjustment value
- 8 STEP Moves 8 steps of POSITION adjustment value

- 8 To complete, press the END button.

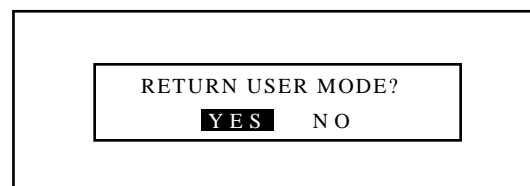
- Whenever the END button is pressed, the menus will sequence in this order:

“OPTION” menu → “ADJUST” menu → Source screen

- If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and then press ENTER.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.





SETTING



Signal Switching Mute Mode Setting

This function allows you to mute the picture and/or sound during signal switching.



To set the Signal Switching Mute mode, proceed as follows:



- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.

```
– ADJUST –  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF.ADJUST
```

- 3 Use the CURSOR  or  button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.

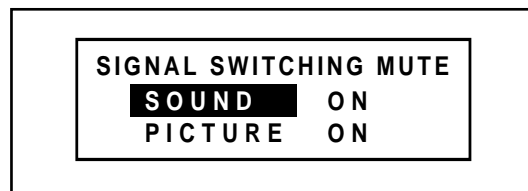
```
– OPTION –  
1 / SETTING MODE  
2 / MENU MODE  
3 / SEQUENCER  
4 / PJ ADDRESS  
5 / VERSION  
6 / HOUR METER  
7 / DEFAULT DATA
```

- 4 Use the CURSOR  or  button to select the “SIGNAL SWITCHING” item on Page 2, then press ENTER to display the “SIGNAL SWITCHING” menu.

NOTE: The SETTING MODE has three menus. The “SIGNAL SWITCHING” menu is on the second menu (P02). To access P02 from P01, press and hold down the CTL button then press the  button; to return to P01 from P02, press and hold down the CTL button then press the  button.

```
P02/P03  OPTION  –SETTING MODE–  
AUTO POWER ON MODE  INACTIVE  
WARM-UP MODE  INACTIVE  
AUTOMATIC DATA STORE  DISABLE  
PHOSPHOR SAVER  OFF  
SIGNAL SWITCHING  SOUND  
MUTE ON  
PICTURE  
MUTE ON
```

- 5 Use the CURSOR or button to select either “SOUND” or “PICTURE”, and press the ENTER button.
- The “SOUND MUTE” or “PICTURE MUTE” menu will be displayed.

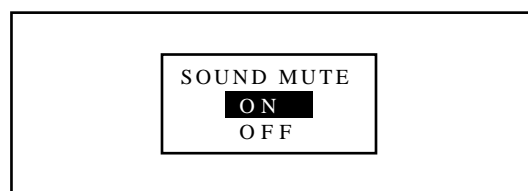


- 6 Use the CURSOR or button to select either “ON” or “OFF” and then press ENTER.

Items to select

MUTE ON... Mutes a picture and/or sound during switching signals.

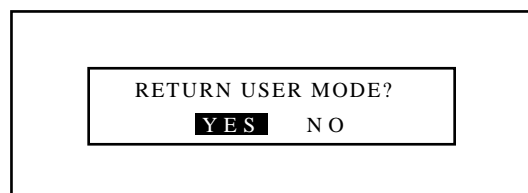
MUTE OFF.. Outputs a picture and/or sound during switching signals.



- 7 To complete this, press END.
- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “ADJUST” menu → Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and then press ENTER.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.







SETTING

Direct Entry Access Setting

This feature allows you to switch the current input directly to one of the registered inputs from NO1 to NO10 in the INPUT LIST.



NOTE: To use this feature, hold down the CTL button and press one of the INPUT buttons corresponding to the input number.



To set this feature, proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.
- 3 Use the CURSOR  or  button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.

```
– ADJUST –  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF.ADJUST
```

```
– OPTION –  
1 / SETTING MODE  
2 / MENU MODE  
3 / SEQUENCER  
4 / PJ ADDRESS  
5 / VERSION  
6 / HOUR METER  
7 / DEFAULT DATA
```

- 4 Use the CURSOR  or  button to select the “DIRECT ENTRY ACCESS” item on Page 3, then press ENTER to display the “DIRECT ENTRY ACCESS” menu.

NOTE: The SETTING MODE has three menus. The “DIRECT ENTRY ACCESS” item is on the third menu (P03).
To access P03 from P01, press and hold down the CTL button then press the  button twice; to return to P01 from P03, press and hold down the CTL button then press the  button twice.

```
P03/P03  OPTION  – SETTING MODE –  
DIRECT ENTRY ACCESS  DISABLE  
B-FOCUS TRACKING      OFF  
OPTION TERM BAUD RATE  9600 BPS  
INPUT TERMINAL  
RGB/COMPONENT SEARCH  MANUAL
```

- 5 Use the CURSOR or button to select either “DISABLE” or “ENABLE” and press ENTER.

Items to select

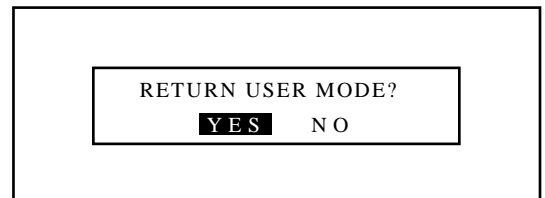
- DISABLE .. An error message will appear at the bottom of the screen and the signal is not switched when one of the INPUT buttons is pressed with CTL.
- ENABLE ... The signal is switched to the corresponding signal when one of the INPUT button is pressed with CTL.



- 6 To complete this, press END.
- Whenever the END button is pressed, the menus will sequence in this order.
“OPTION” menu → “ADJUST” menu → Source screen
 - If the RETURN USER MODE ? menu appears, use the CURSOR or button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next, you will not need to re-enter your passcode.



Blue Focus Tracking Setting

This feature allows you to obtain the better white uniformity by defocusing the blue CRT.

NOTE:

- The defocus values will vary with changes in the horizontal frequency.
- Select the "ALL WHITE" pattern using the TEST button on the full function remote control.

- 1 Press the ADJUST button to display the "ADJUST" menu.
 - The projector may ask you to enter your passcode. See page 61 for the explanation of PASSCODE.
- 2 Use the CURSOR or button to highlight the "8/OPTION" line. Press ENTER to display the "OPTION" menu. You can also select the "OPTION" menu directly by pressing the INPUT "8" button.
- 3 Use the CURSOR or button to highlight the "1/SETTING MODE" line. Press ENTER to display the "SETTING MODE" menu. You can also select the "SETTING MODE" menu directly by pressing the INPUT "1" button.
- 4 Use the CURSOR or button to select the "B-FOCUS TRACKING" item on Page 3, then press ENTER to display the "B-FOCUS TRACKING" menu.

NOTE: The SETTING MODE has three menus. The "B-FOCUS TRACKING" item is on the third menu (P03). To access P03 from P01, press and hold down the CTL button then press the button twice; to return to P01 from P03, press and hold down the CTL button then press the button twice.

- 5 Use the CURSOR or button to select either "OFF" or "ON" and press ENTER.

Items to select

- OFF Defocuses the blue CRT
- ON Does not defocus the blue CRT

- 6 To end this mode, press the END button.
 - Whenever the END button is pressed, the menu will sequence in this order.
"OPTION" menu → "ADJUST" menu → Source screen.
 - If the "RETURN USER MODE?" menu appears, use the CURSOR or button to select either "YES" or "NO" and then press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R,G,B GAIN
7 / PASSCODE
8 / OPTION
9 / REF. ADJUST
    
```

```

- OPTION -
1 / SETTING MODE
2 / MENU MODE
3 / SEQUENCER
4 / PJ ADDRESS
5 / VERSION
6 / HOUR METER
7 / DEFAULT DATA
    
```

```

P03/P03  OPTION  - SETTING MODE -
DIRECT ENTRY ACCESS  DISABLE
B-FOCUS TRACKING  OFF
OPTION TERM BAUD RATE  9600 BPS
RGB/COMPONENT SEARCH  MANUAL
    
```

```

B-FOCUS TRACKING
  OFF
  ON
    
```

```

RETURN USER MODE?
  YES  NO
    
```

Optional Terminal Baud Rate Selection

This feature allows you to set baud rate of the OPTION terminal from 4800 to 38400 bps.

NOTE:

- The baud rate of the OPTION terminal defaults to 9600 bps at the factory.
- Make sure that the baud rate of the OPTION terminal matches that of operating of the connected equipment.

To change the baud rate of the OPTION terminal, proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode. See page 61 for the explanation of PASSCODE.
 - 2 Use the CURSOR or button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.
 - 3 Use the CURSOR or button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.
 - 4 Use the CURSOR or button to select the “OPTION TERM BAUD RATE” item on Page 3, then press ENTER to display the “OPTION TERM BAUD RATE” menu.
- NOTE:** The SETTING MODE has three menus. The “OPTION TERM BAUD RATE” item is on the third menu (P03). To access P03 from P01, press and hold down the CTL button then press the button twice; to return to P01 from P03, press and hold down the CTL button then press the button twice.
- 5 Use the CURSOR or button to select the baud rate from 4800 to 38400 bps and press ENTER.
 - 6 To end this mode, press the END button.
 - Whenever the END button is pressed, the menu will sequence in this order.
“OPTION” menu→“ADJUST” menu→Source screen.
 - IF the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and then press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R,G,B GAIN
7 / PASSCODE
8 / OPTION
9 / REF. ADJUST
  
```

```

- OPTION -
1 / SETTING MODE
2 / MENU MODE
3 / SEQUENCER
4 / PJ ADDRESS
5 / VERSION
6 / HOUR METER
7 / DEFAULT DATA
  
```

```

P03/P03  OPTION  - SETTING MODE -
DIRECT ENTRY ACCESS  DISABLE
B-FOCUS TRACKING    OFF
OPTION TERM BAUD RATE 9600 BPS
RGB/COMPONENT SEARCH MANUAL
  
```

```

OPTION TERM.
  BAUD RATE

      4800
      9600
      19200
      38400
  
```

```

RETURN USER MODE?
  YES  NO
  
```

RGB/COMPONENT Search Setting

This feature allows you to set the searching method of RGB/COMPONENT signal.

To set this feature, proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of PASSCODE.
- 2 Use the CURSOR or button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.
- 3 Use the CURSOR or button to highlight the “1/SETTING MODE” line. Press ENTER to display the “SETTING MODE” menu. You can also select the “SETTING MODE” menu directly by pressing the INPUT “1” button.
- 4 Use the CURSOR or button to select “RGB/COMPONENT SEARCH” item on Page 3, then press ENTER to display the “RGB/COMPONENT SEARCH” menu.

NOTE: The SETTING MODE has three menus. The “RGB/COMPONENT SEARCH” item is on the third menu (P03). To access P03 from P01, press and hold down the CTL button then press the v button twice; to return to P01 from P03, press and hold down the CTL button then press the button twice.

- 5 Use the CURSOR or button to select either “MANUAL” or “AUTO” and press ENTER.

When used in a stand alone operation:

Items to select
 *MANUAL Searches RGB signals only
 *AUTO Searches COMPONENT signals automatically after searching RGB signals.

NOTE: This feature corresponds to R/Cr, G/Y, or B/Cb input terminal of INPUT A slot. INPUT B and C slots are depending on setting of the optional input board.
 In regardless of this setting, pressing INPUT “10” button searches a COMPONENT signal.

```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R, G, B GAIN
7 / PASSCODE
8 / OPTION
9 / REF. ADJUST
    
```

```

- OPTION -
1 / SETTING MODE
2 / MENU MODE
3 / SEQUENCER
4 / PJ ADDRESS
5 / VERSION
6 / HOUR METER
7 / DEFAULT DATA
    
```

```

P03/P03  OPTION  - SETTING MODE -
DIRECT ENTRY ACCESS  DISABLE
B-FOCUS TRACKING  OFF
OPTION TERM BAUD RATE  9600 BPS
RGB/COMPONENT SEARCH  MANUAL
    
```

```

RGB/COMPONENT SEARCH
MANUAL
AUTO
    
```

When used with a single Switcher ISS-6020/ISS-6020G:

Items to select

- MANUAL Searches RGB or COMPONENT signals only.
- AUTO Searches COMPONENT signals automatically after searching RGB signals.

- When “MANUAL” is selected, searching will be set for each slot.

Use the CURSOR or button to select the input slot number of the Switcher and press ENTER.

- The “SIGNAL FORMAT” menu will be displayed.

Use the CURSOR or button to select “RGB” or “COMPONENT” and press ENTER.

MASTER		
SLOT-01	R	
SLOT-02	R	
SLOT-03	R	
SLOT-04	R	
SLOT-05	R	
SLOT-06	R	
SLOT-07	R	
SLOT-08	R	
SLOT-09	R	
SLOT-10	R	

SIGNAL FORMAT		
RGB		
COMPONENT		

When used with two or more Switchers ISS-6020/ISS-6020G:

Items to select

- MANUAL Searches RGB or COMPONENT signals only (for each slot).
- AUTO Searches COMPONENT signals automatically after searching RGB signals (for all slots).

- When “MANUAL” is selected, searching will be set for each slot.

Use the CURSOR or button to select the master slot number “1” through “10” first from the master menu, then select the slave slot number “1” through “10” from the slave menu and press ENTER.

- The “SIGNAL FORMAT” menu will be displayed.

Use the CURSOR or button to select “RGB” or “COMPONENT” and press ENTER.

MASTER		
SLOT-01	R	
SLOT-02	R	
SLOT-03	R	
SLOT-04	R	
SLOT-05	R	
SLOT-06	R	
SLOT-07	R	
SLOT-08	R	
SLOT-09	R	
SLOT-10	R	

MASTER		
SLOT-01	R	
SLOT-02	R	
SLOT-03	R	
SLOT-04	R	
SLOT-05	R	
SLOT-06	R	
SLOT-07	R	
SLOT-08	R	
SLOT-09	R	
SLOT-10	R	

SIGNAL FORMAT		
RGB		
COMPONENT		

Items to select

- RGB Searches RGB signals only.
- COMPONENT Searches COMPONENT signals only.

Ⓞ To end this mode, press the END button.

- Whenever the END button is pressed, the menu will sequence in this order.

“OPTION” menu → ”ADJUST” menu → Source screen

- If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and then press ENTER. This will exit the ADJUST mode.

RETURN USER MODE?		
YES	NO	

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.







SETTING

On-screen Display Mode Setting

There are two modes of operations for the on-screen display. With AUTO mode, the on-screen display will automatically switch off after three through ten seconds. In the MANUAL mode, the display must be manually turned off with the DISPLAY button on the full function remote control each time it appears.

NOTE: Pressing DISPLAY with CTL will select the non on-screen mode; pressing DISPLAY with CTL again will cancel this mode. Even if the on-screen display may be turned off with CTL and DISPLAY, any adjustment will still change the projector's memory settings.

Proceed as follows:

- 1 Press the ADJUST button to display the "ADJUST" menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the "8/OPTION" line. Press ENTER to display the "OPTION" menu. You can also select the "OPTION" menu directly by pressing the INPUT "8" button.
- 3 Use the CURSOR  or  button to highlight the "2/MENU MODE" line. Press ENTER to display the "MENU MODE" menu. You can also select the "MENU MODE" menu directly by pressing the INPUT "2" button.
- 4 Use the CURSOR  or  button to highlight the "MESSAGE MODE" item.
Press ENTER to display the "MESSAGE MODE" menu.

```
  - ADJUST -  
  1 / SIGNAL ENTRY  
  2 / FOCUS  
  3 / ALIGNMENT  
  4 / CONVERGENCE  
  5 / KELVIN  
  6 / R,G,B GAIN  
  7 / PASSCODE  
  8 / OPTION  
  9 / REF.ADJUST
```

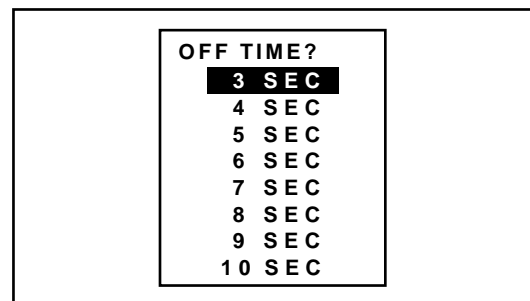
```
  - OPTION -  
  1 / SETTING MODE  
  2 / MENU MODE  
  3 / SEQUENCER  
  4 / PJ ADDRESS  
  5 / VERSION  
  6 / HOUR METER  
  7 / DEFAULT DATA
```

OPTION	- MENU MODE -
MESSAGE MODE	AUTO 10 SEC
MESSAGE COLOR	COLOR
DATE, TIME DISPLAY	DATE : ON DAY : OFF TIME : 24HOUR
DATE, TIME PRESET	
PJ ADDRESS DISPLAY NEW SIGNAL MESSAGE	OFF ON

- 5 Use the CURSOR or button to select either “AUTO” or “MANUAL” and press ENTER.

Items to select

- **AUTO** The on-screen menu display appears when the buttons on the remote control, or the controls on the rear panel are pressed. The on-screen display will turn off at a preselected time. The OFF TIME is specified in seconds up to a maximum of 10 seconds. Select your desired time (3-10 seconds) from the OFF TIME menu.
- **MANUAL** . The on-screen menu display appears when the buttons on the remote control, or the controls on the rear panel are pressed. The display will be turned on and off whenever the DISPLAY button is pressed. If no button operation is made for 20 minutes or more, the on-screen message will automatically turn off.

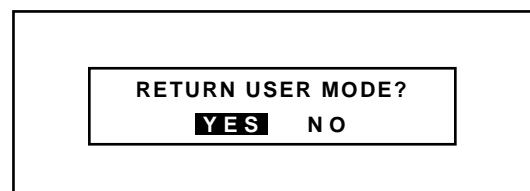


- 6 To end this mode, press the END button.

- When the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “ADJUST” menu → Source screen
- If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.

Items to select

- **YES** When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- **NO** When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.





SETTING



On-screen Display Color Setting

You can select two color modes (full color, or green only) for the color of the on-screen display such as menus, or messages.



Proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.

```
– ADJUST –  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF.ADJUST
```

- 3 Use the CURSOR  or  button to highlight the “2/MENU MODE” line. Press ENTER to display the “MENU MODE” menu. You can also select the “MENU MODE” menu directly by pressing the INPUT “2” button.

```
– OPTION –  
1 / SETTING MODE  
2 / MENU MODE  
3 / SEQUENCER  
4 / PJ ADDRESS  
5 / VERSION  
6 / HOUR METER  
7 / DEFAULT DATA
```

- 4 Use the CURSOR  or  button to highlight the “MESSAGE COLOR” item.

Press ENTER to display the “MESSAGE COLOR” menu.

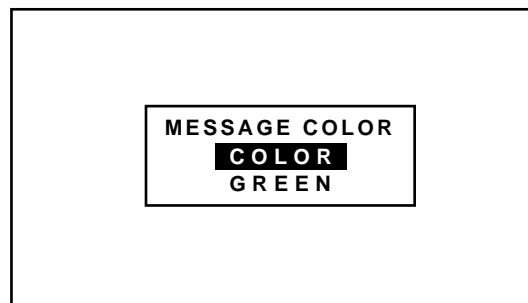
OPTION	- MENU MODE -
MESSAGE MODE	AUTO 10 SEC
MESSAGE COLOR	COLOR
DATE, TIME DISPLAY	DATE : ON
DATE : MM/DD/YY	DAY : OFF
TIME : 24HOUR	TIME : ON
DATE, TIME PRESET	
PJ ADDRESS DISPLAY	OFF
NEW SIGNAL MESSAGE	ON

- 5 Use the CURSOR or button to select either “COLOR” or “GREEN” and press ENTER.

Items to select

- COLOR The on-screen characters will be displayed in color.
- GREEN The on-screen characters will be displayed only in green.

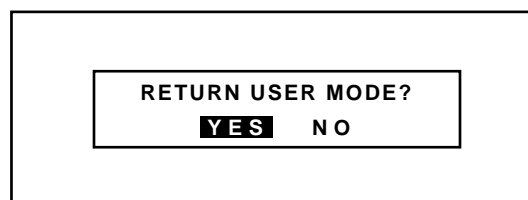
NOTE: It is recommended, if the on-screen message interferes with the display image in the “COLOR” mode, that you select “GREEN”.



- 6 To end this mode, press the END button.
- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “ADJUST” menu → Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.











SETTING

Date, Time Display Setting

The current year, month, date and time are displayed on the top of the screen.

Proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.
- 3 Use the CURSOR  or  button to highlight the “2/MENU MODE” line. Press ENTER to display the “MENU MODE” menu. You can also select the “MENU MODE” menu directly by pressing the INPUT “2” button.
- 4 Use the CURSOR  or  button to highlight the “DATE, TIME, DISPLAY” item. Press ENTER to display the “DATE, TIME DISPLAY” menu.
- 5 Use the CURSOR  or  button to select any one of the three items: DATE, DAY, and TIME. Then press ENTER.

```
- ADJUST -  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF.ADJUST
```

```
- OPTION -  
1 / SETTING MODE  
2 / MENU MODE  
3 / SEQUENCER  
4 / PJ ADDRESS  
5 / VERSION  
6 / HOUR METER  
7 / DEFAULT DATA
```

OPTION	- MENU MODE -
MESSAGE MODE	AUTO 10 SEC
MESSAGE COLOR	COLOR
DATE, TIME DISPLAY	DATE : ON DAY : OFF TIME : ON
DATE, TIME PRESET	
PJ ADDRESS DISPLAY	OFF
NEW SIGNAL MESSAGE	ON

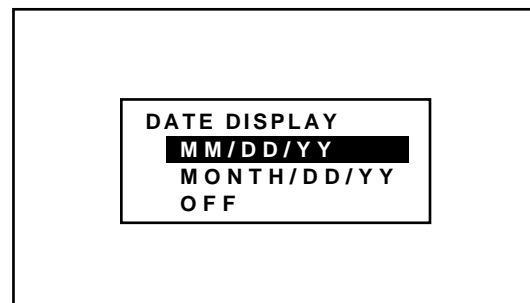
```
DATE, TIME DISPLAY  
DATE ON  
DAY OFF  
TIME ON
```

■ When selecting “DATE”

Use the CURSOR or button to select any one of the three formats: MM/DD/YY, MONTH/ DD/YY, or OFF from the “DATE DISPLAY” menu and press ENTER.

Items to select

- MM/DD/YY Is the date in month/day-of-month/year format.
- MONTH/DD/YY Is the date in month (not in Arabic numerals)/day-of-month/year format.
- OFF Does not display the date.

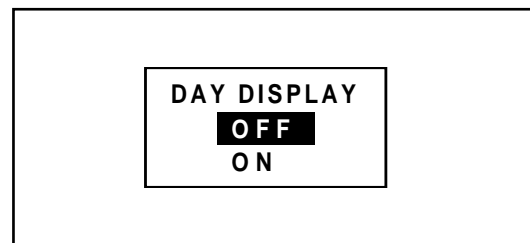


■ When selecting “DAY”

Use the CURSOR or button to select either “ON” or “OFF” from the “DAY DISPLAY” menu and press ENTER.

Items to select

- OFF Does not display the day of the week
- ON Displays the day of the week

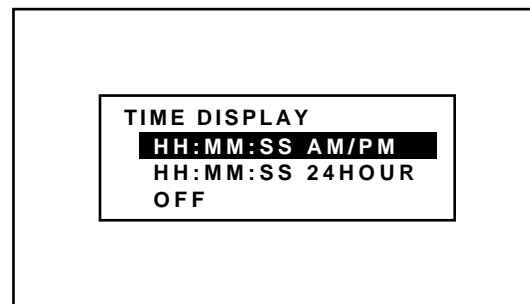


■ When selecting “TIME”

Use the CURSOR or button to select any one of the three items: HH:MM:SS AM/PM, HH:MM:SS 24 HOUR, or OFF from the “TIME DISPLAY” menu and press ENTER.

Items to select

- HH:MM:SS AM/PM Is the time in hours/minutes/seconds/am/pm. format
- HH:MM:SS 24 HOUR Is the time in hours/minutes/seconds/24-hour format
- OFF Does not display the time.



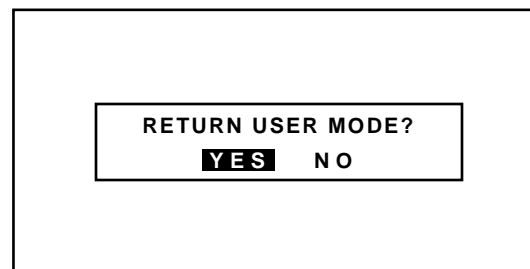
NOTE: You can select the time input format for timer, date, preset with this feature. When OFF is selected, use the AM/PM format.

6 To end this mode, press END.

- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “ADJUST” menu → Source screen
- If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.









SETTING

Entering Date and Time

You can enter the year, date and time to display them on the screen.

Proceed as follows:

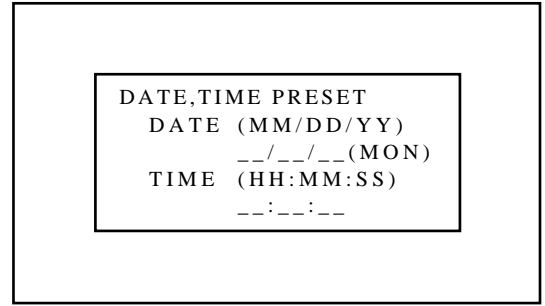
- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.
- 3 Use the CURSOR  or  button to highlight the “2/MENU MODE” line. Press ENTER to display the “MENU MODE” menu. You can also select the “MENU MODE” menu directly by pressing the INPUT “2” button.
- 4 Use the CURSOR  or  button to highlight the “DATE, TIME PRESET” item. Press ENTER to display the “DATE, TIME PRESET” menu.

```
- ADJUST -  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF. ADJUST
```

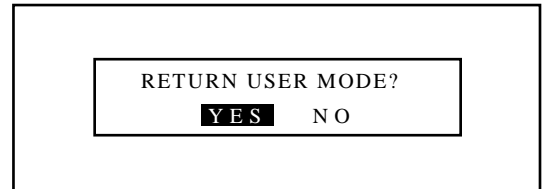
```
- OPTION -  
1 / SETTING MODE  
2 / MENU MODE  
3 / SEQUENCER  
4 / PJ ADDRESS  
5 / VERSION  
6 / HOUR METER  
7 / DEFAULT DATA
```

OPTION	- MENU MODE -
MESSAGE MODE	AUTO 10 SEC
MESSAGE COLOR	COLOR
DATE, TIME DISPLAY	DATE : ON DAY : OFF TIME : 24HOUR
DATE, TIME PRESET	
PJ ADDRESS DISPLAY NEW SIGNAL MESSAGE	OFF ON

- 5 Use INPUT buttons to enter the year, month, day, hour, minute, and second and press ENTER.
- Pressing the END button will turn off the “DATE, TIME PRESET” screen and the screen will return to the “MENU MODE” menu.
 - If you made an error in entering data, press the END button to return to the “MENU MODE” menu, then start again.
 - The time input format varies depending on the setting previously explained.



- 6 To end this mode, press END.
- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu → “ADJUST” menu → Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.



Notes

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

NOTE: The projector has built-in clock. The clock will keep working for about three days after the main power is turned off. If the main power is not supplied to the projector for three days or more, the built-in clock may reset. If the built-in clock resets, set the date and time again. The built-in clock will not reset while in the standby condition.

SETTING

PJ Address Display Setting

This feature allows you to view the PJ address on the screen.

To set the PJ address display, proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode. See page 61 for the explanation of PASSCODE.

- 2 Use the CURSOR or button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.

- 3 Use the CURSOR or button to highlight the “2/MENU MODE” line. Press ENTER to display the “MENU MODE” menu. You can also select the “MENU MODE” menu directly by pressing the INPUT “2” button.

- 4 Use the CURSOR or button to highlight the “NEW SIGNAL MESSAGE” item. Press ENTER to display the “PJ ADDRESS DISPLAY” menu.

- 5 Use the CURSOR or button to select either “OFF” or “ON”, and press ENTER.

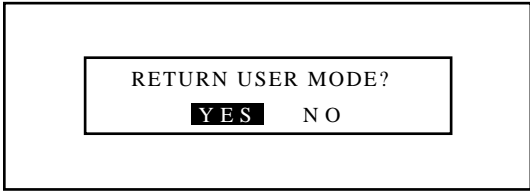
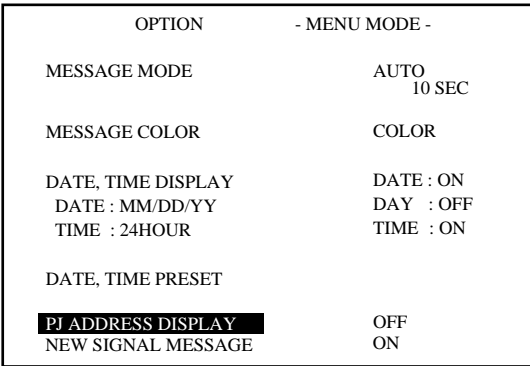
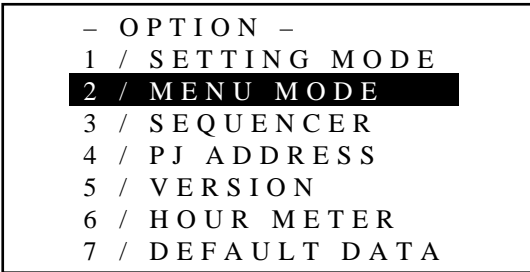
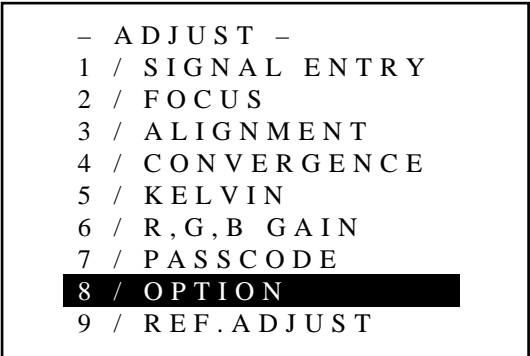
Items to select

- OFF Does not display PJ address
- ON Displays PJ address

- 6 To end this mode, press END.
 - Whenever the END button is pressed, the menu will sequence in this order.
“OPTION” menu→”ADJUST” menu→Source screen.
 - If the “RETURN USER MODE?” menu appears, use the CURSOR or button to select either “YES” or “NO” and then press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode again, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode again, you will not need to re-enter your passcode.



"NEW SIGNAL" Message Display Setting

This feature allows you to view the "NEW SIGNAL" message when an unregistered signal is projected.

To set the PJ address display, proceed as follows:

- 1 Press the ADJUST button to display the "ADJUST" menu.
 - The projector may ask you to enter your passcode. See page 61 for the explanation of PASSCODE.

- 2 Use the CURSOR or button to highlight the "8/OPTION" line. Press ENTER to display the "OPTION" menu. You can also select the "OPTION" menu directly by pressing the INPUT "8" button.

- 3 Use the CURSOR or button to highlight the "2/MENU MODE" line. Press ENTER to display the "MENU MODE" menu. You can also select the "MENU MODE" menu directly by pressing the INPUT "2" button.

- 4 Use the CURSOR or button to highlight the "NEW SIGNAL MESSAGE" item. Press ENTER to display the "NEW SIGNAL MESSAGE" menu.

- 5 Use the CURSOR or button to select either "OFF" or "ON", and press ENTER.

Items to select

- ON Displays the "NEW SIGNAL" message
- OFF Does not display the "NEW SIGNAL" message

- 6 To end this mode, press END.
 - Whenever the END button is pressed, the menu will sequence in this order.
"OPTION" menu → "ADJUST" menu → Source screen.
 - If the "RETURN USER MODE?" menu appears, use the CURSOR or button to select either "YES" or "NO" and then press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode again, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode again, you will not need to re-enter your passcode.

```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R, G, B GAIN
7 / PASSCODE
8 / OPTION
9 / REF. ADJUST
    
```

```

- OPTION -
1 / SETTING MODE
2 / MENU MODE
3 / SEQUENCER
4 / PJ ADDRESS
5 / VERSION
6 / HOUR METER
7 / DEFAULT DATA
    
```

OPTION	- MENU MODE -
MESSAGE MODE	AUTO 10 SEC
MESSAGE COLOR	COLOR
DATE, TIME DISPLAY	DATE : ON DAY : OFF
DATE : MM/DD/YY	TIME : ON
TIME : 24HOUR	
DATE, TIME PRESET	
PJ ADDRESS DISPLAY	OFF
NEW SIGNAL MESSAGE	ON

NEW SIGNAL MESSAGE

ON

OFF

RETURN USER MODE?

YES NO

SETTING

Auto Sequence Setting

You can program the projector to change sources.

Up to 20 program lines can be accepted.

To do this proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode. See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR \leftarrow or \rightarrow button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.

```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R,G,B GAIN
7 / PASSCODE
8 / OPTION
9 / REF.ADJUST
  
```

- 3 Use the CURSOR \leftarrow or \rightarrow button to highlight the “3/SEQUENCER” line. Press ENTER to display the “SEQUENCER” menu. You can also select the “SEQUENCER” menu directly by pressing the INPUT “3” button.
 - The “SEQUENCER” screen will be displayed.

```

- OPTION -
1 / SETTING MODE
2 / MENU MODE
3 / SEQUENCER
4 / PJ ADDRESS
5 / VERSION
6 / HOUR METER
7 / DEFAULT DATA
  
```

- 4 Use the CURSOR \leftarrow or \rightarrow button to select the “EDIT” and press ENTER.
 - This will bring you to the “EDIT” mode, and a program line is highlighted.

Notes

- START Executestheprogram.
- EDIT Correctsorcreatetheprogramdata.

OPTION		- SEQUENCER -		
P01				
NO	INPUT		TIME	SMTWTF5
01	M-10	S-01	12:00:00	X00000X
02	M-02	S-02	14:00:00	X00000X
03	M-01	S-02		X00000X
04	WAIT		00:10:00	
05	M-01	S-01		X00000X
06	WAIT		00:20:00	
07	LOOP	03	COUNT 05	
08	M-02	S-02	15:50:00	X00000X
09	P-OFF		18:00:00	X00000X
10	P-ON		09:00:00	X00000X
			START	EDIT

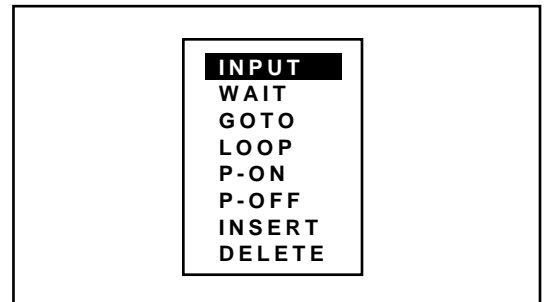
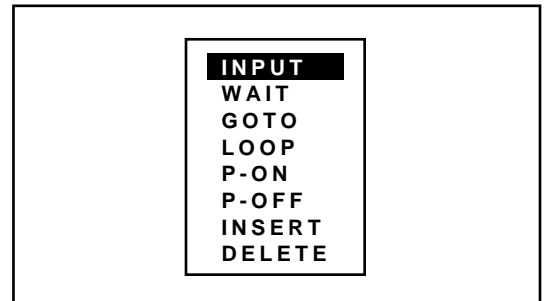
- 5 Use the CURSOR \leftarrow or \rightarrow button to highlight the line to be input and press ENTER.
- The Program menu is displayed.

OPTION - SEQUENCER -				
P01				
NO	INPUT		TIME	SMTWTFSS
01	M-10	S-01	12:00:00	X00000X
02	M-02	S-02	14:00:00	X00000X
03	M-01	S-02		X00000X
04	WAIT		00:10:00	
05	M-01	S-01		X00000X
06	WAIT		00:20:00	
07	LOOP	03	COUNT 05	
08	M-02	S-02	15:50:00	X00000X
09	P-OFF		18:00:00	X00000X
10	P-ON		09:00:00	X00000X
			START	EDIT

- 6 Use the CURSOR \leftarrow or \rightarrow button to highlight the desired item and press ENTER.

INPUT

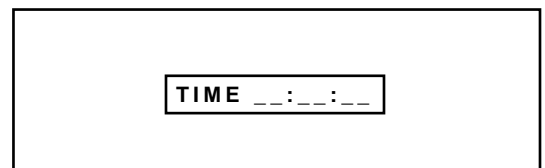
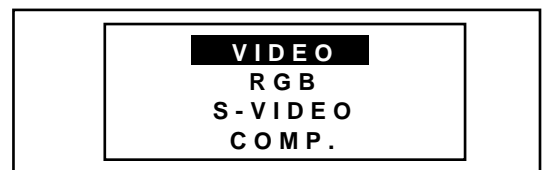
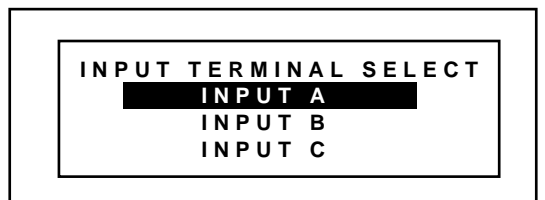
- INPUT Programstoswitchsources.
- WAIT Retainsthecurrentconditionforaspecifiedtime.
- GOTO Jumpstotheselectedline
- LOOP ExecutestheLOOPoperation.
- PCN Programstoturnonthe poweratthedesiredtime.
- POF Programstoturnoffthepoweratthedesiredtime.
- INSERT Insertsthe selectedlineandmovesdownthe followinglines.
- DELETE ... Deletesthe selectedlineandmovesupthe followinglines.



Selecting "INPUT"

When using in stand alone application:

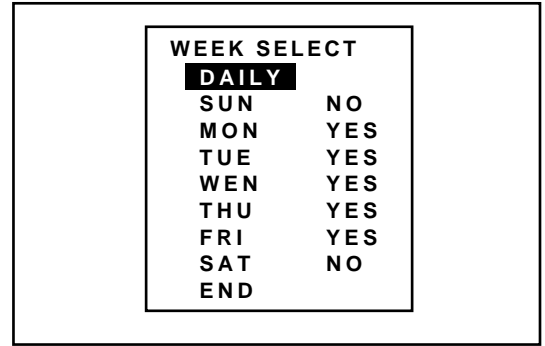
- 1) Use the CURSOR \leftarrow or \rightarrow button to select "INPUT" and press ENTER.
 - The "INPUT TERMINAL SELECT" terminal menu is displayed.
- 2) Use the CURSOR \leftarrow or \rightarrow button to select an input slot and press ENTER.
 - The "TERMINAL SELECT" menu is displayed.
- 3) Use the CURSOR \leftarrow or \rightarrow button to select either "VIDEO", "RGB", "S-VIDEO" or "COMPO." and press ENTER.
 - The "TIME" input screen is displayed.
- 4) Enter the starting time using INPUT buttons and press ENTER.
 - Type the time in hours (24 hours), minutes, and seconds.
 - If you have made an error in the input of numbers, press the END button to return to the "VIDEO/RGB/S-VIDEO/COMPO." terminal menu then start from step 3).
 - The "WEEK SELECT" screen will appear.



SETTING

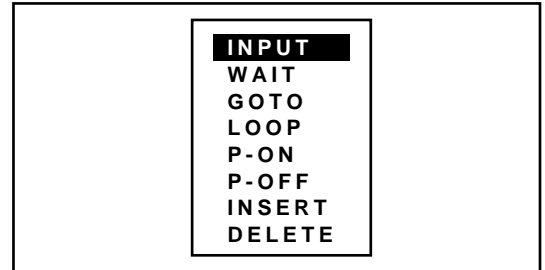
- 5) Use the CURSOR \leftarrow or \rightarrow button to select any day of the week, then select either “YES” or “NO” with ENTER.
 - When “DAILY” selected, the entire week is changed to “YES”.
 - When “END” is selected, the current setting is saved.
 - To return to Step 4), press the END button. In that case, the changed setting is invalid.

NOTE: Typing 99:99:99 in the time input menu will execute the program immediately. (See the example in the “WAIT” section on page 108)

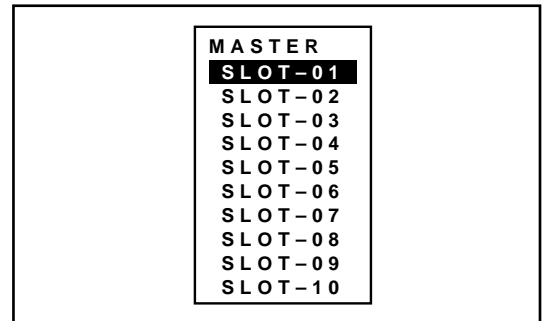


When using with a single ISS-6020/ISS-6020G Switcher:

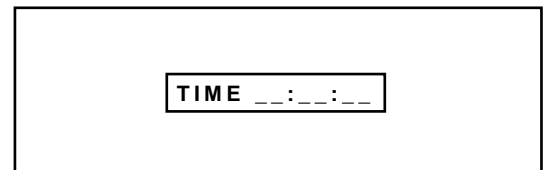
- 1) Use the CURSOR \leftarrow or \rightarrow button to select “INPUT” and press ENTER.
 - The “MASTER” menu will be displayed.



- 2) Use the CURSOR \leftarrow or \rightarrow button to select the input slot number of the Switcher and press ENTER.
 - The “TIME” input screen will be displayed.

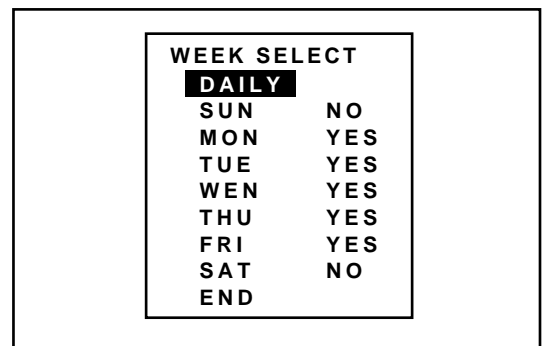


- 3) Enter the starting time using INPUT buttons and press ENTER.
 - Type the time in hours (24 hours), minutes, and seconds.
 - If you have made an error in the input of numbers, press the END button to return to the “MASTER” menu then start from step 2).
 - The “WEEK SELECT” screen will appear.



- 4) Use the CURSOR \leftarrow or \rightarrow button to select any day of the week, then select either “YES” or “NO” with ENTER.
 - When “DAILY” selected, the entire week is changed to “YES”.
 - When “END” is selected, the current setting is saved.
 - To return to Step 3), press the END button. In that case, the changed setting is invalid.

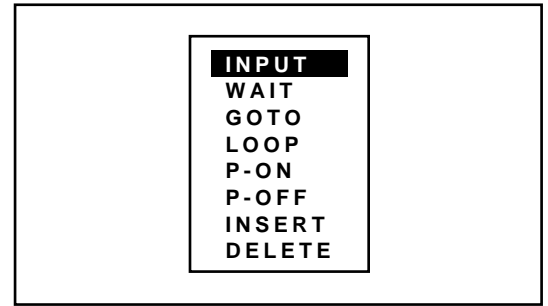
NOTE: Typing 99:99:99 in the time input menu will execute the program immediately. (See the example in the “WAIT” section on page 108)



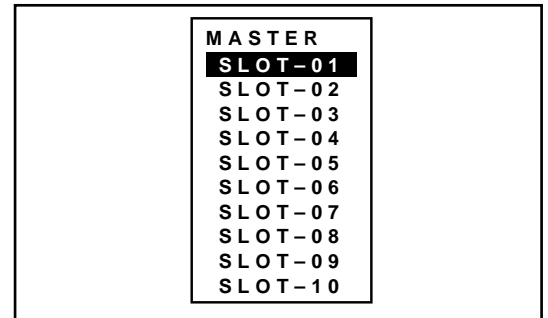
When using with two or more ISS-6020/ISS-6020G Switchers:

1) Use the CURSOR \leftarrow or \rightarrow button to select “INPUT” and press ENTER.

- The “MASTER” and “SLAVE” menu will be displayed.

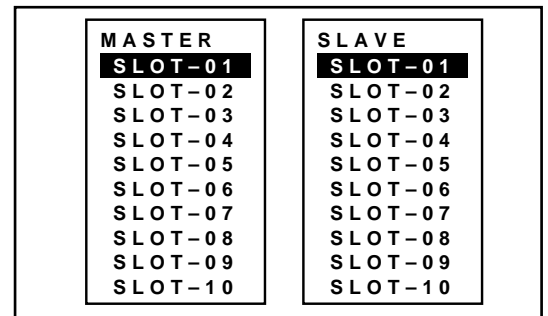


2) Use the CURSOR \leftarrow or \rightarrow button to select the input slot number of the master Switcher from the “MASTER” menu and press ENTER.



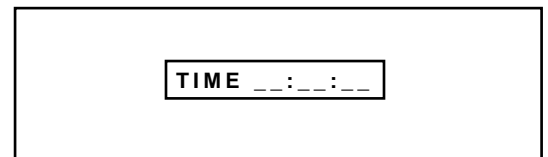
3) Use the CURSOR \leftarrow or \rightarrow button to select the input slot number of the slave Switcher from the “SLAVE” menu and press ENTER.

- The “TIME” input screen will be displayed.



4) Enter the starting time using INPUT buttons and press ENTER.

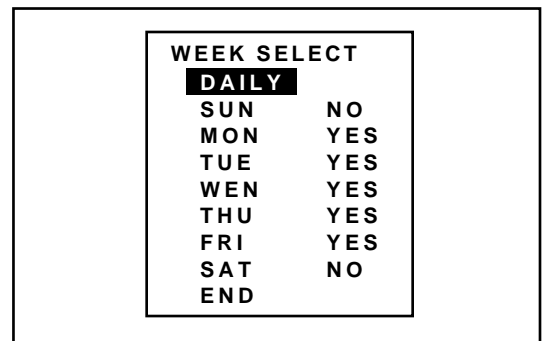
- Type the time in hours (24 hours), minutes, and seconds.
- If you have made an error in the input of numbers, press the END button to return to the “SLAVE” menu then start from step 2).



- The “WEEK SELECT” screen will appear.

5) Use the CURSOR \leftarrow or \rightarrow button to select any day of the week, then select either “YES” or “NO” with ENTER.

- When “DAILY” selected, the entire week is changed to “YES”.
- When “END” is selected, the current setting is saved.
- To return to Step 4), press the END button. In that case, the changed setting is invalid.



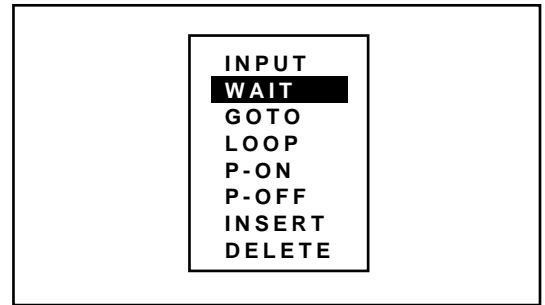
NOTE: Typing 99:99:99 in the time input menu will execute the program immediately. (See the example in the following “WAIT” section.)

SETTING

■ Selecting “WAIT”

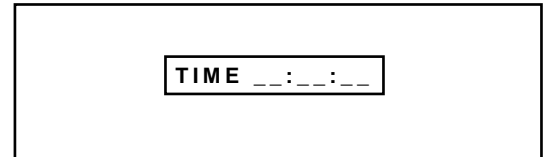
1) Use the CURSOR \leftarrow or \rightarrow button to select “WAIT” and press ENTER.

- The “TIME” input screen will be displayed.



2) Type the waiting time using the INPUT buttons and press ENTER.

- Type the time in hours, minutes, and seconds.
- If you have made an error in the input of numbers, press the END button to return to the Program menu on step 1), then start again.



NOTE: The waiting time cannot exceed 23 hours, 59 minutes, and 59 seconds.

Example:

When the following program is set, the display as shown on the right will appear:

First line: Select VIDEO, then type “99:99:99” in the TIME input screen, then select “DAILY” in the WEEK SELECT menu for “INPUT”.

Second line: Select type “00:20:00” in the TIME input screen for “WAIT”.

Third line: Type “99:99:99”, then select “DAILY” for “P-OFF”.

When this program starts, the input signal will change to VIDEO immediately. Then, the current condition will be retained for 20 minutes.

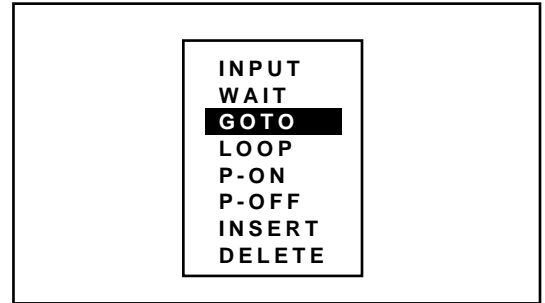
Finally, the power will be turned off.

The “WAIT” function is used to execute the command immediately.

OPTION - SEQUENCER -			
P01			
NO	INPUT	TIME	SMTWTFS
01	VIDEO		0000000
02	WAIT	00:20:00	
03	P-OFF		0000000
04			
05			
06			
07			
08			
09			
10			
		START	EDIT

■ Selecting “GOTO”

- 1) Use the CURSOR \leftarrow or \rightarrow button to select “GOTO” and press ENTER.
 - The “GOTO” input screen will be displayed.

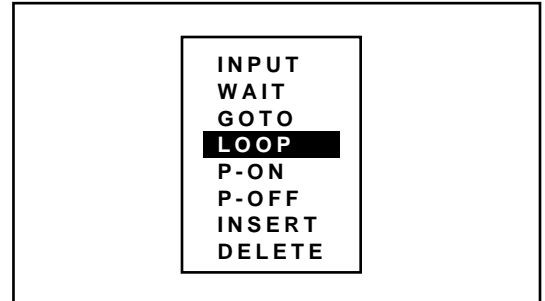


- 2) Enter the scan number line to which you want to jump to using the INPUT button and press ENTER.
 - If you have made an error, press END to return to the Program menu, then start again.
 - The “SEQUENCER” screen will be restored to its last setting.

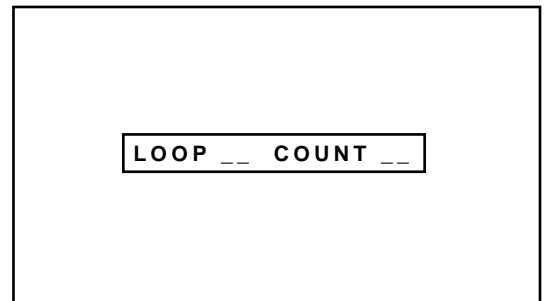


■ Selecting “LOOP”

- 1) Use the CURSOR \leftarrow or \rightarrow button to select “LOOP” and press ENTER.
 - The “LOOP/COUNT” input screen will be displayed.



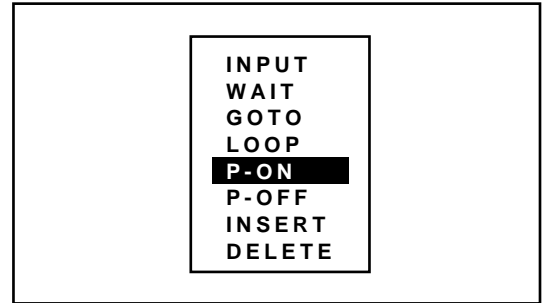
- 2) Enter the number of the destination line (LOOP) and the number of the loop times (COUNT) in this order using the INPUT button and press ENTER.
 - If you have made an error, press END to return to the Program menu, then start again.
 - The “SEQUENCER” screen will be restored to its last setting.



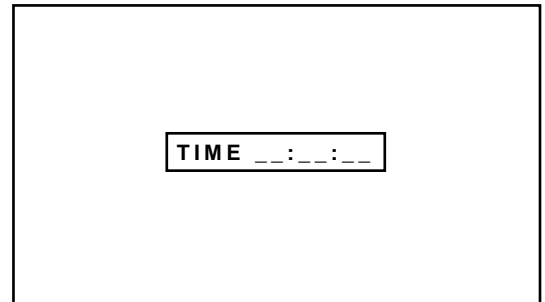
SETTING

■ Selecting “P-ON”

- 1) Use the CURSOR \leftarrow or \rightarrow button to select “P-ON” and press ENTER.
 - The POWER ON input screen will be displayed.



- 2) Enter the POWER ON TIME you wish to turn on the projector using INPUT buttons and press ENTER.
 - Type the time in hours (24 hours), minutes and seconds.
 - If you made an error, press END to return to the Program menu, then start again.

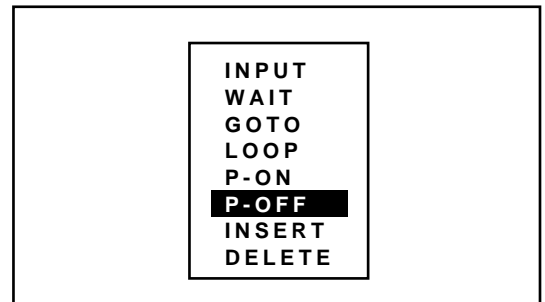


NOTE1: Typing 99:99:99 in the time input menu will execute the program immediately.

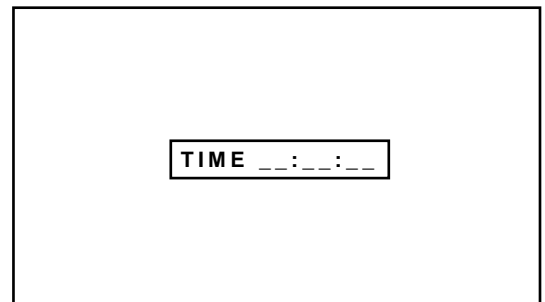
NOTE2: The P-ON commands are available only when the projector is off (in the standby condition). The P-ON command is ignored if set in the first line. In this case, the program will start its execution from the second line.

■ Selecting “P-OFF”

- 1) Use the CURSOR \leftarrow or \rightarrow button to select “P-OFF” and press ENTER.
 - The POWER OFF input screen will be displayed.



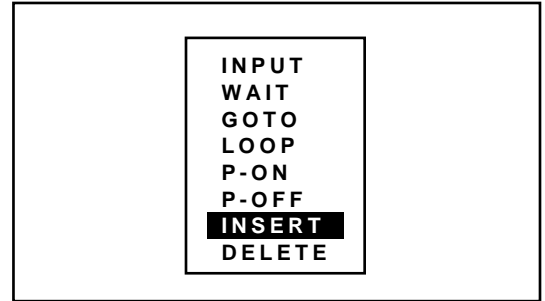
- 2) Enter the POWER OFF TIME you wish to turn on the projector using INPUT buttons and press ENTER.
 - Type the time in hours (24 hours), minutes and seconds.
 - If you made an error, press END to return to the Program menu, then start again.



NOTE: Typing 99:99:99 in the time input menu will execute the program immediately. (See the example in the “WAIT” section on page 108)

■ Selecting “INSERT”

- 1) Use the CURSOR \leftarrow or \rightarrow button to select “INSERT” and press ENTER.

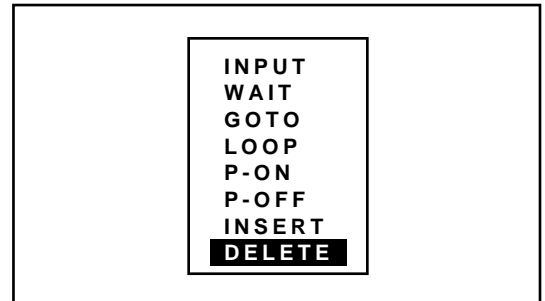


- 2) Use the CURSOR \leftarrow or \rightarrow button to select where you wish to insert a vacant line and press ENTER.
 - The highlighted line will be switched to a vacant line and the original line(s) will be moved down.

OPTION - SEQUENCER -				
P01				
NO	INPUT		TIME	SMTWTFS
01	M-10	S-01	12:00:00	X00000X
02	M-02	S-02	14:00:00	X00000X
03	M-01	S-02		X00000X
04	WAIT		00:10:00	
05	M-01	S-01		X00000X
06	WAIT		00:20:00	
07	LOOP	03	COUNT 05	
08	M-02	S-02	15:50:00	X00000X
09	P-OFF		18:00:00	X00000X
10	P-ON		09:00:00	X00000X
			START	EDIT

■ Selecting “DELETE”

- 1) Use the CURSOR \leftarrow or \rightarrow button to select “DELETE” and press ENTER.



- 2) Use the CURSOR \leftarrow or \rightarrow button to select the line you wish to delete and press ENTER.
 - The selected line will be deleted and the following line(s) will be moved up.

OPTION - SEQUENCER -				
P01				
NO	INPUT		TIME	SMTWTFS
01	M-10	S-01	12:00:00	X00000X
02	M-02	S-02	14:00:00	X00000X
03	M-01	S-02		X00000X
04	WAIT		00:10:00	
05	M-01	S-01		X00000X
06	WAIT		00:20:00	
07	LOOP	03	COUNT 05	
08	M-02	S-02	15:50:00	X00000X
09	P-OFF		18:00:00	X00000X
10	P-ON		09:00:00	X00000X
			START	EDIT



SETTING

- 7 Pressing the END button will exit the “EDIT” mode.
 Select “START” and press ENTER to execute the program.
- The “*EXECUTING NO. XX*” will appear during program execution. When the program is finished, the “*SEQUENCER END*” message will appear for about five seconds.

NOTE: To cancel the program, hold down the CTL button then press END. The “*SEQUENCER MANUALEND*” will appear for about five seconds.

OPTION - SEQUENCER -				
P01				
NO	INPUT		TIME	SMTWTFS
01	M-10	S-01	12:00:00	X00000X
02	M-02	S-02	14:00:00	X00000X
03	M-01	S-02		X00000X
04	WAIT		00:10:00	
05	M-01	S-01		X00000X
06	WAIT		00:20:00	
07	LOOP	03	COUNT 05	
08	M-02	S-02	15:50:00	X00000X
09	P-OFF		18:00:00	X00000X
10	P-ON		09:00:00	X00000X

START EDIT

- 8 To end this mode, press the END button.
- Whenever the END button is pressed, the menus will sequence in this order:
 “SEQUENCER” screen (No highlighted line) → “ADJUST” menu → Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR  or  button to select either “YES” or “NO” and then press ENTER. This will exit the ADJUST mode.

RETURN USER MODE?

YES NO

Notes

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

Address Setting

Each projector needs its own unique address in the case of a serial connection of projectors. Up to 64 addresses can be set.

Proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.

- 2 Use the CURSOR \leftarrow or \rightarrow button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.

```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R,G,B GAIN
7 / PASSCODE
8 / OPTION
9 / REF.ADJUST

```

- 3 Use the CURSOR \leftarrow or \rightarrow button to highlight the “4/PJ ADDRESS” line. Press ENTER to display the “ADDRESS” screen. You can also select the “ADDRESS” menu directly by pressing the INPUT “4” button or the ADDRESS button on the full function remote control.

```

- OPTION -
1 / SETTING MODE
2 / MENU MODE
3 / SEQUENCER
4 / PJ ADDRESS
5 / VERSION
6 / HOUR METER
7 / DEFAULT DATA

```

- 4 Enter the address number using the INPUT button and press ENTER.
 - If you have made a mistake, press END to return to the “OPTION” menu, then start again.

NOTE: Enter the address number “01” when only one projector is used.

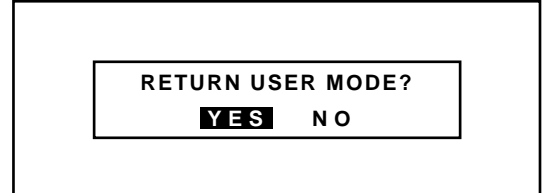
```

OPTION
-PJ ADDRESS-
01 (01-64)

```


SETTING

- 5 To complete, press the END button.
- Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu→“ADJUST” menu→Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR◀ or ▶ button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.



Notes

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

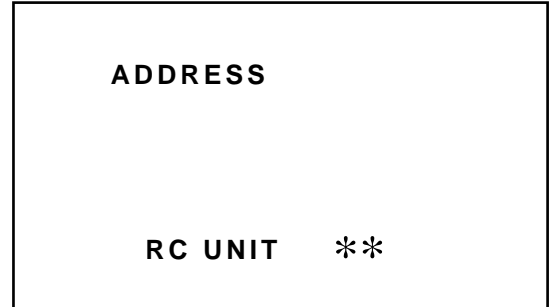
■ Addressing the Remote Control Unit

When changing the projector address, ensure that the projector address respond to the remote control address, otherwise you cannot operate the projector using the remote control.

To specify the remote control address, proceed as follows:

- 1) Press and hold the CTL button then press the ADDRESS button to access the RC UNIT address mode.
 - The current remote control address is displayed on the remote control address screen. (When the current remote control address is configured at "00", the remote control address screen will not be displayed.
 - This screen will disappear in 30 seconds.

NOTE: When the remote control is used with the Switcher in wired application, a window shown on the right will not be displayed. However, the remote control address can be changed.



When the remote control address is configured at "00", the above screen will not be displayed.

- 2) Use INPUT buttons to enter a new two-digit number and press ENTER.
 - The new remote control address is displayed on the screen. When the new remote control address is configured at "00", the display will not be changed. However, its address has been changed by pressing ENTER.
 - The number you can specify ranges from 00 to 64.

To stop the address changing, press END.
See the projector address number on the screen.

NOTE:

- The buttons other than the above mentioned button and the OFF button are not available during specifying the remote control address.
- If no key input is made within 30 seconds, the remote control automatically exits the RC UNIT address mode.

Address common to all the projectors

When specifying the remote control address as "00", you can operate the projector using the remote control, regardless of the projector addresses.

If the remote control loses power, the remote control address becomes "00". In this case the on-screen shown on the right above is not displayed on the screen.

Projector Version Number

This function lets you know the version for hardware and software used in the projector.

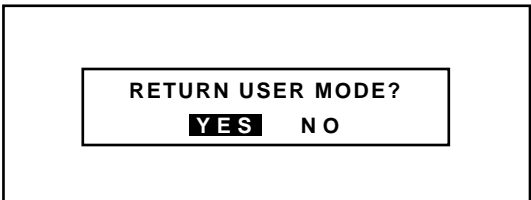
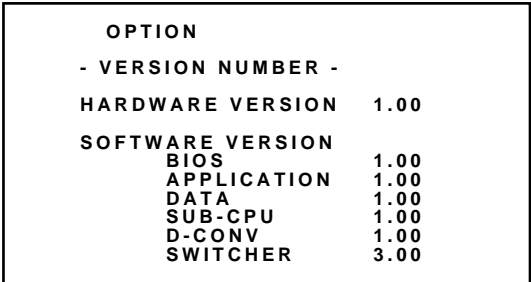
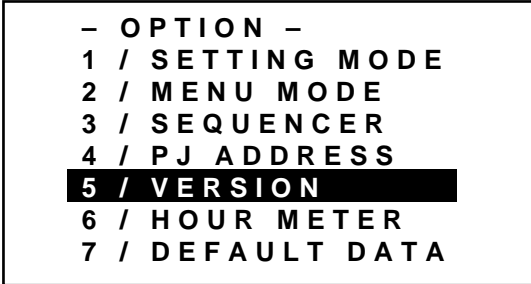
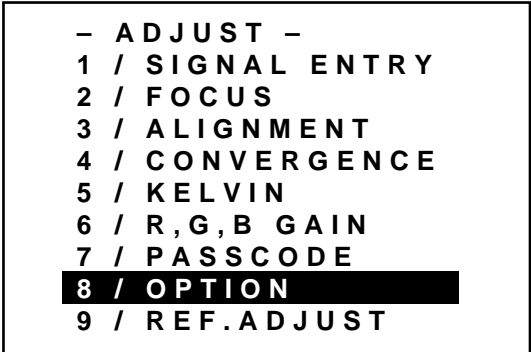
To view the Version number, proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.

- 2 Use the CURSOR \leftarrow or \rightarrow button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.

- 3 Use the CURSOR \leftarrow or \rightarrow button to highlight the “5/VERSION” line. Press ENTER to display the “VERSION NUMBER” menu. You can also select the “VERSION NUMBER” menu directly by pressing the INPUT “5” button.
 - You will know what version number your applications software and the projector are.
 - The “SWITCHER” item is displayed only when the connect condition is set to the SW 1 or 2 LEVEL.

- 4 To exit this menu, press END.
 - Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu→“ADJUST” menu→Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR \leftarrow or \rightarrow button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.

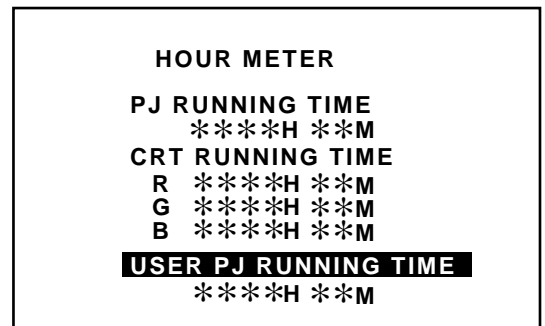
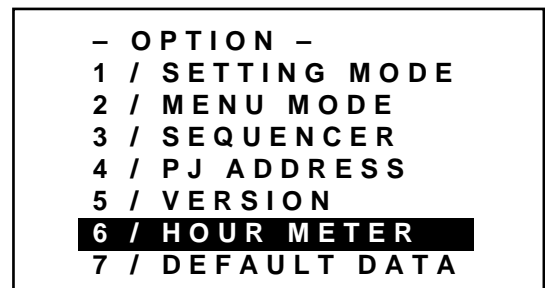
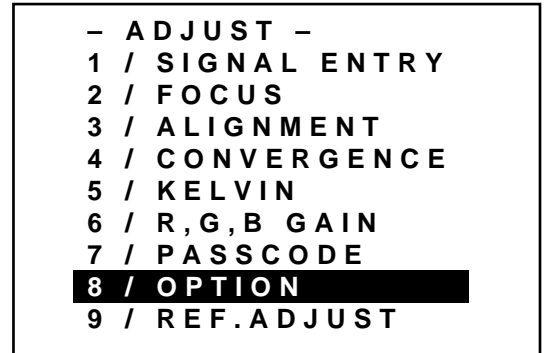


- Notes**
- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
 - NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

Checking and Setting the Running Time

The projector will give you the amount of operating time.
Proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR \leftarrow or \rightarrow button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “HOUR METER” screen directly by pressing the INPUT “8” button.
- 3 Use the CURSOR \leftarrow or \rightarrow button to highlight the “6/HOUR METER” line. Press ENTER to display the “HOUR METER” screen. You can also select the “HOUR METER” screen directly by pressing the INPUT “6” button.



Notes

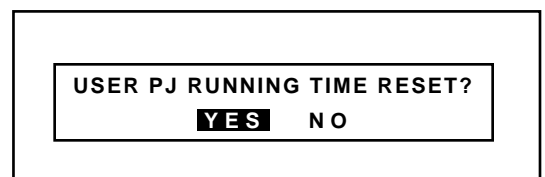
- PJRUNNINGTIME
The amount of operating time of the projector.
- CRTRUNNINGTIME
The amount of operating time of CRT.
- USERPJRUNNINGTIME
The amount of operating time of the projector. User resettable.

How to reset the user projector or CRT running time:

- 1) Use the CURSOR buttons to select the item and then press ENTER.
 - The “USER PJ RUNNING TIME RESET?” or “USER CRT RUNNING TIME RESET?” menu is displayed.
- 2) Use the CURSOR \leftarrow or \rightarrow button to select either “YES” or “NO” and then press ENTER.

Notes

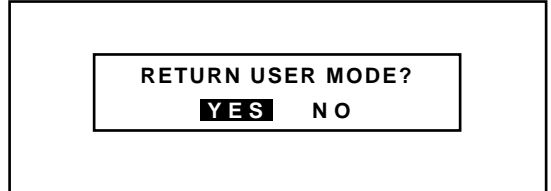
- YES The time will be reset
- NO The time will not be reset



- The display will be returned to the “HOUR METER” screen.

SETTING

- 4 To exit the HOUR METER display, press END.
 - Whenever the END button is pressed, the menus will sequence in this order:
“ADJUST” menu→Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR \leftarrow or \rightarrow button to select either “YES” or “NO” and then press ENTER. This will exit the ADJUST mode.



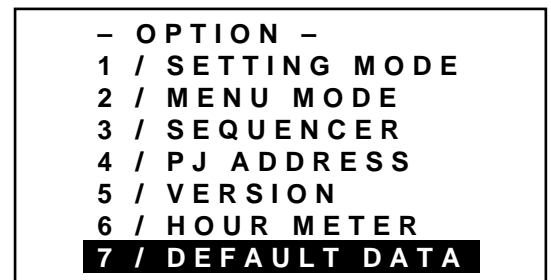
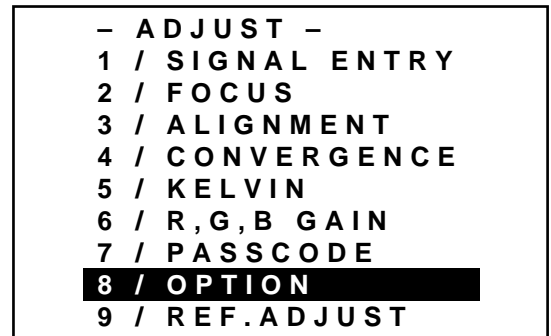
Notes

- YES When you try to enter the ADJUST mode again, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode again, you will not need to re-enter your passcode.

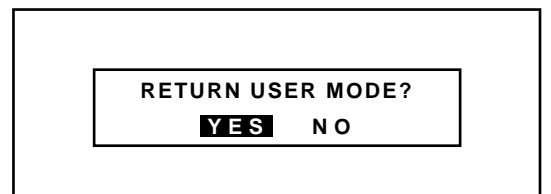
Viewing Default Data

The feature allows you to view the default data stored in Default Area.
To view the data, proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR \leftarrow or \rightarrow button to highlight the “8/OPTION” line. Press ENTER to display the “OPTION” menu. You can also select the “OPTION” menu directly by pressing the INPUT “8” button.
- 3 Use the CURSOR \leftarrow or \rightarrow button to highlight the “7/DEFAULT DATA” line. Press ENTER to display the “DEFAULT DATA” screen. You can also select the “DEFAULT DATA” screen directly by pressing the INPUT “7” button.
- 4 To complete, press the END button.
 - Whenever the END button is pressed, the menus will sequence in this order:
“OPTION” menu→“ADJUST” menu→Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR \leftarrow or \rightarrow button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.



OPTION INPUT	-DEFAULT DATA- REGISTERED
H-FREQ. (KHz)	DEFAULT DATA
1 15 to 25	15kHz (60Hz)
2 20 to 40	NONE
3 35 to 50	48KHz (60Hz)
4 45 to 75	NONE
5 70 to 110	NONE
6 105 to 135	NONE



Notes





- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

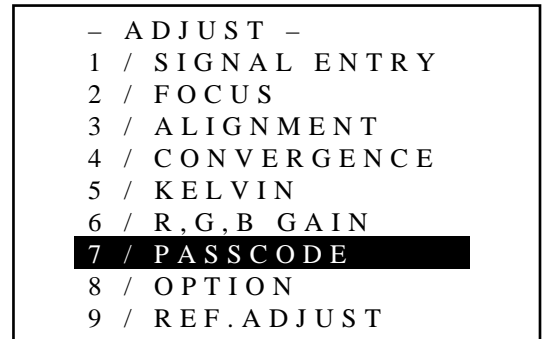
PASSCODE

Registering Passcode

When the projector is shipped from the factory, no passcode is registered. If you want to use the passcode option, you must register a passcode.

To register a new passcode, proceed as follows:

- 1 Press the ADJUST button.
 - The “ADJUST” menu will be displayed.
- 2 Use the CURSOR  or  button to highlight the “7/PASSCODE” line. Press ENTER to display the “PASSCODE” menu. You can also select the “PASSCODE” menu directly by pressing the INPUT “7” button.
- 3 Use the CURSOR  or  button to select “ENTRY”. Press ENTER to display the “NEW PASSCODE?” menu. You can also select the “NEW PASSCODE?” menu directly by pressing the INPUT “1” button.



- 4 Enter a four digit passcode using the “1” through “0” buttons.
 - 1) Each time you press the INPUT button, an asterisk will appear under the “NEW PASSCODE?” message.

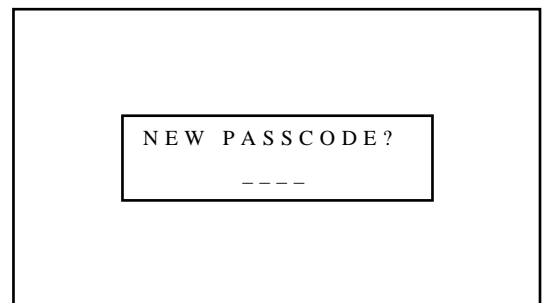
NOTE: “0000” and “9999” cannot be used as a passcode.

- 2) Once you have finished entering your four digit passcode, press ENTER to store the code.

NOTE: If you have made an error, press the NORMAL button to delete the asterisk “*”. Then re-enter the correct passcode. To delete all the entered digits, hold down the CTL button then press the NORMAL button.

- 3) If the passcode has been entered correctly, the “CONFIRM NEW PASSCODE?” menu will be displayed.

NOTE: If the passcode is not entered correctly, the “WARNING PASSCODE!!” message will be displayed. You will be required to enter the passcode correctly.



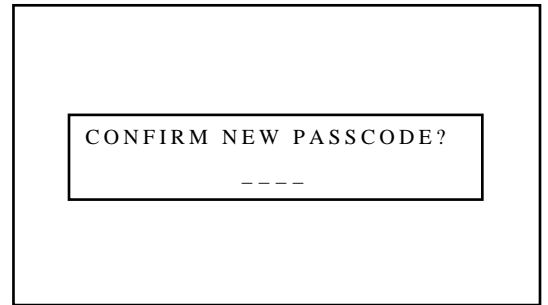
5 Enter the new passcode again.

- 1) Each time you press the INPUT button, an asterisk will appear under the “CONFIRM NEW PASSCODE?” message.
- 2) Once you have finished entering the new four digit passcode, press ENTER.

NOTE: If you have made an error, press the NORMAL button to delete the asterisk “*”. Then re-enter the correct passcode. To delete all the entered digits, hold down the CTL button then press the NORMAL button.

- 3) If the entered passcode is correct, the “CHANGE PASSCODE COMPLETE!!” message will be displayed.

NOTE: If the passcode is not correct, the “WARNING DIFFERENT PASSCODE!!” message will be displayed. You are required to enter the new passcode correctly.

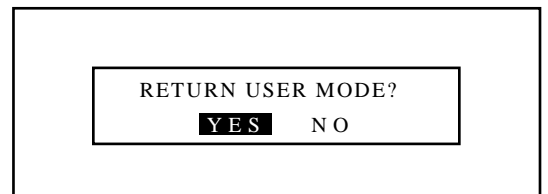


6 To complete, press the END button.

- When the END button is pressed once, the “RETURN USER MODE?” menu will be displayed. Use the CURSOR or button to select either “YES” or “NO” and then press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode again, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode again, you will not need to re-enter your passcode.





PASSCODE



Changing Your Passcode

To change your passcode, proceed as follows:

- 1 Press the ADJUST button.
 - The “PASSCODE?” screen will be displayed.

- 2 Enter the four digit current passcode using the “1” through “0” buttons. Press ENTER.
 - The “ADJUST” menu will be displayed.

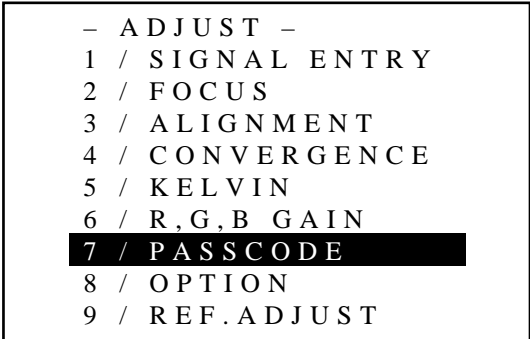
- 3 Use the CURSOR  or  button to highlight the “7/PASSCODE” line. Press ENTER to display the “PASSCODE” menu. You can also select the “PASSCODE” menu directly by pressing the INPUT “7” button.

- 4 Use the CURSOR  or  button to select “1/ENTRY”. Press ENTER to display the “CURRENT PASSCODE?” menu. You can also select the “CURRENT PASSCODE?” menu directly by pressing the INPUT “1” button.

- 5 Enter the four digit passcode (the current passcode) using the “1” through “0” buttons.
 - 1) Each time you press the INPUT button, an asterisk will appear under the “CURRENT PASSCODE?” message.
 - 2) Once you have finished entering the four digit passcode, press ENTER.

NOTE: If you have made an error, press the NORMAL button to delete the asterisk “*”. Then re-enter the correct passcode. To delete all the entered digits, hold down the CTL button then press the NORMAL button.

NOTE: If the passcode is not correct, the “WARNING DIFFERENT PASSCODE!!” message is displayed. You will be required to enter the correct current passcode.



```
- ADJUST -  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF.ADJUST
```



```
- PASSCODE -  
1 / ENTRY  
2 / DISABLE
```



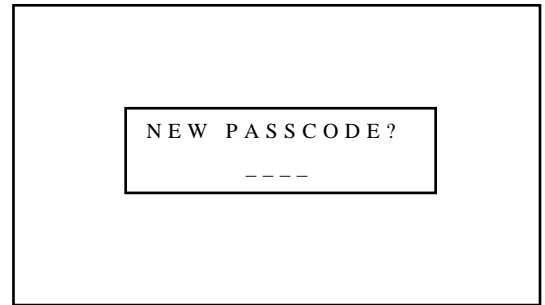
```
CURRENT PASSCODE?  
****
```


- 6 Enter a new passcode using the “1” through “0” buttons.
- 1) Each time you press the INPUT button, an asterisk will appear under the “NEW PASSCODE?” message.
 - 2) Once you have finished entering the four digit new passcode, press ENTER.

NOTE: If you have made an error, press the NORMAL button to delete the asterisk “*”. Then re-enter the correct passcode. To delete all the entered digits, hold down the CTL button then press the NORMAL button.

- 3) If the passcode has been entered correctly, the “CONFIRM NEW PASSCODE?” menu will be displayed.

NOTE: If the passcode is not entered correctly, the “WARNING PASSCODE!!” message will be displayed. You are required to enter the new passcode correctly.

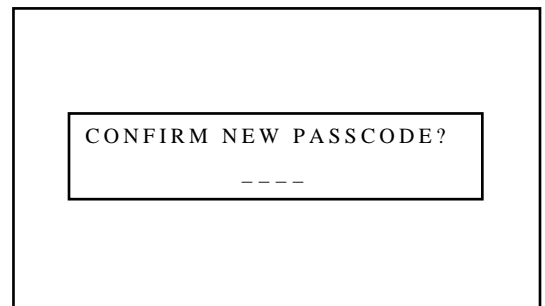


- 7 Enter the new passcode again using the “1” through “0” buttons.
- 1) Each time you press the INPUT button, an asterisk will appear under the “CONFIRM NEW PASSCODE?” message.
 - 2) Once you have finished entering the four digit new passcode, press ENTER.

NOTE: If you have made an error, press the NORMAL button to delete the asterisk “*”. Then re-enter the correct passcode. To delete all the entered digits, hold down the CTL button then press the NORMAL button.

- 3) If the entered passcode is correct, the “CHANGE PASSCODE COMPLETE!!” message is displayed.

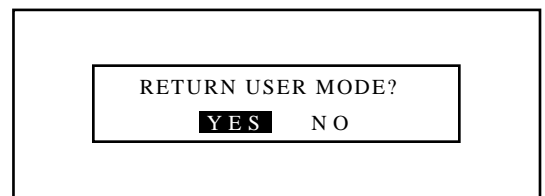
NOTE: If the passcode is not entered correctly, the “WARNING DIFFERENT PASSCODE!!” message is displayed. You will be required to enter the new passcode correctly.



- 8 To complete, press the END button.
- Whenever the END button is pressed, the “RETURN USER MODE?” menu will be displayed. Use the CURSOR or button to select either “YES” or “NO” and press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode again, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode again, you will not need to re-enter your passcode.





PASSCODE



Canceling Your Passcode

To cancel the passcode, proceed as follows:

- 1 Press the ADJUST button and then enter your passcode.
 - The “PASSCODE?” screen will be displayed.

- 2 Enter the four digit current passcode using the “1” through “0” buttons and then press ENTER.
 - The “ADJUST” menu will be displayed.

- 3 Use the CURSOR  or  button to highlight “7/PASSCODE”. Press the ENTER button to display the “PASSCODE” menu. You can also select the “PASSCODE” menu directly by pressing the INPUT “7” button.

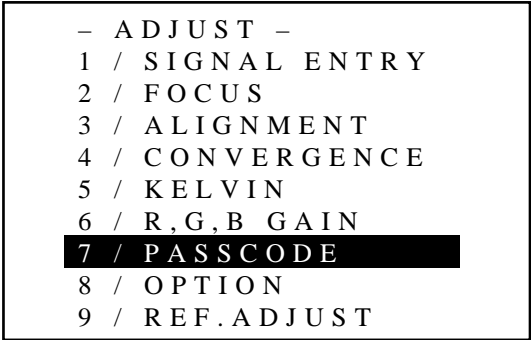
- 4 Use the CURSOR  or  button to select “2/DISABLE”. Press ENTER to display the “CURRENT PASSCODE?” menu. You can also select the “CURRENT PASSCODE?” menu directly by pressing the INPUT “2” button.

- 5 Enter the four digit passcode (the current passcode) using the “1” through “0” buttons.
 - 1) Each time you press the INPUT button, an asterisk will appear under the “CURRENT PASSCODE?” message.
 - 2) Once you have finished entering the four digit passcode, press ENTER.

NOTE: If you have made an error, press the NORMAL button to delete the asterisk “*”. Then re-enter the correct passcode. To delete all the entered digits, hold down the CTL button then press the NORMAL button.

- 3) If the entered passcode is correct, the “PASSCODE DIS-ABLE?” menu will be displayed.

NOTE: If the passcode is not correct, the “WARNING DIFFER-ENT PASSCODE!!” message will be displayed. You will be required to enter your correct passcode.





```
- ADJUST -  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R,G,B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF. ADJUST
```



```
- PASSCODE -  
1 / ENTRY  
2 / DISABLE
```

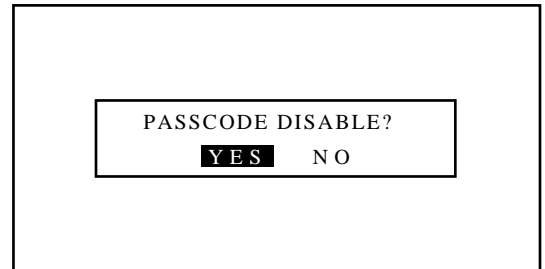


```
CURRENT PASSCODE?  
****
```

6 Use the CURSOR  or  button to select either “YES” or “NO” and then press ENTER.

Items to select

- YES When selecting “YES”, the current passcode will be canceled. You will not be required to re-enter your passcode when you press the ADJUST button to re-enter the ADJUST mode.
- NO When selecting “NO”, the current passcode will remain in effect.



Electrical Focus Adjustment

Adjust the focus electrically to obtain the best screen focus.

NOTE:

- The adjustment must be done to each input.
- Select the FOCUS test pattern using the TEST button on the full function remote control.

Proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASS CODE.
- 2 Use the CURSOR \leftarrow or \rightarrow button to highlight the “2/FOCUS” line. Press ENTER to display the FOCUS menu. You can also select the FOCUS menu directly by pressing the INPUT “2” button.
- 3 Use the CURSOR \leftarrow or \rightarrow button to highlight your preferred adjustment item. Press ENTER to display the selected adjustment screen.
 - You can also select the adjustment screen directly by pressing the INPUT “1” through “4” button.
 - For edge focus, you can select either “EDGE ALL” or “EDGE SEPA.” in the FOCUS EDGE mode of the OPTION menu.
(See page 65).

Items to select

- CENTER The focus adjustment for the center of the screen (each CRT).
- EDGEALL The focus adjustment for the edge area of the screen (all CRTs).
- EDGESEPA. .. The focus adjustment for the edge area of the screen (each CRT).
- CORNER The focus adjustment for the corner of the screen (each CRT).

NOTE:

- The adjustment screen can also be displayed by pressing the FOCUS button on the full function remote control. The FOCUS button rotates the adjustment screen in the above order.

```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R, G, B GAIN
7 / PASSCODE
8 / OPTION
9 / REF. ADJUST

```

```

- FOCUS -
1 / CENTER
2 / EDGE ALL
3 / EDGE SEPA.
4 / CORNER

```

ADJUSTMENT

- 4 Press the R, G, and B button to project the CRT beam to be adjusted.
- You can turn on or off each CRT beam (R, G, and B) separately.

NOTE:

- The CENTER, EDGE SEPA., and CORNER focus adjustment should be performed for each CRT separately.
- The EDGE ALL focus adjustment affects all the three CRTs at the same time.





- 5 Hold down the CTL button then select the CRT you wish to adjust with the R, G, and B button.
- The display of the corresponding CRT will change from one CRT to another.

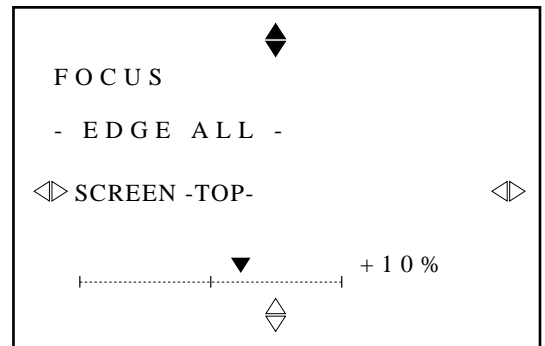
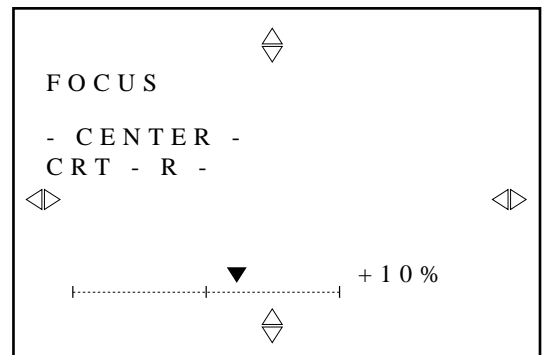
NOTE:

- You do not need to select the CRT color for the EDGE ALL focus.
- Always be aware of what color the on-screen CRT display is showing (R, G, B) when "CENTER", "EDGE SEPA.", or "CORNER" is selected. If that color's test pattern is turned off, any adjustment to that color will display the "THIS COLOR IS NOT APPLICABLE" message.

- 6 Use the CURSOR buttons to adjust the focus.

■ **When selecting "CENTER"**



- Pressing the  or  button increases the control levels of the center focus. (The gauge mark in the scale moves to the right.)
 - Pressing the  or  button decreases the control levels of the center focus. (The gauge mark in the scale moves to the left.)
- To switch to the "EDGE ALL" or "EDGE SEPA." mode: press and hold CTL, then press CURSOR button.







■ When selecting “EDGE ALL”/“EDGE SEPA.”









1) Press and hold the CTL button then press any one of the CURSOR buttons to select the position to be adjusted. (The marker on the selected side will turn to a solid color.)

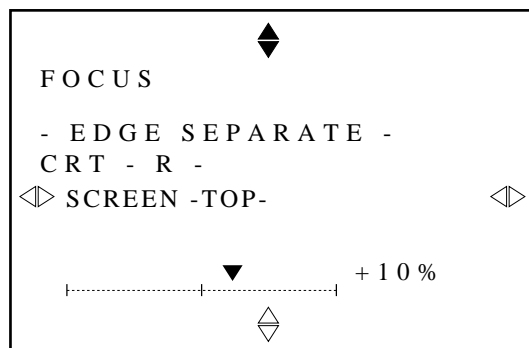
CTL+  (Top) CTL+  (Right)

CTL+  (Bottom) CTL+  (Left)

- To switch to Bottom from Top, press and hold CTL, then press CURSOR twice.
- To switch to Top from Bottom, press and hold CTL, then press CURSOR twice.
- To switch to Left from Right, press and hold CTL, then press CURSOR twice.
- To switch to Right from Left, press and hold CTL, then press CURSOR twice.


2) Use the CURSOR buttons to adjust the focus.

- Pressing the  or  button increases the control levels of the edge focus. (The gauge mark in the scale moves to the right.)
 - Pressing the  or  button decreases the control levels of the edge focus. (The gauge mark in the scale moves to the left.)
- 3) To switch to the CENTER screen, use the CTL and CURSOR buttons as follows:
- To switch to CENTER from Top, press and hold CTL, then press CURSOR.
 - To switch to CENTER from Bottom, press and hold CTL, then press CURSOR.
 - To switch to CENTER from Right, press and hold CTL, then press CURSOR.
 - To switch to CENTER from Left, press and hold CTL, then press CURSOR.





■ When selecting “CORNER”

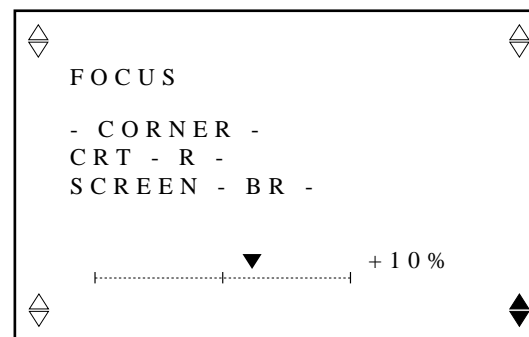
• Press and hold the CTL button then press any one of the CURSOR buttons to select the position to be adjusted. (The marker on the selected side will turn to a solid color.)





CTL+  TR (Topright)

CTL+  BR (Bottomright)



CTL+  TL (Topleft)

CTL+  BL (Bottomleft)



- Use the CURSOR buttons to adjust the focus. Pressing the  or  button increases the control levels of the corner focus. (The gauge mark in the scale moves to the right.) Pressing the  or  button decreases the control levels of the corner focus. (The gauge mark in the scale moves to the left.)

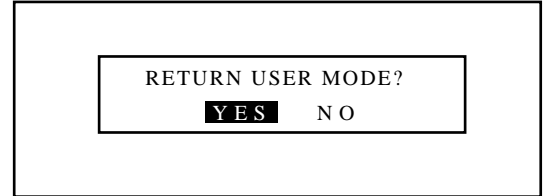
ADJUSTMENT

- 7 Repeat steps 4 to 6 for the other CRTs if necessary.
- 8 To end this adjustment, press the END button.
 - Whenever the END button is pressed, the menu will sequence in this order:
“FOCUS” menu→ “ADJUST” menu→ Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR  or  button to select either “YES” or “NO” and then press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

NOTE: The center focus for the Blue CRT is pre-adjusted so that the best white uniformity can be obtained at the gauge center (0%). For this reason, it has been set at the factory to be slightly out of focus.
Therefore you should not perform the center focus adjustment to the Blue CRT with the remote control.



Alignment Adjustment

Correct the horizontal and vertical error for the projected image.

NOTE: Select the CROSS-COARSE test pattern using the TEST button on the full function remote control.

Proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR \leftarrow or \rightarrow button to highlight the “3/ALIGNMENT” line. Press ENTER to display the “ALIGNMENT” menu. You can also select the “ALIGNMENT” menu directly by pressing the INPUT “3” button.
- 3 Use the CURSOR \leftarrow or \rightarrow button to select the preferred item. Press ENTER. You can also select the alignment item directly by pressing an INPUT button.
 - The selected adjustment screen will be displayed.
See page 45 and 46 for the explanation of the selected adjustment.

Items to select

- TILT SKEW Adjusts the tilt and the skew
- BOW Adjusts the horizontal and vertical bow
- AMPLITUDE Adjusts the horizontal and vertical amplitude of the projected image
- LINEARITY Adjusts the horizontal and vertical linearity
- KEY-STONE Adjusts the horizontal and vertical keystone
- PIN-CUSHION Adjusts the horizontal and vertical pincushion
- LINEAR-BAL Adjusts the horizontal and vertical linearity balance
- KEY-BALANCE Adjusts the horizontal and vertical keystone tilt balance
- PIN-BALANCE Adjusts the horizontal and vertical pincushion bow balance
- LINE DIST Adjusts S shaped and biquadratic distortion of vertical and horizontal lines
- R,G,B POINT Adjusts the horizontal and vertical line in detail using a intersections on the CROSS-COARSE pattern as a reference point

```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R,G,B GAIN
7 / PASSCODE
8 / OPTION
9 / REF.ADJUST

```





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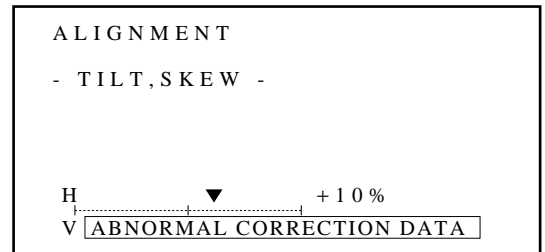
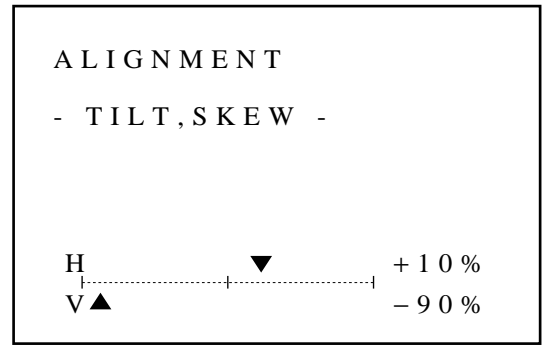
- ALIGNMENT -
01 / TILT,SKEW
02 / BOW
03 / AMPLITUDE
04 / LINEARITY
05 / KEY-STONE
06 / PIN-CUSHION
07 / LINEAR-BAL
08 / KEY-BALANCE
09 / PIN-BALANCE
10 / LINE DIST
11 / R,G,B POINT

```

NOTE: You can also select adjustments directly using buttons on the full function remote control. If you are in the CONVERGENCE mode (see page 48), press and hold down the CTL button then press the G button. This will bring you to the ALIGNMENT adjustment screen. To select the “LINEAR-BAL”, “KEY-BALANCE”, or “PIN-BALANCE”, or “LINE DIST”. alignment, press and hold down the CTL button then press the LINEAR,KEYSTN, PINCUS, or BOW button respectively.



ADJUSTMENT

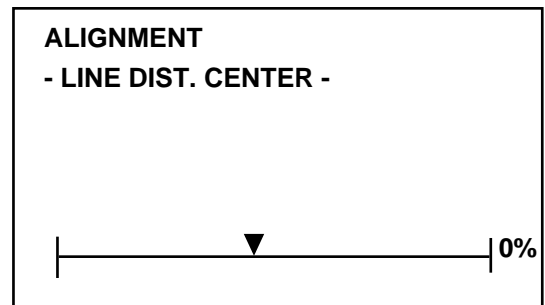
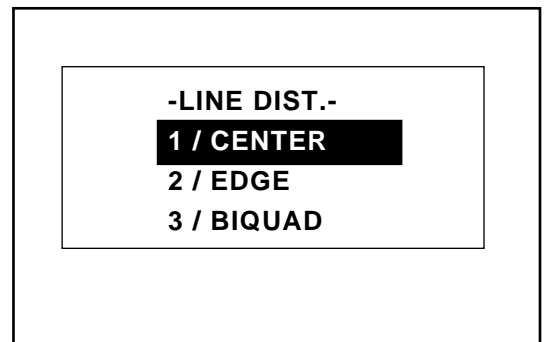
- 4 Press the R, G, and B buttons to display only the Green pattern.
 - You can turn on or off each CRT beam (R, G or B) separately.
 - To access the CONVERGENCE screen (see page 49), press and hold down the CTL button then press the R or B button.
- 5 Use the CURSOR buttons to adjust the alignment of the projected pattern.
 - The CURSOR  or  button increases or decreases the horizontal level.
 - The CURSOR  or  button increases or decreases the vertical level.



During alignment or convergence adjustment, if the projector acknowledges that your adjustment is overcorrected, the "ABNORMAL CORRECTION DATA" message appears. The data is cancelled at that moment. If this happens, reduce the total amount of the current adjustment data.

■ Adjusting LINE DISTORTION

- 1) Select the "10/LINE DIST." item then press ENTER.
 - The "LINE DIST." menu is displayed.
- 2) Use the CURSOR  or  buttons to select the item and press ENTER to display the selected adjustment screen. You can also select the item directly by pressing the corresponding INPUT number button.
 - The selected adjustment screen is displayed.
 - The adjustment screen can also be displayed by holding and pressing the CTL, then the BOW button on the full function remote control. Each press of the BOW button with pressed CTL toggles the adjustment screen between CENTER, EDGE and BIQUAD.







Items to select





- CENTER Corrects S-shaped horizontal lines distortion on the screen.
- EDGE Corrects S-shaped lines distortion around the perimeter of the screen.
- BIQUAD Corrects biquadratic distortion at the top and bottom of the screen.

3) Use the CURSOR buttons to align the pattern.





When selecting "CENTER":



- Pressing the CURSOR  or  button increases the level.
- Pressing the CURSOR  or  button decreases the level.

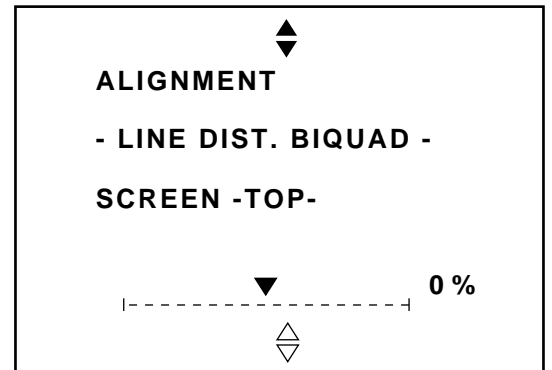
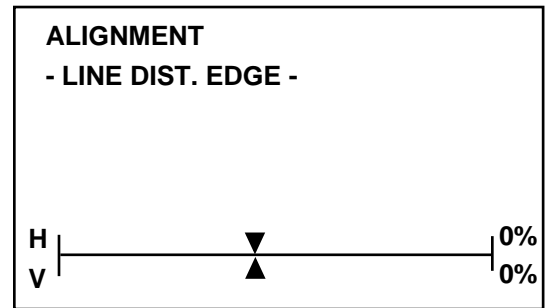
When selecting "EDGE":

- Pressing the CURSOR  or  button corrects the vertical lines.
- Pressing the CURSOR  or  button corrects the horizontal lines.

When selecting "BIQUAD":

- Pressing the CURSOR  or  increases the level.
- Pressing the CURSOR  or  decreases the level.

To switch to the adjustment position, press and hold CTL and then press CURSOR  or  button.





■ Adjusting R,G,B POINT

NOTE:

- The R,G,B POINT adjustments should only be done if necessary. Over adjusting them may cause the picture distortion.
- The alignment adjustment affects three CRTs at the same time while the convergence adjustment needs to be performed for each CRT (R and B) separately.

1) Select "11/R,G,B POINT" from the "ALIGNMENT" menu and press ENTER to display the "R,G,B POINT" menu. For dynamic convergence, select "9/POINT" from the "CONVERGENCE" menu and press ENTER to display the "POINT" menu.



ADJUSTMENT





2) Use the CURSOR  or  button to select the item and press ENTER to display the selected adjustment screen. You can also select the item directly by pressing the corresponding INPUT number button.

- The "CROSS-COARSE" test pattern will be automatically displayed.
- The R,G,B POINT screen in the alignment mode or the POINT adjustment screen in the convergence mode can be also displayed by pressing the POINT button on the full function remote control. The POINT button rotates the adjustment screen in the following order: COARSE, MEDIUM, FINE.

Items to select

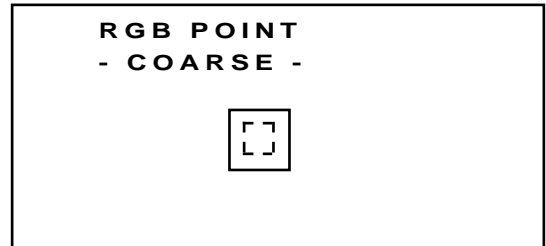
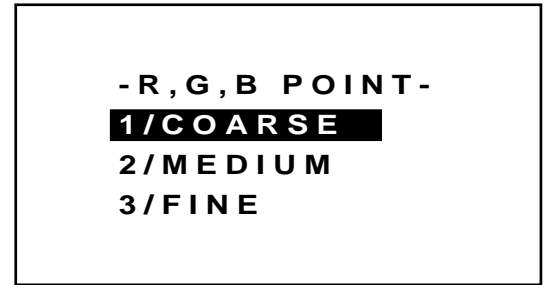
- COARSE Coarse adjustment. Number of adjustment zones is 3 x 3.
- MEDIUM Number of adjustment zones is 7 x 7.
- FINE Fine adjustment. Number of adjustment points is 13 x 16.

3) Use the CURSOR  or  buttons to move the cursor mark to the point to be adjusted.

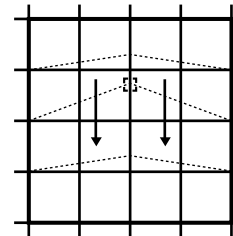
- Pressing the CURSOR  button moves the cursor to the right. Pressing the CURSOR  button moves the cursor to the left. Pressing the CURSOR  button moves the cursor to the top. Pressing the CURSOR  button moves the cursor to the bottom.

 : adjustment area frame

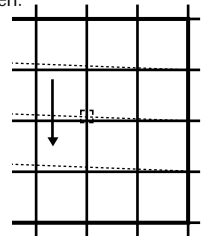
 : adjustment



When the adjustment area frame is a box type.





When the adjustment area frame is a box with one side open.



When FINE is selected, the adjustment area frame is not displayed.

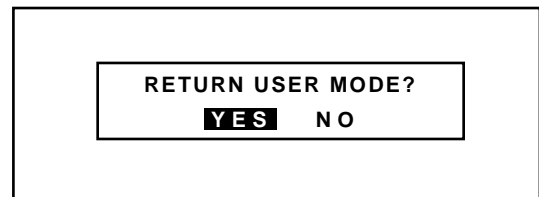
- 4) For alignment, hold down the CTL button, then use the CURSOR buttons to align the pattern. For convergence, hold down the CTL button and then use the CURSOR buttons to align the Red or Blue pattern with the Green pattern.

NOTE: For more accurate convergence correction on edges, perform the amplitude and linearity adjustments before the POINT convergence adjustment.

- 6 To end this adjustment, press the END button.
- Whenever the END button is pressed, the menus will sequence in this order:
“ALIGNMENT” menu → “ADJUST” menu → Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR  or  button to select either “YES” or “NO” and then press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode again, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode again, you will not need to re-enter your passcode.

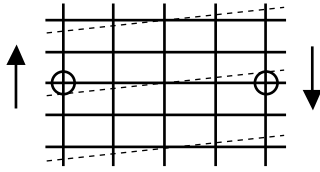


ADJUSTMENT

Alignment Adjustment Items

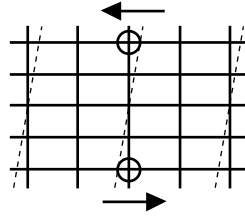
TILT

Adjust horizontal center line.



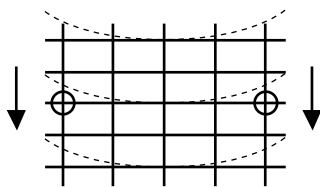
SKEW

Adjust vertical center line.



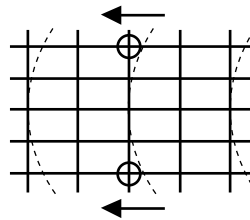
Vertical BOW

Adjust horizontal center line bow.



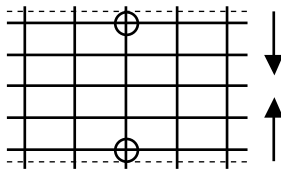
Horizontal BOW

Adjust vertical center line bow.



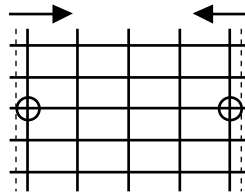
Vertical AMPLITUDE

Adjust vertical height of image.



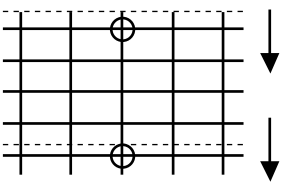
Horizontal AMPLITUDE

Adjust horizontal size of image.



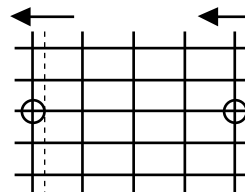
Vertical LINEARITY

Adjust top and bottom linearity.



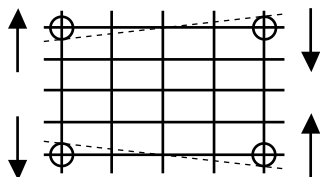
Horizontal LINEARITY

Adjust left and right linearity.



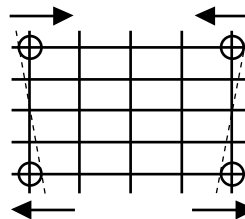
Vertical KEYSTONE

Adjust top and bottom keystone error.



Horizontal KEYSTONE

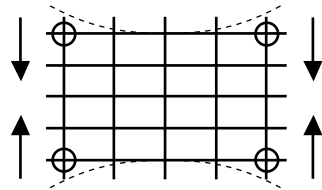
Adjust left and right keystone error.



Alignment Adjustment Items

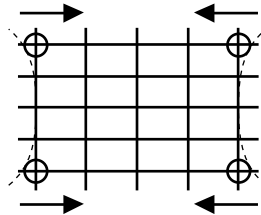
Vertical PINCUSHION

Equalize top and bottom pincushion error.



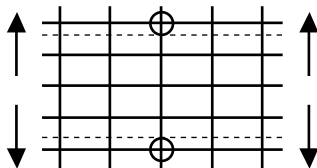
Horizontal PINCUSHION

Equalize left and right pincushion error.



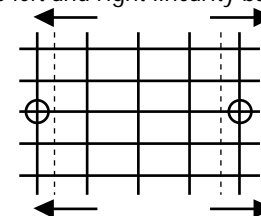
Vertical LINEAR-BALANCE

Equalize top and bottom linearity balance error.



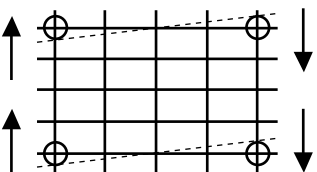
Horizontal LINEAR-BALANCE

Equalize left and right linearity balance error.



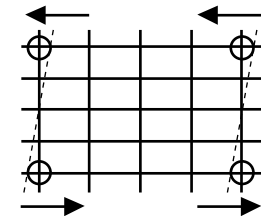
Vertical KEY-BALANCE

Equalize top and bottom keystone balance error.



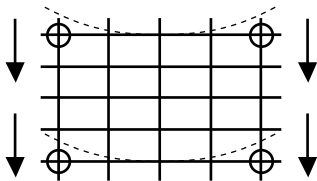
Horizontal KEY-BALANCE

Equalize left and right keystone balance error.



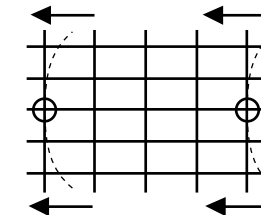
Vertical PIN-BALANCE

Equalize top and bottom pincushion balance error.



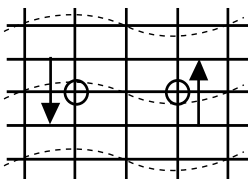
Horizontal PIN-BALANCE

Equalize left and right pincushion balance error.



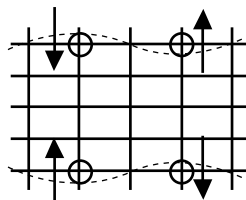
LINE DIST. CENTER

Correct S-shaped horizontal line



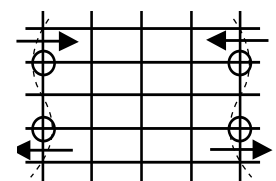
Vertical LINE DIST. EDGE

Correct S-shaped horizontal line



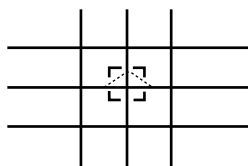
Horizontal LINE DIST. EDGE

Correct S-shaped vertical line



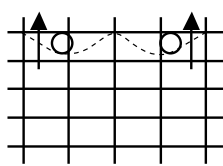
Vertical POINT

Adjust the point peak vertically

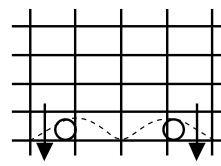


LINE DIST. BIQUAD

Correct biquadratic distortion



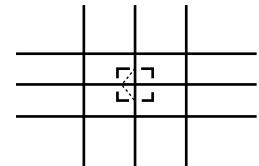
Markerup



Markerdown

Horizontal POINT

Adjust the point peak horizontally





ADJUSTMENT

Static Convergence Adjustment

Adjust the red and blue CRT images to position them over the green test pattern (center portion only).

NOTE: The static convergence adjustment should be performed for each CRT (R and B) separately. Carry out the adjustment after displaying an active image for 20 minutes or more.

Proceed as follows:





- 1 Press the OPERATE button.
 - The “OPERATE” menu is displayed.
- 2 Use the CURSOR  or  button to highlight the “6/STATIC” line. Press ENTER to display the STATIC adjustment. You can also select the STATIC adjustment screen directly by pressing the INPUT “6” button.
 - The CROSS-HAIR test pattern will be automatically displayed.

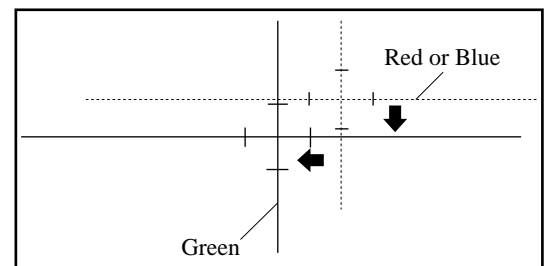
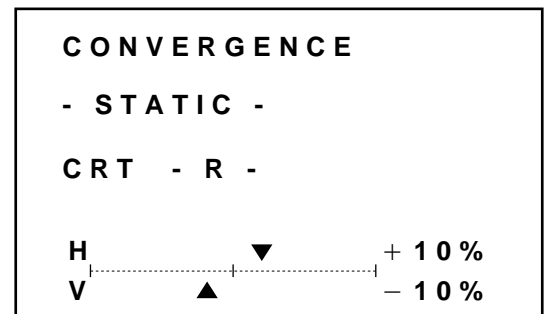
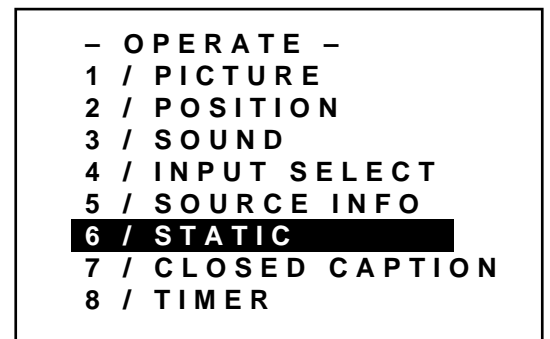
NOTE: When you are in the ADJUST mode, selecting the STATIC mode will not automatically select the CROSS-HAIR test pattern. Reselect the pattern using the TEST button.

NOTE: The “STATIC” adjustment can be also displayed by pressing the STATIC button on the user or full function remote control.

- 3 Press the R or B button to display the pattern to be aligned with the Green pattern.
 - You can turn on or off each CRT beam (R and B) separately.
- 4 Hold down the CTL button then select the CRT you wish to adjust with the R and B buttons.

NOTE: Always be aware of what color the on-screen CRT display is showing (R, G, B). If that color’s test pattern is turned off, any adjustment to that color will display the “THIS COLOR IS NOT APPLICABLE” message.

- 5 Align the center of the Red or the Blue pattern with the center of the Green pattern (reference color) using the CURSOR buttons.
 - The CURSOR  or  button moves the pattern left or right.
 - The CURSOR  or  button moves the pattern up or down.
- 6 Repeat steps 3 to 5 for the other CRTs if necessary.
- 7 To end this adjustment, press the END button.
 - Whenever the END button is pressed, the menus will sequence in this order:
“OPERATE” menu → Source screen





Dynamic Convergence Adjustment

Corrects the horizontal and vertical error for each color and align the red and blue to the green.

NOTE:



- The dynamic convergence adjustment should be performed for each CRT (R and B) separately.
- Select the CROSS-COARSE test pattern using the TEST button on the full function remote control.

Proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “4/CONVERGENCE” line. Press ENTER to display the “CONVERGENCE” menu. You can also select the “CONVERGENCE” menu directly by pressing the INPUT “4” button.

```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R, G, B GAIN
7 / PASSCODE
8 / OPTION
9 / REF. ADJUST
  
```

- 3 Use the CURSOR  or  button to select the preferred item and then press ENTER. You can also select directly the dynamic convergence item by pressing an INPUT button.
 - The selected adjustment will be displayed.
See pages 54 to 56 for the explanation of the selected adjustment.

NOTE:

- You can also select adjustments directly using buttons on the full function remote control. If you are in the ALIGNMENT mode (see page 41), press and hold down the CTL button then press the R or B button. This will bring you to the CONVERGENCE adjustment screen. To select “LINEAR-BAL” convergence, press and hold down the CTL button then press the LINEAR button.
- To select “LINE DIST.” convergence, press and hold down the CTL button then press the BOW button.

```

- CONVERGENCE -
1 / TILT, SKEW
2 / BOW
3 / AMPLITUDE
4 / LINEARITY
5 / KEY-STONE
6 / PIN-CUSHION
7 / LINEAR-BAL
8 / LINE DIST.
9 / POINT
10 / PHASE
  
```





- 4 Press the R or B button to display the CRT beam to be aligned with the Green pattern.
 - You can turn on or off each CRT beam (R and B) separately.

ADJUSTMENT

- 5 Hold down the CTL button then select the CRT you wish to adjust with the R and B buttons.





NOTE: Always be aware of what color the on-screen CRT display is showing (R, B). If that color's test pattern is turned off, any adjustment to that color displays the "THIS COLOR IS NOT APPLICABLE" message.

- To access the ALIGNMENT screen (see page 42), press and hold down the CTL button then press the G button.
- 6 Align the Red or the Blue pattern with the Green pattern using the CURSOR buttons.

- The CURSOR button  or  increases or decreases H level. The CURSOR button  or  increases or decreases V level. The following are the description of the KEYSTONE, PIN-CUSHION, LINEAR-BALANCE, LINE DIST. and POINT adjustment.



■ KEYSTONE, PINCUSHION, and LINEAR-BALANCE

- Press and hold the CTL button then press any one of the CURSOR buttons to select the position to be adjusted.

CTL+  (Top)
 CTL+  (Bottom)
 CTL+  (Right)
 CTL+  (Left)

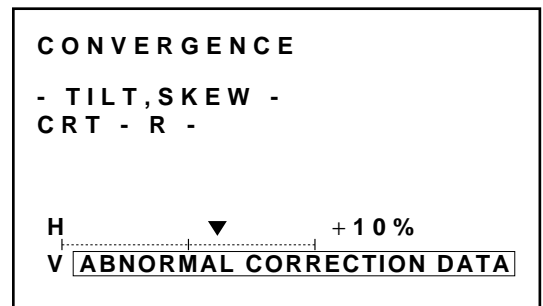
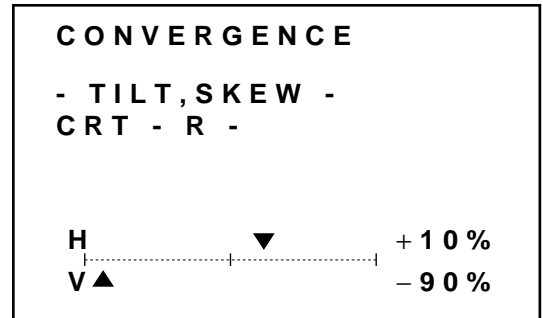
- Use the CURSOR buttons to correct the error.

■ Adjusting LINE DISTORTION

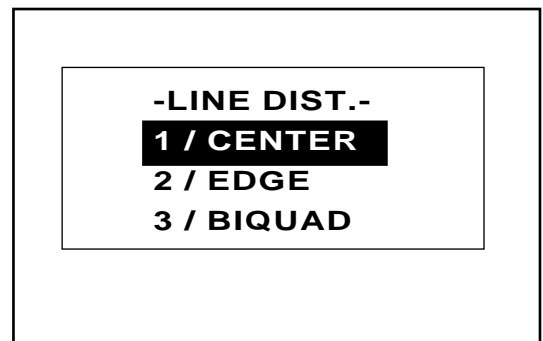
- Select the "8/LINE DIST." item then press ENTER.
 - The "LINE DIST." menu is displayed.
- Use the CURSOR  or  buttons to select the item and press ENTER to display the selected adjustment screen. You can also select the item directly by pressing the corresponding INPUT number button.
 - The selected adjustment screen is displayed.
 - The adjustment screen can also be displayed by holding and pressing the CTL, then the BOW button on the full function remote control. Each press of the BOW button with pressed CTL toggles the adjustment screen between CENTER, EDGE and BIQUAD.

Items to select

- CENTER Corrects S-shaped horizontal lines distortion on the screen.
- EDGE Corrects S-shaped lines distortion around the perimeter of the screen.
- BIQUAD Corrects biquadratic distortion at the top and bottom of the screen.









During alignment or convergence adjustment, if the projector acknowledges that your adjustment is overcorrected, the "ABNORMAL CORRECTION DATA" message appears. The data is cancelled at that moment. If this happens, reduce the total amount of the current adjustment data.









3) Use the CURSOR buttons to align the pattern.

When selecting "CENTER":





- Pressing the CURSOR  or  button increases the level.
 - Pressing the CURSOR  or  button decreases the level.
- To switch to the "EDGE" screen, press and hold the CTL, then press CUSOR  or  button.



When selecting "EDGE":

- Pressing the CURSOR  or  button increases the level.
- Pressing the CURSOR  or  button decreases the level.

To switch another screen, press and hold the CTL, then press CUSOR  or  button.

When selecting "BIQUAD":



- Pressing the CURSOR  or  increases the level.
- Pressing the CURSOR  or  decreases the level.

To switch to the adjustment position, press and hold CTL and then press CURSOR  or  button.

7 Repeat steps 3 to 6 for the other CRTs if necessary.

- Pressing the END button will bring you to the "CONVERGENCE" menu.

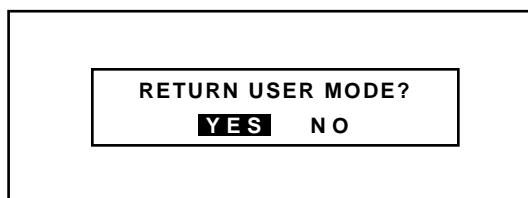
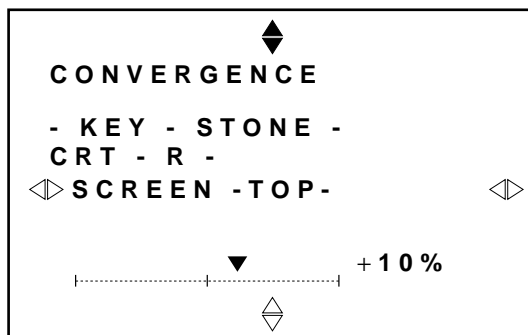
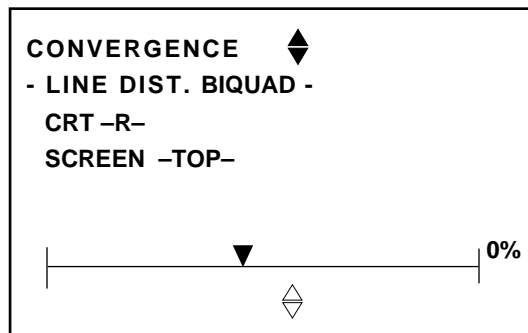
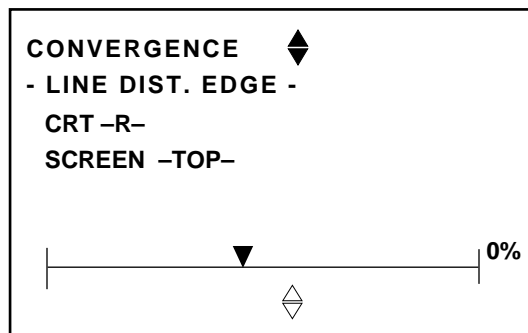
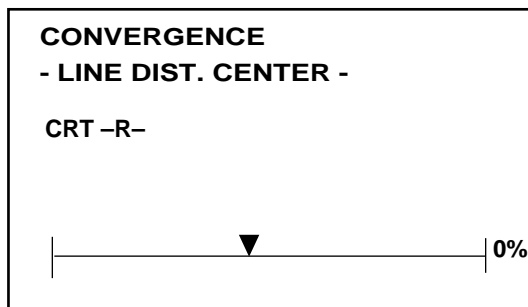
8 To exit, press END.

- Whenever the END button is pressed, the menu will sequence in this order:
"CONVERGENCE" menu → "ADJUST" menu → Source screen
- If the "RETURN USER MODE?" menu appears, use the CURSOR  or  button to select either "YES" or "NO" and then press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode again, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode again, you will not need to re-enter your passcode.



NOTE: Adjusting the dynamic convergence may cause the static convergence settings to change. If this happens, adjust the static convergence again.



■ Adjusting POINT







NOTE:



- The POINT adjustments should only be done if necessary. Over adjusting them may cause the picture distortion.
- The convergence adjustment needs to be performed for each CRT (R and B) separately.

- 1) Select "9/POINT" from the "CONVERGENCE" menu and press ENTER to display the "POINT" menu. For alignment, select "11/R,G,B POINT" from the "ALIGNMENT" menu and press ENTER to display the "R,G,B POINT" menu.
- 2) Use the CURSOR  or  button to select the item and press ENTER to display the selected adjustment screen. You can also select the item directly by pressing the corresponding INPUT number button.
 - The "CROSS-COARSE" test pattern will be automatically displayed.
 - The POINT convergence screen can be also displayed by pressing the POINT button on the full function remote control. The POINT button rotates the adjustment screen in the following order: COARSE, MEDIUM, FINE.

Items to select

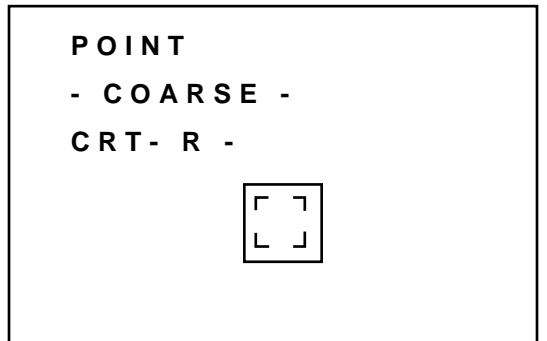
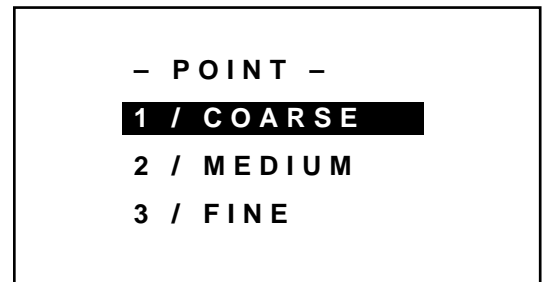
- COARSE Coarse adjustment. Number of adjustment zones is 3 x 3.
- MEDIUM Number of adjustment zones is 7 x 7.
- FINE Fine adjustment. Number of adjustment points is 13 x 16.

- 3) Use the CURSOR  or  buttons to move the cursor mark to the point to be adjusted.
 - Pressing the CURSOR  button moves the cursor to the right. Pressing the CURSOR  button moves the cursor to the left. Pressing the CURSOR  button moves the cursor to the top. Pressing the CURSOR  button moves the cursor to the bottom.

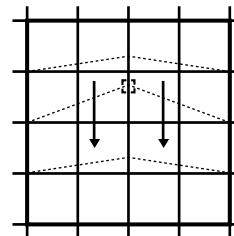
-  : adjustment area frame
-  : adjustment point

- 4) For alignment, hold down the CTL button, then use the CURSOR buttons to align the pattern. For convergence, hold down the CTL button and then use the CURSOR buttons to align the Red or Blue pattern with the Green pattern.

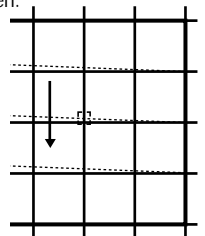
NOTE: For more accurate convergence correction on edges, perform the amplitude and linearity adjustments before the POINT convergence adjustment.



When the adjustment area frame is a box type.



When the adjustment area frame is a box with one side open.







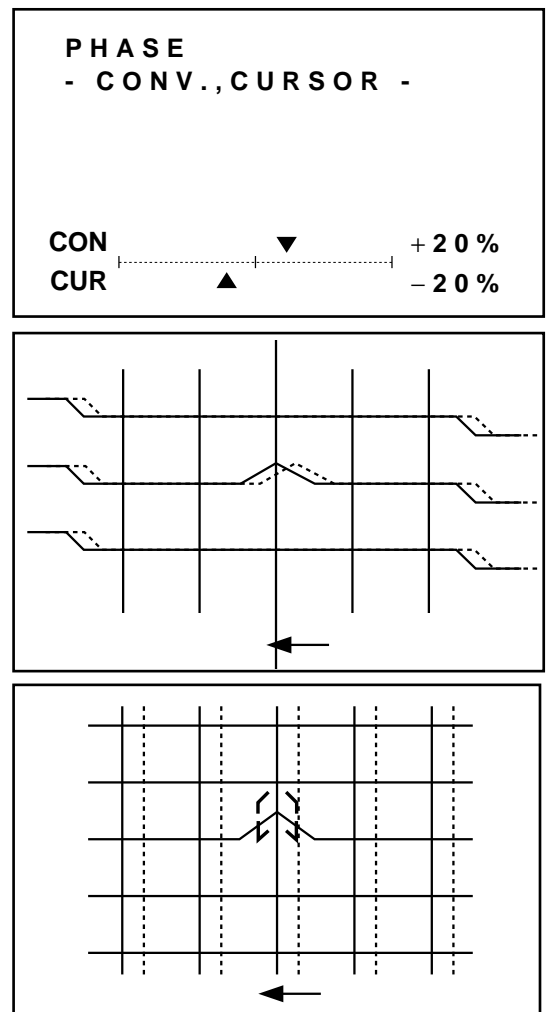
When FINE is selected, the adjustment area frame is not display.

■ Adjusting PHASE

This adjustment corrects the phase of convergence wave forms.

NOTE: Since the projector has been pre-adjusted for the optimal phase adjustments at the factory, further adjustment should not be required in normal operation. In some cases, carrying this adjustment causes convergence to change.

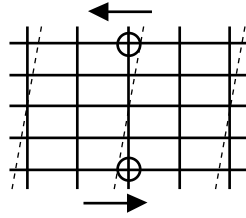
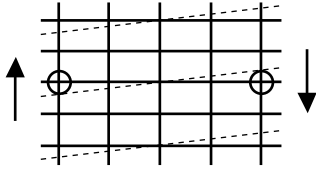
- 1) Select "10/PHASE" and press ENTER to display the phase adjustment screen.
 - The CROSS-COARSE test pattern will be automatically displayed and the adjustments will be cancelled. You can also display the adjustment screen by pressing PHASE button on the service remote control.
- 2) Use the CURSOR  or  button to adjust the convergence phase (for horizontal line). Adjust the pattern so the sharp turns at the left and right edges in the diagonal lines are equal.
- 3) Use the CURSOR  or  button to adjust the cursor phase (for vertical line). Align the vertical center line of the point cursor with the point peak.



Convergence Adjustment Items

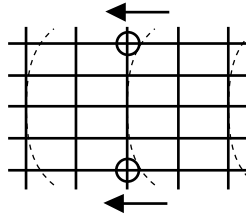
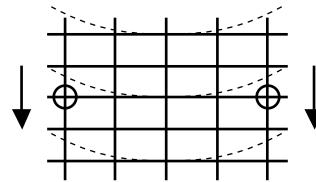
TILT

Adjust horizontal center line.



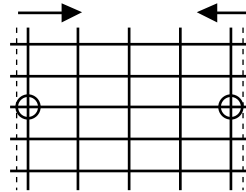
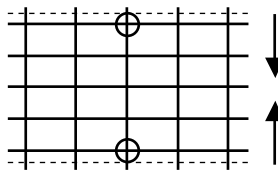
Vertical BOW

Adjust horizontal center line bow.



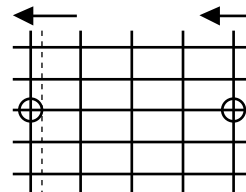
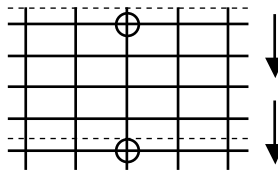
Vertical AMPLITUDE

Adjust top and bottom height.



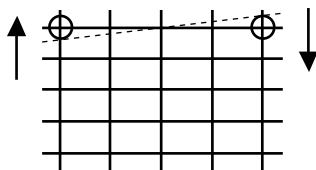
Vertical LINEARITY

Adjust top and bottom linearity.

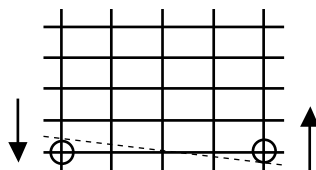


KEYSTONE

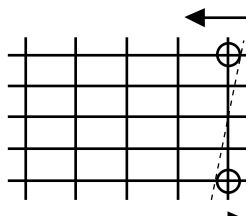
Adjust the selected part.



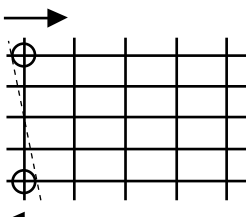
When TOP is selected



When BOTTOM is selected

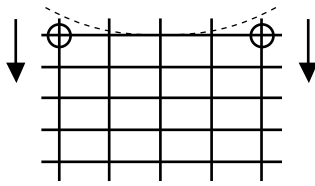


When RIGHT is selected

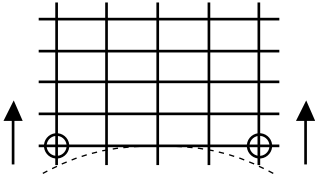


When LEFT is selected

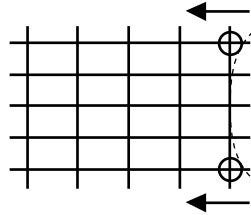
PINCUSHION



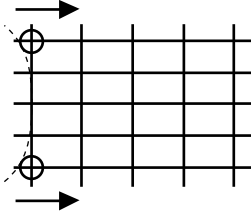
When TOP is selected



When BOTTOM is selected



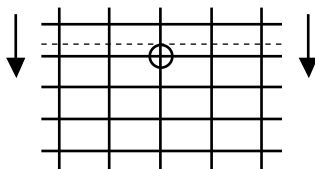
When RIGHT is selected



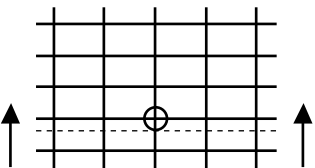
When LEFT is selected

LINEAR-BALANCE

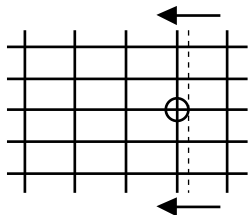
Adjust the selected part.



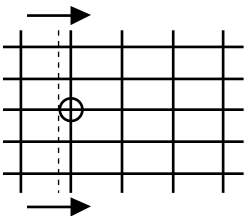
When TOP is selected



When BOTTOM is selected



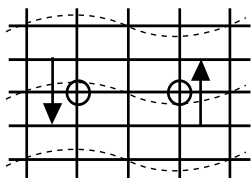
When RIGHT is selected



When LEFT is selected

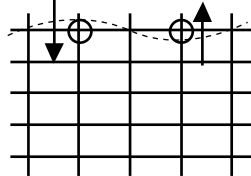
LINE DIST. CENTER

Correct S-shaped horizontal line

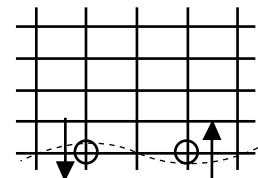


LINE DIST. EDGE

Correct S-shaped horizontal line



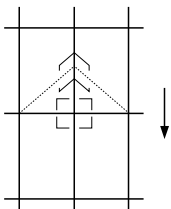
When TOP is selected



When BOTTOM is selected

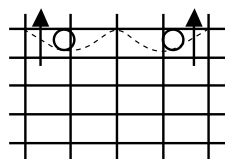
Vertical POINT

Adjust the point peak vertically

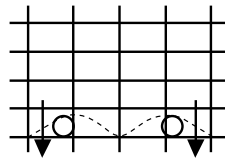


LINE DIST. BIQUAD

Correct biquadratic distortion



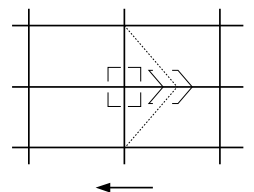
Markerup



Markerdown

Horizontal POINT

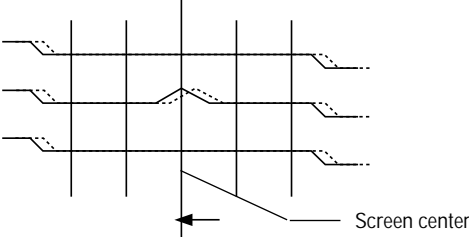
Adjust the point peak horizontally



ADJUSTMENT

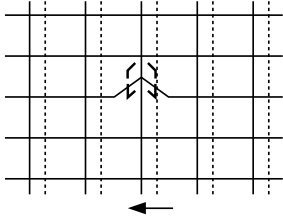
PHASE CONV. PHASE

Adjust the pattern so the sharp turns at the left and right edges in the diagonal lines are equal.



CURSOR PHASE

Align the vertical center line of the point cursor with the point peak.







Color Temperature and White Balance Adjustment

Adjusts the color temperature and the white balance.

NOTE:



- When you are in this adjustment mode, all the CRTs will be in use. The white balance adjustment should be performed for each CRT (R, G, and B) separately. The CRT beam cannot be cut-off.



Proceed as follows:

- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode. See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “5/KELVIN” line. Press ENTER to switch to the “KELVIN.” menu. You can also select the “KELVIN.” menu directly by pressing the INPUT “5” button.
- 3 Use the CURSOR  or  button to select “COLOR TEMP.” or “WHITE BAL.” menu.
 - The “COLOR TEMPERATURE” and “WHITE BALANCE” adjustment screen can be also displayed by using the KELVIN button on the full function remote control.

■ When selecting “COLOR TEMP”

Press ENTER to display the COLOR TEMPERATURE screen.

Pressing  or  increases the color temperature.

Pressing  or  decreases the color temperature.





- The color temperature ranges from 3200 to 9500K.



■ When selecting “WHITE BAL”

Press ENTER to display the WHITE BALANCE screen.

Hold down the CTL button then select the CRT you wish to adjust with the R, G and B buttons.

Use the CURSOR buttons to adjust the white and the black level.

- The CURSOR  button increases the white level (WHT).
The CURSOR  button decreases the white level (WHT).
- The CURSOR  button increases the black level (BLK).
The CURSOR  button decreases the black level (BLK).

- 4 Repeat the above steps for the other CRTs if necessary.
- 5 To end this adjustment, press the END button.
 - Whenever the END button is pressed, the menus will sequence in this order.
“ADJUST” menu → Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR  or  button to select either “YES” or “NO” and then press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode again, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode again, you will not need to re-enter your passcode.

```

- ADJUST -
1 / SIGNAL ENTRY
2 / FOCUS
3 / ALIGNMENT
4 / CONVERGENCE
5 / KELVIN
6 / R, G, B GAIN
7 / PASSCODE
8 / OPTION
9 / REF. ADJUST
  
```

```

- KELVIN -
1 / COLOR TEMP.
2 / WHITE BAL.
  
```

```

COLOR
TEMPERATURE
  
```

```

3200K          ▼          9500K
|-----+-----|
  
```

```

WHITE BALANCE
  
```

```

CRT - R -
  
```

```

WHT |-----+-----| 60%
BLK ▲-----+-----| 10%
  
```

```

RETURN USER MODE?
YES NO
  
```








ADJUSTMENT

R, G, and B Gain Adjustment



Adjusts the input level of the signal.

NOTE: This adjustment works only with the ISS-6020/ISS-6020G Switcher.

Proceed as follows:

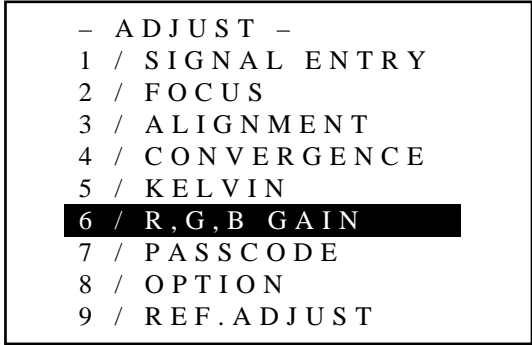
- 1 Press the ADJUST button to display the “ADJUST” menu.
 - The projector may ask you to enter your passcode.
See page 61 for the explanation of the PASSCODE.
- 2 Use the CURSOR  or  button to highlight the “6/R, G, B GAIN” line. Press ENTER to display the “R, G, B GAIN” adjustment screen. You can also select the “R, G, B GAIN” adjustment screen directly by pressing the INPUT “6” button.
- 3 Hold down the CTL button then select the CRT you wish to adjust with the R, G, and B buttons.
- 4 Use the CURSOR buttons to adjust the level of the input signal.
 - The CURSOR ,  button increases the input level.
 - The CURSOR ,  button decreases the input level.

NOTE: Connect the projector and the Switcher with an oscilloscope, then adjust the CURSOR buttons to obtain a value of 0.7Vp-p of the projector input level or the Switcher output level on the oscilloscope.

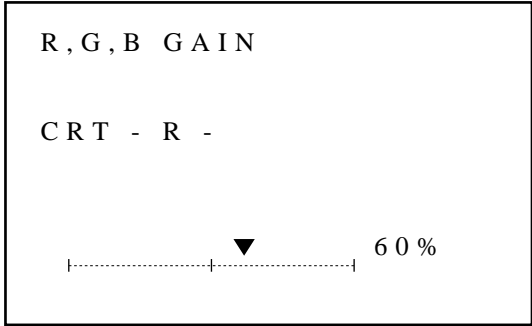
- 5 Repeat steps 3 and 4 for other input signals if necessary.
- 6 To end this adjustment, press END.
 - Whenever the END button is pressed, the menus will sequence in this order:
“ADJUST” menu → Source screen
 - If the “RETURN USER MODE?” menu appears, use the CURSOR  or  button to select either “YES” or “NO” and then press ENTER. This will exit the ADJUST mode.

Items to select

- YES When you try to enter the ADJUST mode again, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode again, you will not need to re-enter your passcode.



```
- ADJUST -  
1 / SIGNAL ENTRY  
2 / FOCUS  
3 / ALIGNMENT  
4 / CONVERGENCE  
5 / KELVIN  
6 / R, G, B GAIN  
7 / PASSCODE  
8 / OPTION  
9 / REF. ADJUST
```





```
R, G, B GAIN  
  
CRT - R -
```

60 %



```
RETURN USER MODE?  
YES NO
```

SIGNAL ENTRY

- 4 Use the CURSOR  or  button to select the item and then press ENTER.

- The Input terminal menu will be displayed.

Items to select



- NEW ENTRY Registers a new signal.
- ENTRY COPY Copies any registered signal entry.
- ENTRY MOVE Moves any registered signal entry.
- ENTRY DELETE ... Deletes any registered signal entry from SIGNAL ENTRY.
- DATA COPY Copies gain data from any one of the registered signals.
- CHANGE DEFAULT . Rewrites the data stored in DEFAULT AREA.
- SOURCE EDIT Changes setting various parameteres of the registered signals.

NOTE: When a vacant line is selected, the "SIGNAL ENTRY" menu has three items only: "NEW ENTRY", "ENTRY COPY" and "ENTRY MOVE".



■ Selecting "NEW ENTRY"

When connecting a signal for the first time, you need to register it into the projector's memory. You can copy the initial setting for the new signal from any other signal that has already been registered or use the factory preset setting.

To do this, proceed as follows:



- 1) Use the CURSOR  or  button to select "NEW ENTRY" and press ENTER.
 - The "INPUT TERMINAL SELECT" menu will be displayed.

When using the projector in stand alone application:

Use the CURSOR  or  button to select one of the three slots, and press ENTER.

Items to select

- INPUT A Standard
- INPUT B Optional board
- INPUT C Optional board

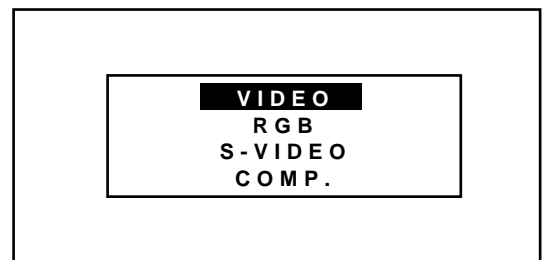
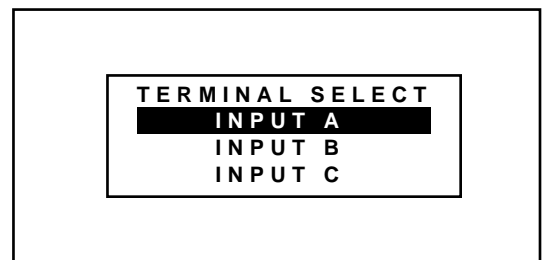
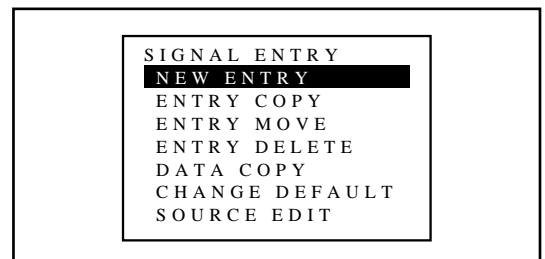
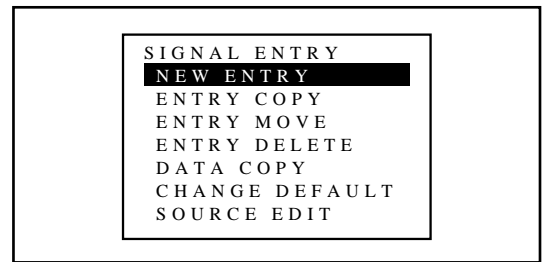
Use the CURSOR  or  button to select "VIDEO", "RGB", "S-VIDEO", or "COMPO." and press ENTER.

- The "NAME INPUT" screen will be displayed.

Items to select

- VIDEO Selects the VIDEO input signal of this projector.
- RGB Selects the RGB input signal of this projector.
- S-VIDEO Selects the S-VIDEO input signal of this projector.
- COMPO Selects the Y/Cb/Cr input signal of this projector.

- Go on to Step 2).



When using with a single Switcher ISS-6020/ISS-6020G:

Use the CURSOR or button to select the input slot number of the Switcher and press ENTER.

- Input slot numbers are from 1 through 10.

Use the CURSOR or button to select “VIDEO”, “RGB”, “S-VIDEO” or “COMPO.” and press ENTER.

- The “NAME INPUT” screen will be displayed.

Items to select

- VIDEO ----- Selects the signal from the VIDEO input terminal of the VIDEO input board.
- RGB ----- Selects the signal from the RGB input terminal of the RGB input board.
- S-VIDEO ----- Selects the signal from the S-VIDEO input terminal of the VIDEO input board.
- COMPO. ----- Selects the signal as COMPONENT signal from the RGB input terminal of the RGB input board.

* Go on to Step 2).

NOTE: Signal registry is not possible unless the installed input board matches the selected signal. Check if the installed input board matches the slot number.

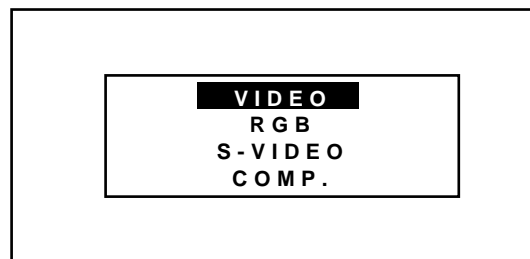
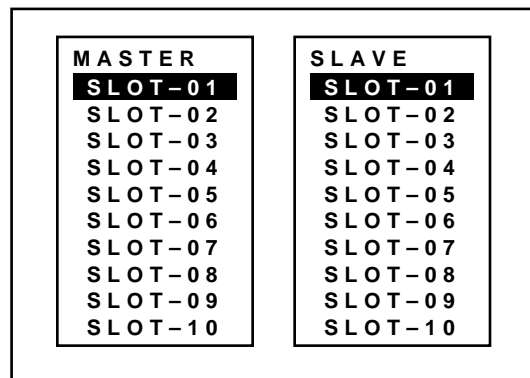
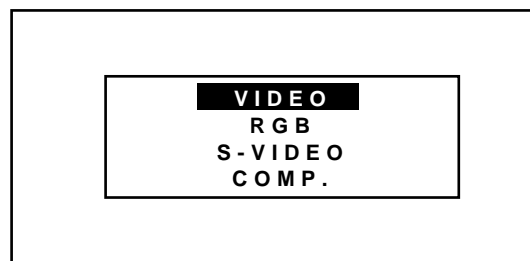
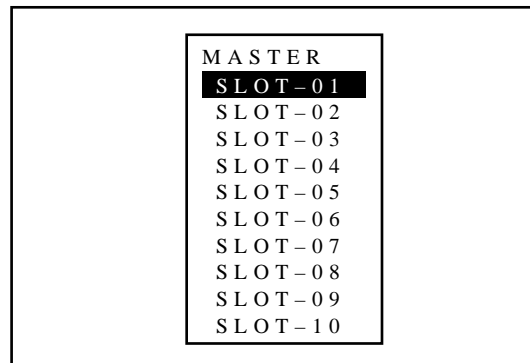
When using with two or more ISS-6020/ISS-6020G switchers:

Use the CURSOR or button to select the input slot number of the master Switcher and press ENTER. Then select the slot number of the slave Switcher and press ENTER.

- The “MASTER” menu will be displayed when the slot number of the master Switcher is selected.
- The “SLAVE” menu will be displayed when the slot number of the slave Switcher is selected.
- Input slot numbers are from 1 through 10.
- The “NAME INPUT” screen will be displayed when you finish entering the slot number.

Use the CURSOR or button to select “VIDEO”, “RGB”, “S-VIDEO” or “COMPO.” and press ENTER.

- The “NAME INPUT” screen will be displayed.




SIGNAL ENTRY

Items to select

- VIDEO ----- Selects the signal from the VIDEO input terminal of the VIDEO input board.
- RGB ----- Selects the signal from the RGB input terminal of the RGB input board.
- S-VIDEO ----- Selects the signal from the S-VIDEO input terminal of the VIDEO input board.
- COMPO. ----- Selects the signal as COMPONENT signal from the RGB input terminal of the RGB input board.



- Go on to Step 2).

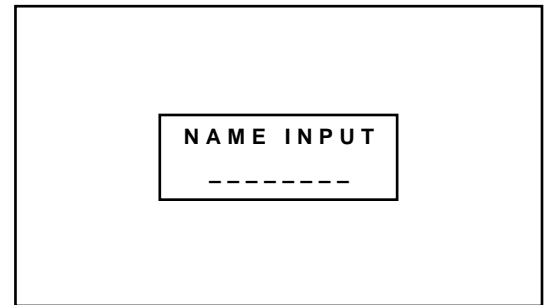
NOTE: Signal registry is not possible unless the installed input board matches the selected signal. Check if the installed input board matches the slot number.



2) Input the source name by selecting one character at a time with the INPUT buttons 1 through 10 and by moving the cursor with the CURSOR  button. After finishing the selection of the characters, press ENTER.

- Up to eight characters can be selected.
- Eight characters are assigned to one INPUT button.
- Whenever the INPUT button is pressed, characters will be rotated.
For example: A → B → C → 1 → A
- When pressing the INPUT button while holding down the CTL button, another group of characters will be rotated.
For example: a → b → c → ! → a
- The characters corresponding to these INPUT buttons are as follows:

	When using With CTL	
INPUT 1	A, B, C, and 1	a, b, c, and !
INPUT 2	D, E, F, and 2	d, e, f, and "
INPUT 3	G, H, I, and 3	g, h, i, and #
INPUT 4	J, K, L, and 4	j, k, l, and \$
INPUT 5	M, N, O, and 5	m, n, o, and %
INPUT 6	P, Q, R, and 6	p, q, r, and &
INPUT 7	S, T, U, and 7	s, t, u, and '
INPUT 8	V, W, X, and 8	v, w, x, and (
INPUT 9	Y, Z, ?, and 9	y, z, /, and)
INPUT 10	*, ,, ., and 0	; , : , +, and -



- If you have made an error in the input of a character, use the CURSOR  button and enter the correct letter or number.
To delete one character, move the CURSOR  button to the character to be deleted and then press the NORMAL button.
To delete all the entered name, hold down the CTL button then press NORMAL.
- The "INITIAL DATA SELECT" menu will be displayed.





3) Use the CURSOR  or  button to select an item and press ENTER.

Items to select

- DEFAULT Uses the data stored in the DEFAULT AREA
- TEMPORARY Uses the data which is currently displayed
- ENTRY NUMBER Copies the data from the registered signal

• When selecting “ENTRY NUMBER”, the “DATA COPY SELECT SOURCE” message will be displayed at the bottom of the screen. Use the CURSOR  or  button to select the signal you wish to copy the initial settings from and press ENTER.

• The “DATA COPY MODE” menu will be displayed.

Use the CURSOR  or  button to select an item and press ENTER.

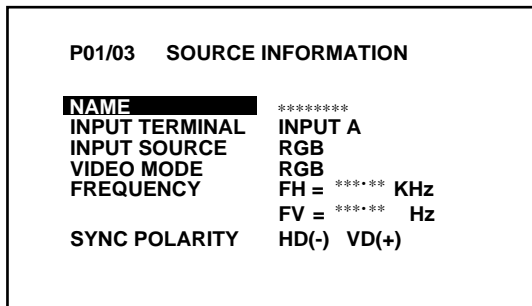
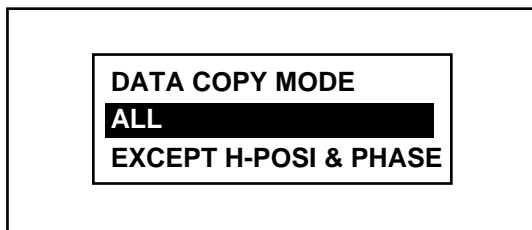
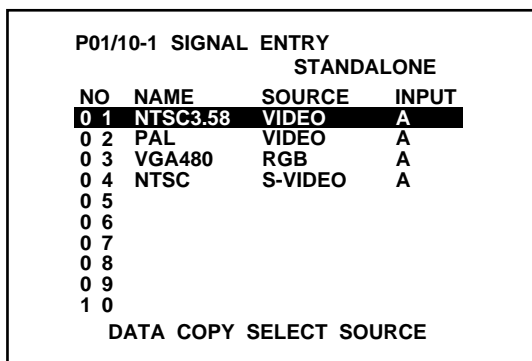
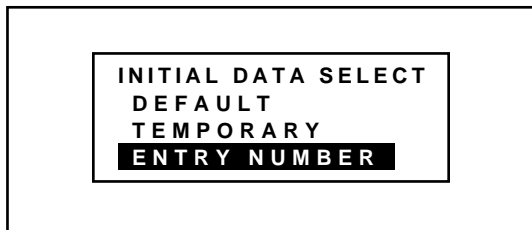
Items to select

- ALL Copies all the settings.
- EXCEPT H-POSI&PHASE
..... Copies the settings except H-position and Phase adjustments data.

• The “SOURCE INFORMATION” screen will be displayed.

• Pressing END will return to the “SIGNAL ENTRY” list. Go on to Step 5 .

NOTE: You can check and change various parameters on the “SOURCE INFORMATION” menu. See page 29.



SIGNAL ENTRY

■ When selecting “ENTRY COPY”

You can copy one of the registered input to another selected line.
To do this, proceed as follows:

- 1) Use the CURSOR \leftarrow or \rightarrow button to select “ENTRY COPY” and then press ENTER.
 - The “ENTRY COPY SELECT SOURCE” message will be displayed at the bottom of the screen.
- 2) Use the CURSOR \leftarrow or \rightarrow button to select a line you wish to copy from and then press ENTER.
 - The “ENTRY COPY SELECT DESTINATION” message will be displayed at the bottom of the screen.
- 3) Use the CURSOR \leftarrow or \rightarrow button to select a line you wish to copy to and press ENTER.
 - When there is already a registered signal in the selected line, the “ENTRY DATA OVERWRITE?” prompt is displayed. Use the CURSOR \leftarrow or \rightarrow button to select “YES” or “NO” and then press ENTER.
 - When the “ENTRY COPY END” message is displayed, this completes the ENTRY COPY mode.
 - The “SIGNAL ENTRY” list is displayed. Go on to Step 5 .

Items to select

- YES Overwrites the selected signal that has already been registered.
- NO Stops overwriting.

■ When selecting “ENTRY MOVE”

You can move one of the registered inputs to another selected line. To do this, proceed as follows:

- 1) Use the CURSOR \leftarrow or \rightarrow button to select “ENTRY MOVE” and then press ENTER.
 - The “ENTRY MOVE SELECT SOURCE” message will be displayed at the bottom of the screen.
- 2) Use the CURSOR \leftarrow or \rightarrow button to select a line you wish to move and then press ENTER.
 - The “ENTRY MOVE SELECT DESTINATION” message will be displayed at the bottom of the screen.
- 3) Use the CURSOR \leftarrow or \rightarrow button to select a line you wish to move to and press ENTER.
 - When there is already a registered signal in the selected line, the “ENTRY DATA OVERWRITE?” prompt will be

```
SIGNAL ENTRY
NEW ENTRY
ENTRY COPY
ENTRY MOVE
ENTRY DELETE
DATA COPY
CHANGE DEFAULT
SOURCE EDIT
```

```
P01/10-1 SIGNAL ENTRY
                STANDALONE
NO  NAME      SOURCE  INPUT
0 1  NTSC3.58  VIDEO   A
0 2  PAL       VIDEO   A
0 3  VGA480    RGB     A
0 4  NTSC      S-VIDEO A
0 5
0 6
0 7
0 8
0 9
1 0
ENTRY COPY SELECT SOURCE
```

```
ENTRY DATA OVERWRITE?
YES NO
```

```
SIGNAL ENTRY
NEW ENTRY
ENTRY COPY
ENTRY MOVE
ENTRY DELETE
DATA COPY
CHANGE DEFAULT
SOURCE EDIT
```

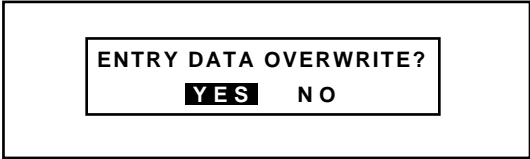
```
P01/10-1 SIGNAL ENTRY
                STANDALONE
NO  NAME      SOURCE  INPUT
0 1  NTSC3.58  VIDEO   A
0 2  PAL       VIDEO   A
0 3  VGA480    RGB     A
0 4  NTSC      S-VIDEO A
0 5
0 6
0 7
0 8
0 9
1 0
ENTRY MOVE SELECT SOURCE
```

displayed. Use the CURSOR or button to select “YES” or “NO” and then press ENTER.

- When the “ENTRY MOVE END” message will be displayed, this completes the ENTRY MOVE mode.
- The “SIGNAL ENTRY” list will be displayed. Go on to Step 5 .

Items to select

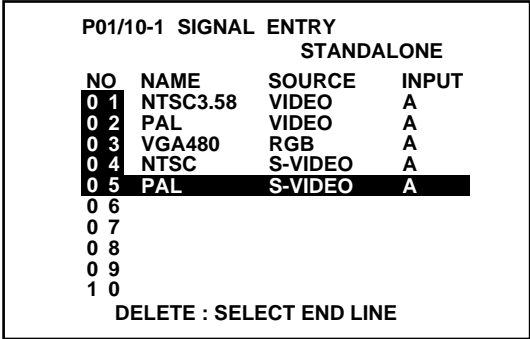
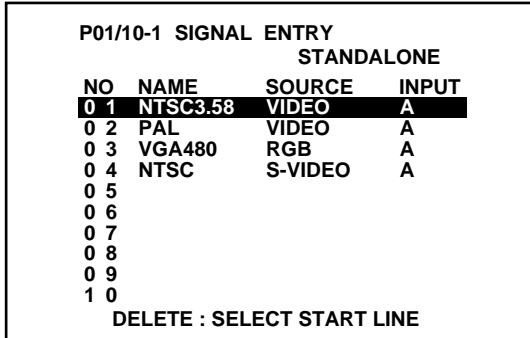
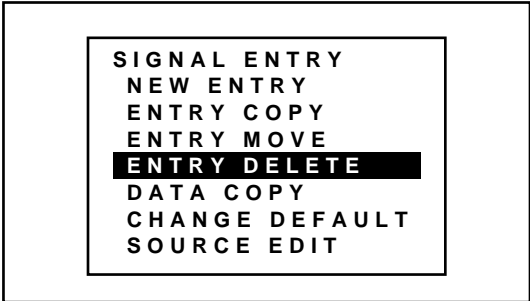
- YES Overwrites the selected signal that has already been registered.
- NO Stops overwriting.



■ When selecting “ENTRY DELETE”

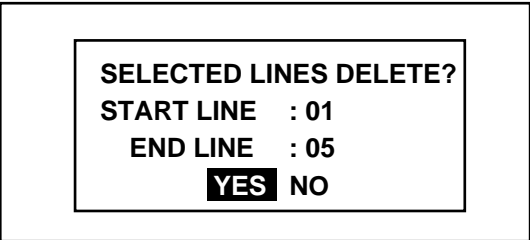
You can delete one of the signals in the currently selected lines. To do this, proceed as follows:

- 1) Use the CURSOR or button to select “ENTRY DELETE” and then press ENTER.
 - The “DELETE : SELECT START LINE” message will be displayed at the bottom of the screen.
- 2) Use the CURSOR or button to select the first of the lines you wish to delete and then press ENTER.
 - The “DELETE : SELECT END LINE” message will be displayed at the bottom of the screen.
- 3) Use the CURSOR or button to select the end of the lines you wish to delete and then press ENTER.
 - The “SELECT LINE DELETE?” menu will be displayed.
- 4) Use the CURSOR or button to select "YES/NO" and then press ENTER.
 - The “SIGNAL ENTRY” list will be displayed. Go on to Step 5 .



Items to select

- YES Deletes the selected signal that has already been registered.
- NO Stops deleting.



SIGNAL ENTRY

■ When selecting “DATA COPY”

To help assist in adjusting multiple inputs this projector has a feature called DATA COPY. This feature allows you to copy the memory data from one input to another input. By copying this data from an input that has already been adjusted to an existing input you will not have to do a complete adjustment.

To do this, proceed as follows:

- 1) Use the CURSOR \leftarrow or \rightarrow button to select “DATA COPY” and then press ENTER.
 - The “DATA COPY SELECT SOURCE” message will be displayed at the bottom of the screen.
- 2) Use the CURSOR \leftarrow or \rightarrow button to select the signal to copy from and then press ENTER.
 - The “DATA COPY SELECT DESTINATION” message will be displayed at the bottom of the screen.
- 3) Use the CURSOR \leftarrow or \rightarrow button to select the signal you wish to copy to and press ENTER.
 - The “DATA COPY MODE” menu will be displayed. Use the CURSOR \leftarrow or \rightarrow button to select an item and press ENTER.

Items to select

- ALL..... Copies all the settings.
- EXCEPT H-POSI&PHASE.. Copies the settings except H-position and Phase adjustments data.

- When “GAIN DATA COPY END” message will be displayed, this completes the DATA COPY mode.
- The “SIGNAL ENTRY” list will be displayed. Go on to Step 5

■ When selecting “CHANGE DEFAULT”

All of the adjustment data of the selected signal will be stored in the DEFAULT AREA.

The data stored in the DEFAULT AREA can be recalled by pressing the NORMAL button.

Selecting “DEFAULT” from the “INITIAL DATA SELECT” menu during signal entry will utilize the data stored in the “DEFAULT AREA”.

NOTE: The default area is comprised of six locations depending on the horizontal frequency. The adjustment data will be stored in one of these locations corresponding its horizontal frequency. To refer the current default area, see "DEFAULT DATA" of the OPTION menu on page 118.

To do this, proceed as follows:

```
SIGNAL ENTRY
NEW ENTRY
ENTRY COPY
ENTRY MOVE
ENTRY DELETE
DATA COPY
CHANGE DEFAULT
SOURCE EDIT
```

```
P01/10-1 SIGNAL ENTRY
STANDALONE
NO NAME SOURCE INPUT
0 1 NTSC3.58 VIDEO A
0 2 PAL VIDEO A
0 3 VGA480 RGB A
0 4 NTSC S-VIDEO A
0 5
0 6
0 7
0 8
0 9
1 0
DATA COPY SELECT SOURCE
```

```
DATA COPY MODE
ALL
EXCEPT H-POSI & PHASE
```

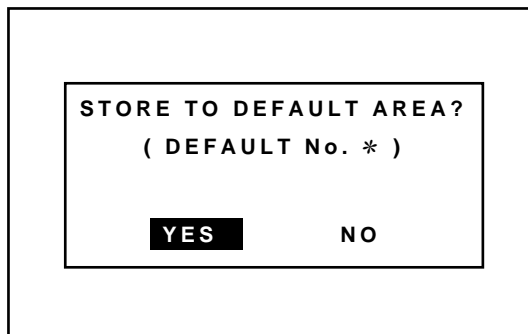
```
SIGNAL ENTRY
NEW ENTRY
ENTRY COPY
ENTRY MOVE
ENTRY DELETE
DATA COPY
CHANGE DEFAULT
SOURCE EDIT
```


- 1) Use the CURSOR \leftarrow or \rightarrow button to select “CHANGE DEFAULT” and press ENTER.
 - The “STORE TO DEFAULT AREA?” will be displayed.
- 2) Use the CURSOR \leftarrow or \rightarrow button to select an item and press ENTER.

Items to select

- YES The picture parameter data of the selected signal will be stored in the DEFAULT AREA.
- NO The picture parameter data of the selected signal will not be stored in the DEFAULT AREA.

- If the “SIGNAL ENTRY” list will be displayed, this completes the CHANGE DEFAULT mode.
- To end the “SIGNAL ENTRY” list, go on to Step 5.



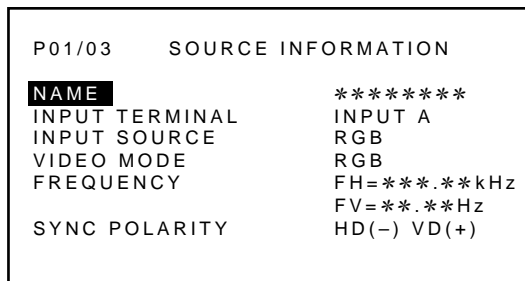
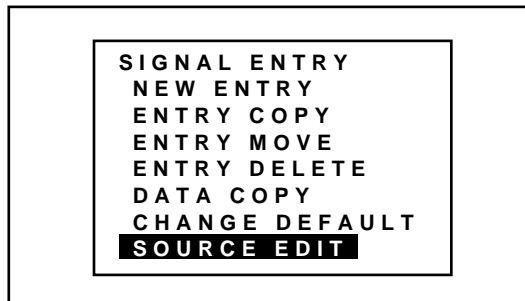
■ When selecting “SOURCE EDIT”

This feature allows you to change various parameters of the source on the selected line. This can be done to the current projected signal as well as not projected source.

NOTE: The setting INPUT TERMINAL cannot be done to the current projected signal.

To do this, proceed as follows:

- 1) Use the CURSOR \leftarrow or \rightarrow button to select “SOURCE EDIT” and then press ENTER.
 - The “SOURCE INFORMATION” screen will be displayed.
 - The “SOURCE INFORMATION” screen will be also displayed by pressing the INFO button on the service remote while the SIGNAL ENTRY is displayed.
- 2) Use the CURSOR \leftarrow or \rightarrow button to select the item and then press ENTER.
 - The selected setting screen is displayed.



SIGNAL ENTRY

■ When selecting "INPUT TERMINAL"

You can select the input terminal for the registered signal. This feature is useful when you need to change the input terminal due to adding optional equipment.

NOTE: This setting cannot be done to the current projected signal.

To do this, proceed as follows:

- 1) Use the CURSOR buttons to select "INPUT TERMINAL" and then press ENTER.
 - The "INPUT TERMINAL SELECT" menu will be displayed.

When used in the stand alone operation:

Use the CURSOR or button to select an input slot from three slots: INPUT A, INPUT B, and INPUT C, and press ENTER.

- The "SIGNAL ENTRY" screen is displayed.

Items to select

- INPUT A Standard installed terminal
- INPUT B Optional board terminal
- INPUT C Optional board terminal

When used with a single Switcher ISS-6020/ISS-6020G:

Use the CURSOR or button to select the desired slot number "1" through "10 (0)" of the Switcher and press ENTER.

- The "SIGNAL ENTRY" screen is displayed.

When used with two or more Switchers ISS-6020/ISS-6020G:

Use the CURSOR or button to select the master slot number "1" through "10 (0)" first from the master menu, then select the slave slot number "1" through "10 (0)" from the slave menu and press ENTER.

- The "SIGNAL ENTRY" screen is displayed.
- For changing parameters of the setting feature, see pages 29 to 35.

P01/03	SOURCE INFORMATION
NAME	*****
INPUT TERMINAL	INPUT A
INPUT SOURCE	RGB
VIDEO MODE	RGB
FREQUENCY	FH=***.***kHz
	FV=**.**Hz
SYNC POLARITY	HD(-) VD(+)

INPUT TERMINAL SELECT INPUT A INPUT B INPUT C
--

MASTER SLOT-01 SLOT-02 SLOT-03 SLOT-04 SLOT-05 SLOT-06 SLOT-07 SLOT-08 SLOT-09 SLOT-10
--

MASTER SLOT-01 SLOT-02 SLOT-03 SLOT-04 SLOT-05 SLOT-06 SLOT-07 SLOT-08 SLOT-09 SLOT-10	SLAVE SLOT-01 SLOT-02 SLOT-03 SLOT-04 SLOT-05 SLOT-06 SLOT-07 SLOT-08 SLOT-09 SLOT-10
--	---

- 5 To complete the signal entry, press the END button.
- Whenever the END button is pressed, the menus will sequence in this order:
“ADJUST” menu→ Source screen.
 - When your passcode is in effect, the “RETURN USER MODE?” screen will be displayed. If this happens, use the CURSOR or button to select either “YES” or “NO” and press ENTER.

**Items to select**

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

SIGNAL ENTRY

Checking and Setting Various Parameters

Parameters of the signal currently projected can be displayed.

For changing parameters of the other registered signals, perform on the SIGNAL ENTRY screen. See pages 19 to 35.

To view or change the parameters, proceed as follows:

- 1 Press the ADJUST button.

The "ADJUST" menu will be displayed.

NOTE: The projector may ask you to enter your passcode.

- See page 59 for Passcode explanation.

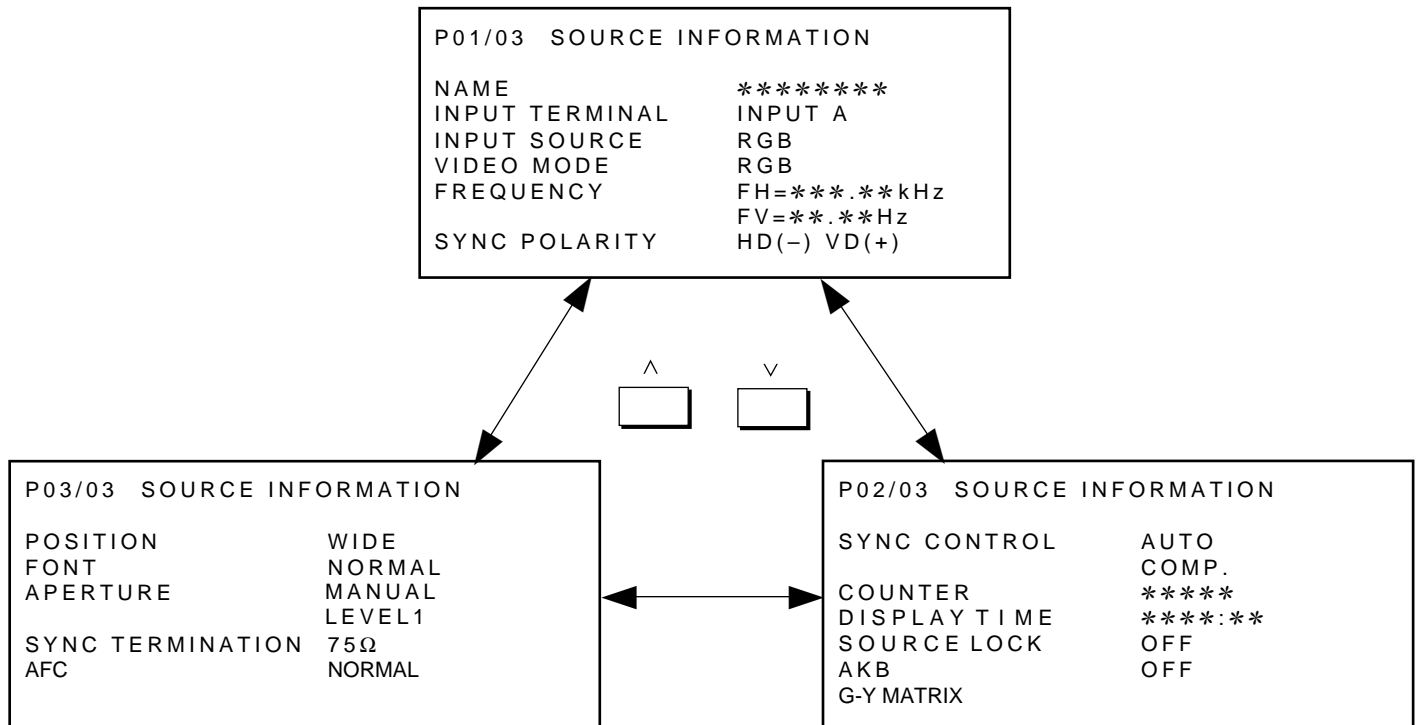
- 2 Press the INFO button.

- The "SOURCE INFORMATION" screen will be displayed.
- The "SOURCE INFORMATION" screen will be displayed also when you exit the "SIGNAL ENTRY" screen.

- 3 Check and / or set the various parameters of the signal currently projected.

The menu items you can set are NAME, SYNC CONTROL, COUNTER, DISPLAY TIME, SOURCE LOCK, AKB, G-Y MATRIX, POSITION, FONT, APERTURE, SYNC TERMINATION and AFC. See the following pages for an explanation of each setting.

- ADJUST -	
1 /	SIGNAL ENTRY
2 /	FOCUS
3 /	ALIGNMENT
4 /	CONVERGENCE
5 /	KELVIN
6 /	R, G, B GAIN
7 /	PASSCODE
8 /	OPTION
9 /	REF. ADJUST



■ **Setting “NAME”**

This function is used to change a user name that has previously been entered.

To do this, proceed as follows:

1) Use the CURSOR buttons to select “NAME” and then press ENTER.

- The “NAME INPUT” screen will be displayed.

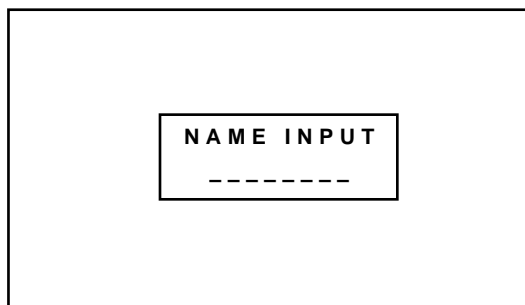
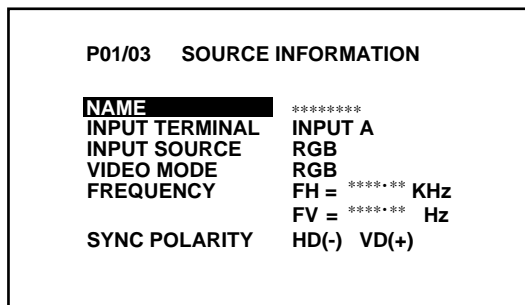
2) Input a new source name by selecting one character at a time with the INPUT buttons 1 through 10 and by moving the cursor with the CURSOR button. Only after completely finishing the selection of the characters, press ENTER.

- If you have made an error, use the CURSOR button and reenter the correct letter or number.

To delete one character, move the under bar to the character to be deleted and then press the NORMAL button.

To delete all the entered name, hold down the CTL button then press the NORMAL button.

- The above is the same procedure of the signal entry. See page 20 for more details.
- The screen will return to the “SOURCE INFORMATION” screen.



■ **Setting “SYNC CONTROL”**

This function is used to select the detection method of the sync signal for an RGB signal.

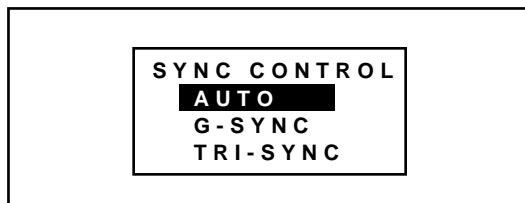
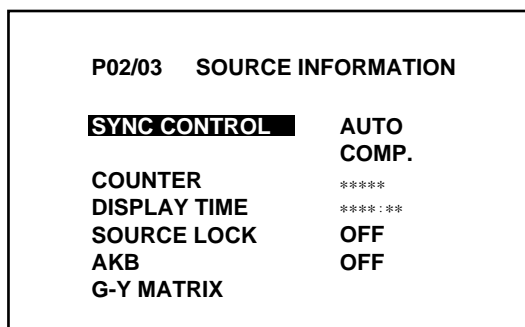
To do this, proceed as follows:

1) Use the CURSOR buttons to select “SYNC CONTROL” and then press ENTER.

- The “SYNC CONTROL” menu will be displayed.

2) Use the CURSOR button or button to select either “AUTO”, “G-SYNC”, or “TRI-SYNC” and press ENTER.

- The screen will return to the “SOURCE INFORMATION” screen.
- When “AUTO” is selected, the sync type will be displayed.
- Select “AUTO” in normal operation.



On-screen display

- AUTO ----- Detects automatically a composite or HV separate sync signal.
- G-SYNC -- When sync on green and HV separate signals are accepted at the same time, the screen may be greenish. If this happens, select this “G-SYNC” to return to the normal screen.
- TRI-SYNC Selects this mode when a tri-sync (HDTV) signal is selected.

SIGNAL ENTRY

■ Setting “COUNTER”

This function is used to reset the number of times a signal is selected for display.

- 1) Use the CURSOR buttons to select the “COUNTER” and then press ENTER.
 - The “COUNTER RESET?” screen will be displayed.

P02/03 SOURCE INFORMATION	
SYNC CONTROL	AUTO COMP.
COUNTER	****
DISPLAY TIME	***:**
SOURCE LOCK	OFF
AKB	OFF
G-Y MATRIX	

- 2) Use the CURSOR or button to select either “YES” or “NO” and then press ENTER.
 - To reset the counter, select “YES”. If you do not need to reset, select “NO”.
 - The screen will return to the “SOURCE INFORMATION” screen.

COUNTER RESET?	
YES	NO

■ Setting “DISPLAY TIME”

This function is used to reset the time of signal display.

- 1) Use the CURSOR buttons to select “DISPLAY TIME” and then press ENTER.
 - The “DISPLAY TIME RESET?” screen will be displayed.

P02/03 SOURCE INFORMATION	
SYNC CONTROL	AUTO COMP.
COUNTER	****
DISPLAY TIME	***:**
SOURCE LOCK	OFF
AKB	OFF
G-Y MATRIX	

- 2) Use the CURSOR or button to select either “YES” or “NO” and then press ENTER.
 - To reset the timer, select “YES”. If you do not need to reset, select “NO”.
 - The screen will return to the “SOURCE INFORMATION” screen.

DISPLAY TIME RESET?	
YES	NO

■ **Setting “SOURCE LOCK”**

This function is used to stop the projector’s automatic signal discrimination of various RGB signals.

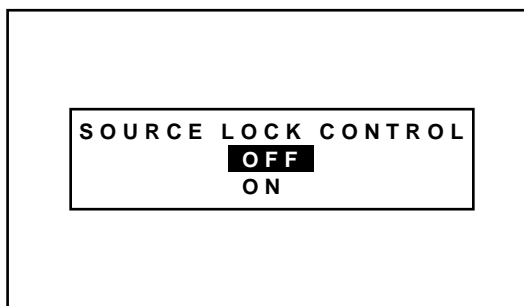
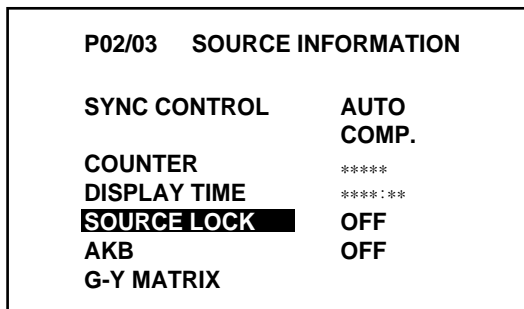
Set the lock control to the ON position when connecting an intermittent or low quality signal.

- 1) Use the CURSOR buttons to select “SOURCE LOCK” and press ENTER.
 - The “SOURCE LOCK CONTROL” menu will be displayed.

- 2) Use the CURSOR or button to select either “OFF” or “ON” and press ENTER.
 - The screen will return to the “SOURCE INFORMATION” screen.
 - Select “OFF” in normal operation.

Items to select

- OFF Deactivates the projector’s automatic signal discrimination of RGB signals.
- ON Activates the projector’s automatic signal discrimination of RGB signals.



■ **Setting “AKB”**

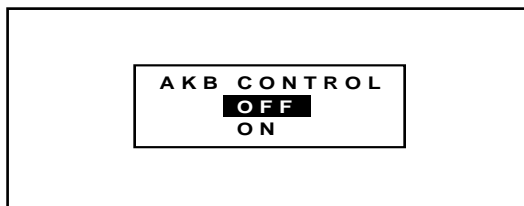
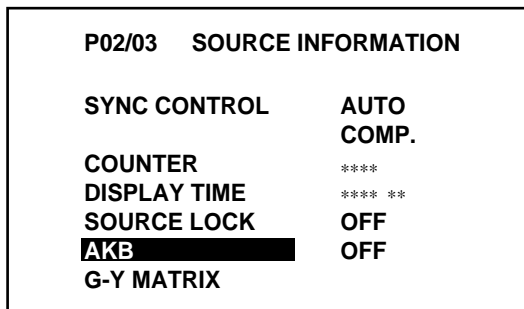
This function is used to activate the auto white balance control.

- 1) Use the CURSOR buttons to select “AKB” and then press ENTER.
 - The “AKB CONTROL” menu will be displayed.

- 2) Use the CURSOR or button to select either “OFF” or “ON” and then press ENTER.
 - The screen will return to the “SOURCE INFORMATION” screen.

NOTE: When “ON” is selected, the AKB detection signal will appear on the top of the screen. If you wish to remove it, select “OFF”.

- If the projector is used on the AKB OFF for an extended period, it could affect the white balance settings. To avoid this, set AKB to ON periodically.



SIGNAL ENTRY

■ Setting “G-Y MATRIX”

This function is used to set a matrix ratio for a COMPONENT signal.

Note that this function is not available unless a COMPONENT signal is accepted.

To do this, proceed as follows:

- 1) Use the CURSOR buttons to select “G-Y MATRIX” and press ENTER.
 - The “G-Y MATRIX” menu will be displayed.
- 2) Use the CURSOR or button to select an item and press ENTER.
 - The screen will return to the “SOURCE INFORMATION” screen.

Items to select

- HD ----- For an HDTV signal
- NTSC 1-3----- For a DVD signal

P02/03 SOURCE INFORMATION

SYNC CONTROL	AUTO COMP.
COUNTER	****
DISPLAY TIME	**** **
SOURCE LOCK	OFF
AKB	OFF
G-Y MATRIX	

G-Y MATRIX
HD
NTSC1
NTSC2
NTSC3

■ **Selecting “POSITION”**

This function is used to select the vertical area mode for the “POSITION-SHIFT” adjustment.

To do this, proceed as follows:

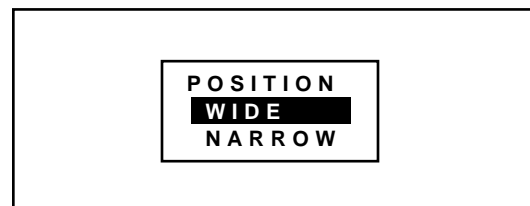
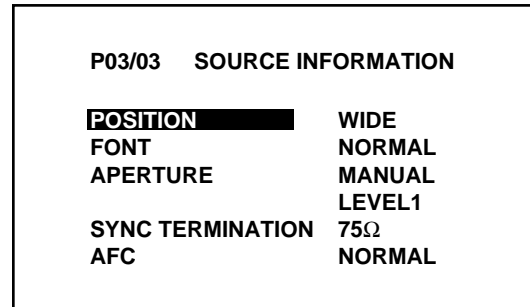
- 1) Use the CURSOR buttons to select “POSITION” and then press ENTER.
 - The “POSITION” menu will be displayed.

- 2) Use the CURSOR or button to select either “WIDE” or “NARROW” and then press ENTER.
 - The screen will return to the “SOURCE INFORMATION” screen.
 - Select “WIDE” in normal operation.

Items to select

- WIDE Adjustment area is wide.
- NARROW . Adjustment area is narrow.

NOTE: Selecting “NARROW” may solve problems caused by an interlace input signal.



■ **Setting “FONT”**

This function is used to specify the appropriate font size to the on-screen message.

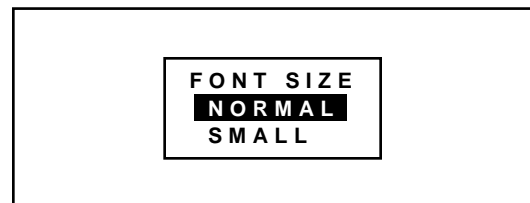
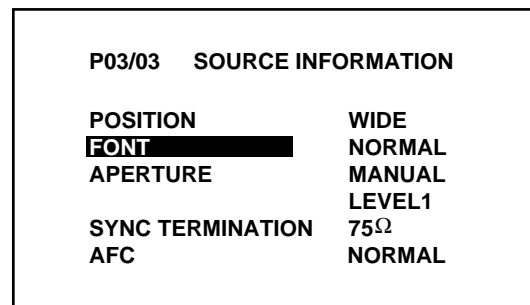
To do this, proceed as follows:

- 1) Use the CURSOR buttons to select “FONT” and then press ENTER.
 - The “FONT SIZE” menu will be displayed.

- 2) Use the CURSOR or button to select either “NORMAL” or “SMALL” and then press ENTER.
 - The screen will return to the “SOURCE INFORMATION” screen.

Items to select

- NORMAL . Calculates the appropriate font size with the vertical scanning lines to display the on-screen message in the appropriate size.
- SMALL Displays the on-screen message in the font size of 75 percent of the NORMAL size.



SIGNAL ENTRY

■ Setting “APERTURE”

This function is used to correct picture edge by changing the frequency response of the video circuit. You can select two aperture modes: manual and auto.

- 1) Use the CURSOR buttons to select “APERTURE” , then press ENTER.
 - The “APERTURE “ menu will be displayed.
- 2) Use the CURSOR or button to select “MANUAL” or “AUTO”, then press ENTER.

Items to select

- MANUAL . Selects one of the eight aperture levels.
- AUTO Corrects the aperture automatically according to the horizontal frequency of the input signal.

- When "MANUAL" is selected, the "LEVEL" menu is displayed. Use the CURSOR or button to select the desired correction level.
- The screen will return to the “SOURCE INFORMATION” screen.

NOTE: The default setting is "MANUAL-LEVEL 1".

■ Setting “SYNC TERMINATION”

This function is used to select the impedance of the sync signal.

- 1) Use the CURSOR buttons to select “SYNC TERMINATION” , then press ENTER.
 - The “SYNC TERMINATION” menu will be displayed.
- 2) Use the CURSOR or button to select “ 75 Ω” or “Hi-Z”, then press ENTER.
 - The screen will return to the “SOURCE INFORMATION” screen.

Items to select

- 75 Ω ----- Set to the 75 ohm impedance of the sync signal.
- Hi-Z ----- Sets to the high impedance of the sync signal.

NOTE: The default setting is “75 Ω”.

This should be “75 Ω” for normal use. Select the “Hi-Z” when inputting a TTL signal.

P03/03	SOURCE INFORMATION	
POSITION		WIDE
FONT		NORMAL
APERTURE		MANUAL
		LEVEL 1
SYNC TERMINATION		75Ω
AFC		NORMAL

APERTURE
MANUAL
AUTO

LEVEL
LEVEL 0
LEVEL 1
LEVEL 2
LEVEL 3
LEVEL 4
LEVEL 5
LEVEL 6
LEVEL 7

P03/03	SOURCE INFORMATION	
POSITION		WIDE
FONT		NORMAL
APERTURE		MANUAL
		LEVEL 1
SYNC TERMINATION		75Ω
AFC		NORMAL

SYNC TERMINAL
75Ω
Hi-Z

■ **Setting “AFC”**

This function is used to reduce jitter by changing time-constant of AFC of the sync generator circuit.

- 1) Use the CURSOR buttons to select “AFC”, then press ENTER.
 - The “AFC” menu will be displayed.
- 2) Use the CURSOR or button to select “NORMAL” or “SLOW”, then press ENTER.
 - The screen will return to the “SOURCE INFORMATION” screen.

Items to select

- NORMAL Standard AFC time-constant.
- ON Slows the AFC time-constant.

NOTE: The default setting is NORMAL.
Although jitter will be reduced, image distortion may appear at the top of the screen if the AFC mode is set to SLOW.

P03/03	SOURCE INFORMATION
POSITION	WIDE
FONT	NORMAL
APERTURE	MANUAL
	LEVEL 1
SYNC TERMINATION	75Ω
AFC	NORMAL

AFC NORMAL SLOW

To complete, press the END button.

- Whenever the END button is pressed, the menus will sequence in this order:
“ADJUST” menu → Source screen
- When your passcode is in effect, the “RETURN USER MODE?” screen is displayed. If this happens, use the CURSOR or button to select either “YES” or “NO” and press ENTER.

Items to select

- YES When you try to enter the ADJUST mode the next time, you will need to re-enter your passcode.
- NO When you try to enter the ADJUST mode the next time, you will not need to re-enter your passcode.

RETURN USER MODE? YES NO

Storing Projector Settings (Automatic Save Feature)

You have two options to store projector settings in the memory: automatically and manually.

- Storing time is four seconds.
- The Automatic Save Feature mode has been set to DISABLE by factory. For information on setting, see "Automatic Save Feature" on page 86.

■ When the Automatic Save Feature mode is set to "ENABLE", projector settings will be stored in the projector's memory automatically.



Settings are stored automatically when any one of the following procedures is performed:

- The END button is pressed several times to return the adjustment screen to the source screen.
- One input is switched to another.
- The projector is turned off.
- After every 10 minutes of elapsed time.

■ When the Automatic Save Feature mode is set to "DISABLE", projector settings can be stored in the projector's memory manually.

When you try to return the source screen by pressing END several times, the "STORE ?" menu is displayed.

To manually save settings, proceed as follows:

1. Use the END button to display the "STORE" menu from the current adjustment screen or menu.
2. Use the CURSOR  or  button to highlight "CURRENT", "NEW", or "CANCEL" and press ENTER.



Items to select

- CURRENT ----- Overwrites the currently projected signal and saves the settings. NOTE: An unregistered signal cannot be stored under the "CURRENT" settings.
- NEW ----- Starting at memory location No.51, this function saves an unregistered signal as a new signal in memory.
- CANCEL ----- Does not save settings.

BEFORE SET-UP

■ When selecting “NEW”

The current settings are registered as a new signal and are saved to an unassigned line starting at memory location No.51.

A registered name is automatically given.

The “NEW ENTRY?” menu will be displayed.

Use the CURSOR or button to highlight “YES” or “NO” and press ENTER.

Items to select

- YES----- Registers settings as a new signal and saves the signal in an unassigned location starting at memory location No.51.
- NO ----- Does not register settings.

A registered name is given as follows:

VIDEO/S-VIDEO ----- Video standard with a list number
e.g. NTSC51 or PAL52.
RGB ----- ”RGB” with a list number e.g.
RGB60.
COMPONENT ----- ”COMPO” with a list number, e.
g. COMPO 70.

NOTE:

- If the Input list does not have any unassigned memory location starting at No. 51 then, the “NEW” item will be selectable. For signal registration see “SIGNAL ENTRY” on page 19.
- The Automatic Save Feature is available only for signals listed in the INPUT LIST.

NEW ENTRY?	
LIST No.	**
NAME	*****
YES	NO

On ADJUST MODE

The ADJUST mode contains various adjustment items for set-up. Open the ADJUST menu and select the item you wish to adjust. To display the ADJUST menu, proceed as follows:

- 1 Press the ADJUST button.
 - The projector may ask for your passcode.
- 2 Enter your registered passcode.

When a passcode has not been registered:

- Since no passcode is programmed at the factory, pressing the ADJUST button will open the ADJUST menu.
- See “Entering Passcode”, “Registering Passcode”, “Changing Your Passcode” and “Canceling Your Passcode” on pages 61 through 66.

When your passcode has already been registered:

- When finishing the ADJUST mode, the “RETURN USER MODE?” menu will be displayed. If you select “YES” and press ENTER to end the ADJUST mode, you will have to enter your passcode to re-enter the ADJUST mode.
- When finishing the ADJUST mode by either selecting “NO” or pressing END, you do not need to enter your passcode to re-enter the ADJUST mode. To exit the ADJUST mode temporarily during adjusting, select “NO”.



PASSCODE?

BEFORE SET-UP

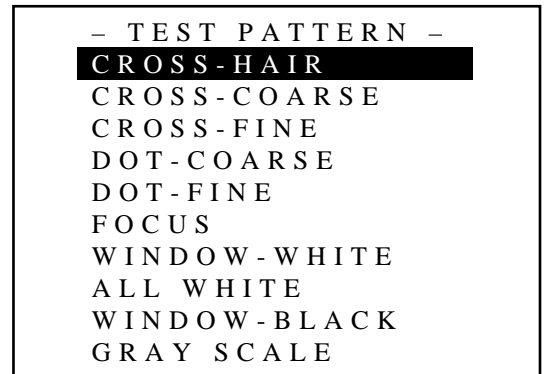
Test Pattern

This projector will generate a selection of test signals.

Ten kinds of internal test patterns can be selected from the TEST PATTERN menu.

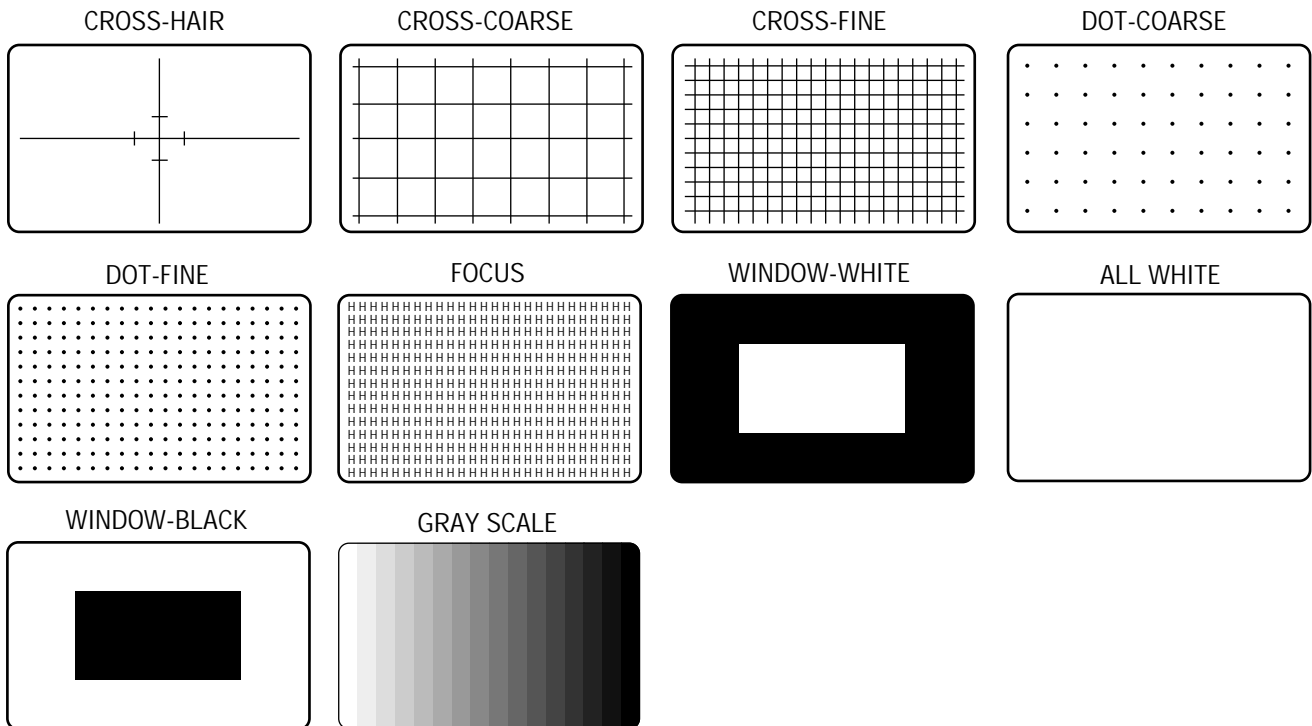
To display the TEST PATTERN menu, proceed as follows:

- 1 Press the TEST button on the Full function remote control.
 - The “TEST PATTERN” menu will be displayed.
 - When the END button is pressed, the “TEST PATTERN” menu will disappear.
- 2 Use the CURSOR \leftarrow or \rightarrow button to highlight the test pattern you wish to use and press ENTER.
 - The selected test pattern will be displayed.
- 3 To return to the source screen, press the TEST and then the END button.
 - When the TEST button is pressed, the “TEST PATTERN” menu will be displayed and when the END button is pressed, the screen will be changed to the source screen.
 - The projector will return to the original source screen by pressing the END button only when *no* menu or *no* adjustment screen is displayed.



NOTE: If there is no test pattern, the beams have been turned off by the R, G, and B buttons on the remote control.

Adjustment test pattern



PROJECTION CONFIGURATION CHANGE

For XG135LC

To change screen size only:

1) Set the focus ring to the proper position. (See page 17.)		
For 100" screen size R – H-3, V-3 G – H-5, V-3 B – H-3, V-3	For 120" screen size R – H-3.5, V-2.5 G – H-5, V-2.5 B – H-3.5, V-2.5	For 180" screen size R – H-3.5, V-2.5 G – H-5, V-2.5 B – H-3.5, V-2.5
2) Adjust the angle of the CRT's. (See page 18.)		
For 100" screen size Move the CRT to the 100 position	For 120–180" screen size and the other screen sizes Move the CRT to the 120, 180, or 60–300 position	

To change to the desk top system (front)

1) Reverse the scan. (See page 14.)		
2) Set the focus ring to the proper position. (See page 17.)		
For 100" screen size R – H-3, V-3 G – H-5, V-3 B – H-3, V-3	For 120" screen size R – H-3.5, V-2.5 G – H-5, V-2.5 B – H-3.5, V-2.5	For 180" screen size R – H-3.5, V-2.5 G – H-5, V-2.5 B – H-3.5, V-2.5
3) Adjust the angle of the CRT's. (See page 18.)		
For 100" screen size Move the CRT to the 100 position	For 120–180" screen size and the other screen sizes Move the CRT to the 120, 180, or 60–300 position	
4) Select an installation from the PJ ORIENTATION menu in the SETTING menu. (See "Projection Type Selection" in the setup manual.)		

To change to the ceiling mount system (rear)

1) Reverse the scan. (See page 14.)		
2) Set the focus ring to the proper position. (See page 17.)		
For 100" screen size R – H-3, V-3 G – H-5, V-3 B – H-3, V-3	For 120" screen size R – H-3.5, V-2.5 G – H-5, V-2.5 B – H-3.5, V-2.5	For 180" screen size R – H-3.5, V-2.5 G – H-5, V-2.5 B – H-3.5, V-2.5
3) Adjust the angle of the CRT's. (See page 18.)		
For 100" screen size Move the CRT to the 100 position	For 120–180" screen size Move the CRT to the 120, or 180.	
4) Select an installation from the PJ ORIENTATION menu in the SETTING menu. (See "Projection Type Selection" in the setup manual.)		

To change to the desk top system (rear, 0 projection angle)

1) Set the focus ring to the proper position. (See page 17.)		
For 100" screen size R – H-3, V-1 G – H-5, V-1 B – H-3, V-1	For 120" screen size R – H-3.5, V-1 G – H-5, V-1 B – H-3.5, V-1	For 180" screen size R – H-3.5, V-1 G – H-5, V-1 B – H-3.5, V-1
2) Adjust the angle of the CRT's (See page 18.)		
For 100" screen size Move the CRT to the 100 position	For 120–180" screen size and the other screen sizes Move the CRT to the 120, 180, or 60–300 position	
3) Select an installation from the PJ ORIENTATION menu in the SETTING menu. (See "Projection Type Selection" in the setup manual.)		

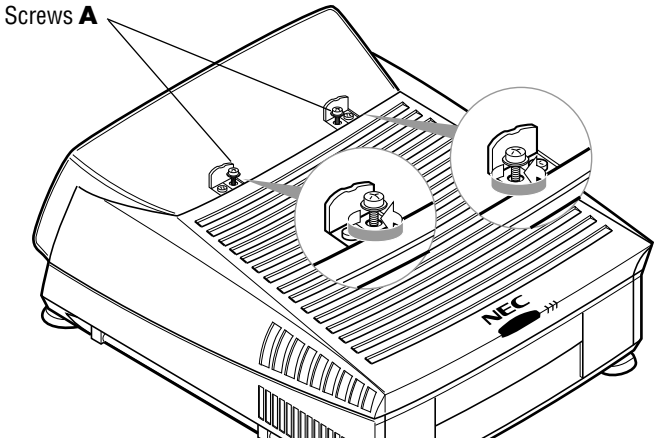
Removing and Reinstalling Top Cover

CAUTION:

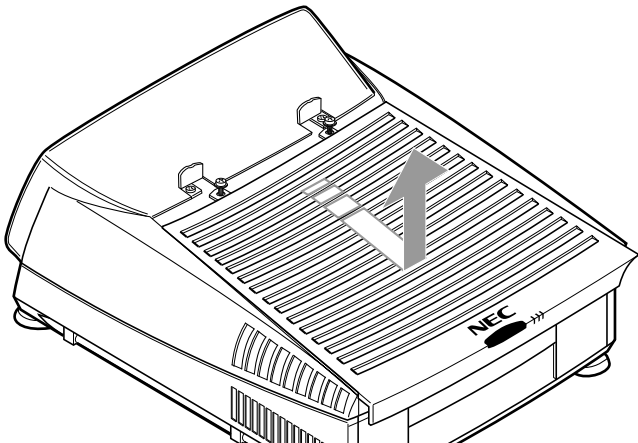
- Be sure to turn off the projector and unplug the power cord before opening the top cover.

To remove the top cover:

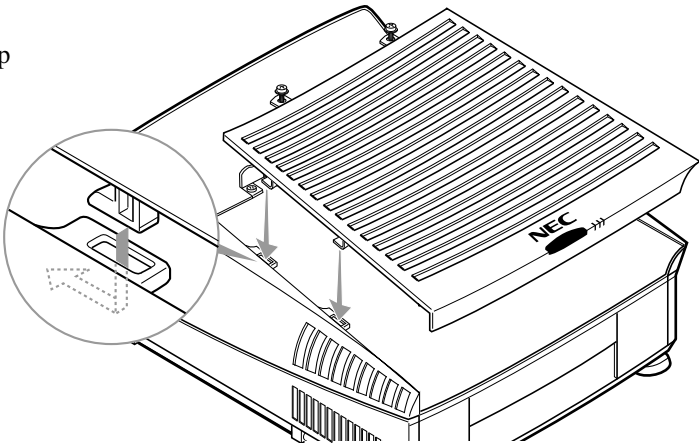
- ① Loosen four screws **A**.
 - These are retaining screws.
 - There are two lids on the top cover. Open the lid to access the two screws each.
 - The other two screws hold the front panel.



- ② Slide and open the top cover in the direction of the arrow.



- ③ To reinstall it, aligning the catches with the hole and slide the top cover in the direction of the arrow.
- ④ Tighten the two **A** screws.



PROJECTION CONFIGURATION CHANGE

Scan Reversal

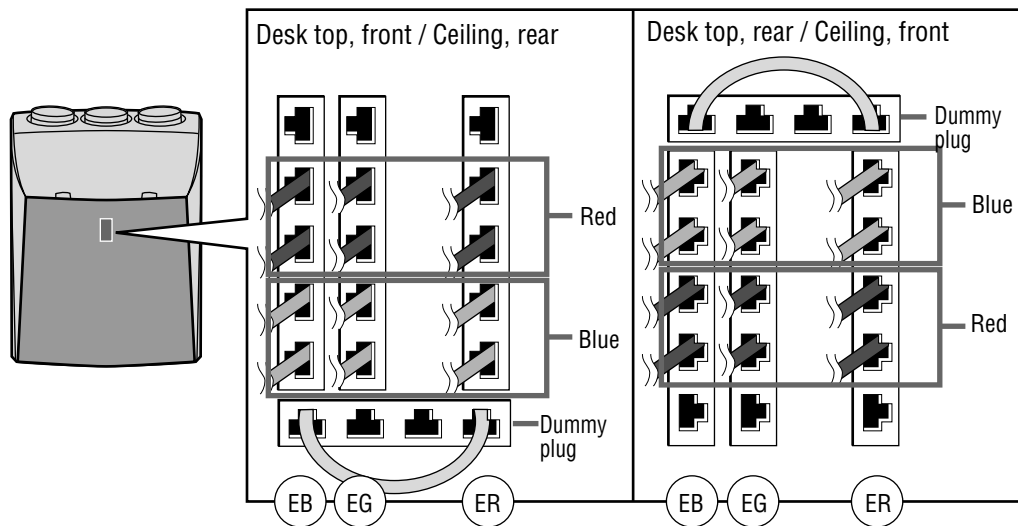
You will have to reverse the horizontal polarity when changing the projector's configuration.

NOTE: For vertical polarity, scan reversal can be changed using the PROJECTION feature in the SETTING MODE menu.

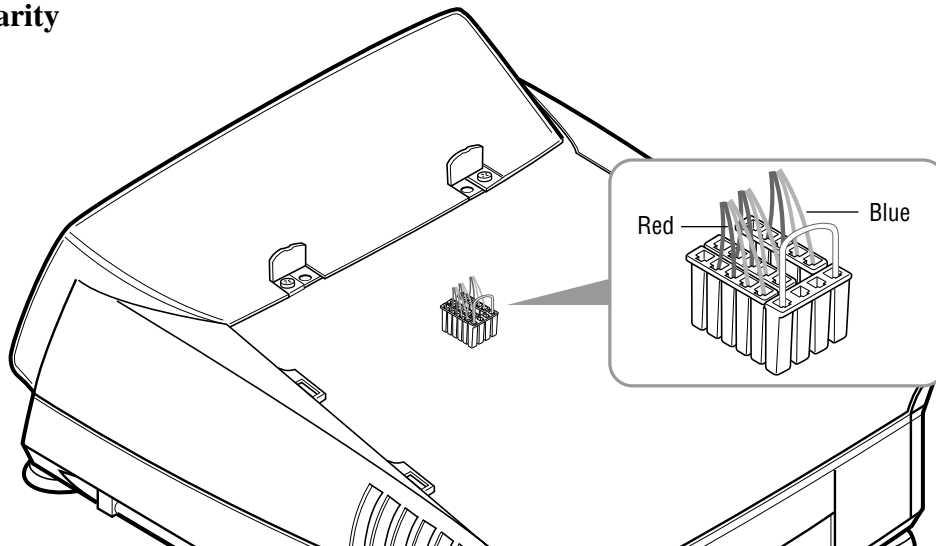
To reverse the scan, proceed as follows:

CAUTION: Always disconnect the projector from the AC source before reversing the plug. Failure to observe this precaution may result in electric shock or damage to the projector.

- ① Remove the top cover.
 - See Removing and reinstalling Top Cover section.
- ② Reverse the horizontal scan.
 - To reverse the scan there are three plugs on the sweep board. EB, EG and ER are the horizontal connectors. First remove the dummy plug. Secondly remove the plug and turn it 180 degrees, then reinstall. Do this for all three of horizontal connectors depending upon your application (See Table below). Third, install the dummy plug on the opposite side.

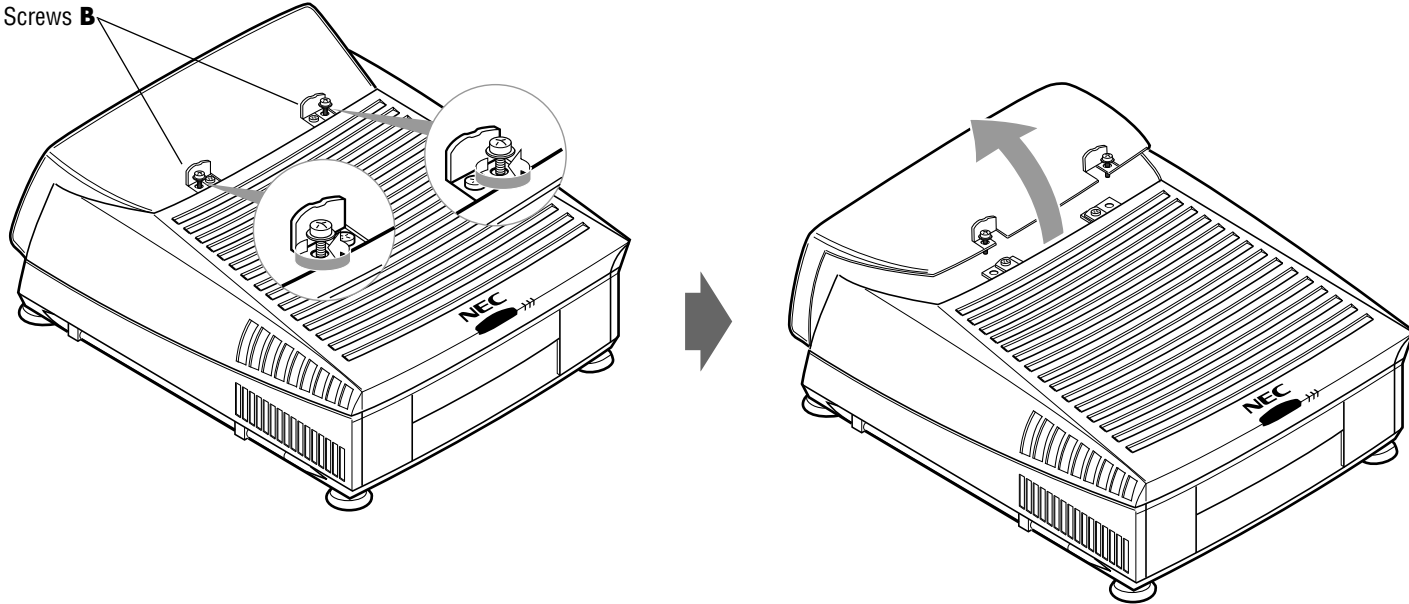


Horizontal polarity



Removing and Reinstalling Front Panel

The projector can project an image from 60 to 300 inches diagonal. From the factory the projector is set for ceiling mount, 100 inch diagonal screen size and a projection angle of 12.4 degrees. The projector can be used in three other degree applications. Before the following procedures, remove the front panel by loosening the two screws **B** which hold the front panel. There are two screws on each side.



• Reverse the preceding steps to reinstall the front panel.

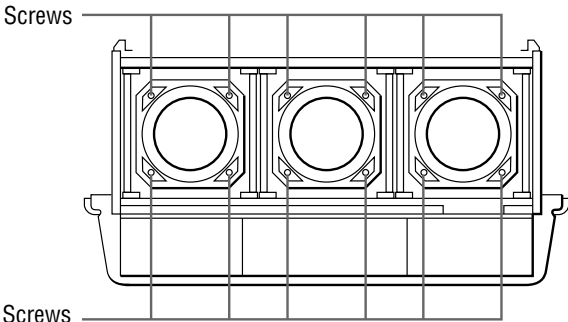
Screen Size Change(Adjusting Focus Rings and CRT Angle) for XG85

• **Adjusting Focus Rings for the XG85**

There are three sets of adjusting focus rings, two between each CRT and lens.
These focus rings are used for maintaining optimum edge focus for the various screen sizes and projection angles.
* When setting the focus rings or changing CRT angle, you must first remove the front panel.

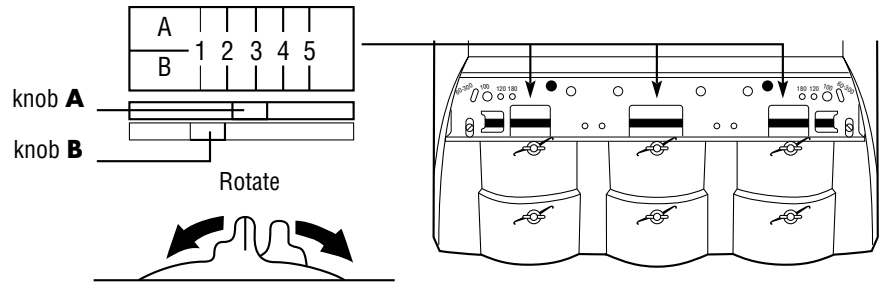
① Loosen the four screws at the lens.

CAUTION: Be careful not to remove any of the four screws completely. The falling lens can cause serious injury especially when the projector is installed on the ceiling.



PROJECTION CONFIGURATION CHANGE

- ② Rotate and set the knobs (**A** and **B**) to the right position. The table below lists which position the knob should be set to for any given screen size and angle. The similar table is also on the back of the front panel.



- ③ Tighten the four screws at the lens.

Position of Knobs for the XG85

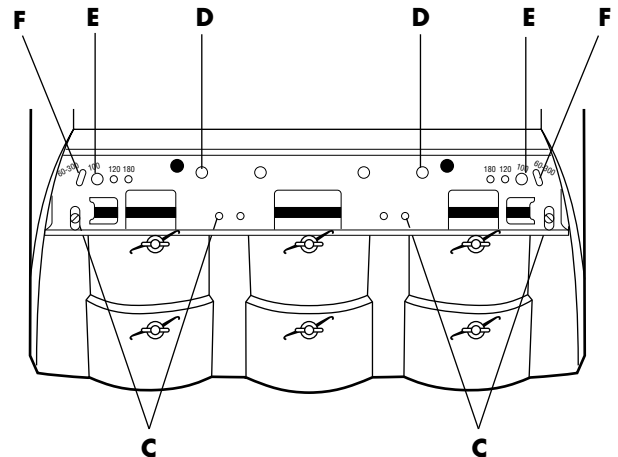
Projection angle and screen size (Diagonal)		CRT		R		G		B	
		Knob		Knob		Knob		Knob	
		A	B	A	B	A	B	A	B
12.1°	60" – 79"	2	2	1	2	2	2		
12.4° (Factory preset)	80" – 129"	3	3	1	3	3	3		
12.6°	130" – 179"	4	4	1	4	4	4		
12.7°	180" – 300"	5	5	1	5	5	5		
0°	60" – 79"	2	1	1	1	2	1		
	80" – 129"	3	1	1	1	3	1		
	130" – 179"	4	1	1	1	4	1		
	180" – 300"	5	1	1	1	5	1		

• Adjusting Angle of CRTs for the XG85

To adjust the angle of the CRTs, remove screws **E** and loosen screws **C** and **D**.

Now you can move the tube and lens assembly to one of the three other positions. Then replace screws **E** and tighten screws **C** and **D**. This process needs to be done for the red and blue CRTs. The green CRT is never repositioned. Use the table below to select the proper setting for your screen size.

NOTE: The threaded hole marked "60-300" **F** is drilled lengthwise so you can move the CRT assembly to any screen size. Adjust the red and blue lens so that the red or blue beam is aligned with the green beam. After doing this, adjust the lens focus (see the next page).



Then tighten the screws **E**.

Metal impression stamp screen size	60-300	100	120	180
Range of screen size (diagonal)	60"-300"	100"	120"	180"

Screen Size Change(Adjusting Focus Rings and CRT Angle) for XG135LC

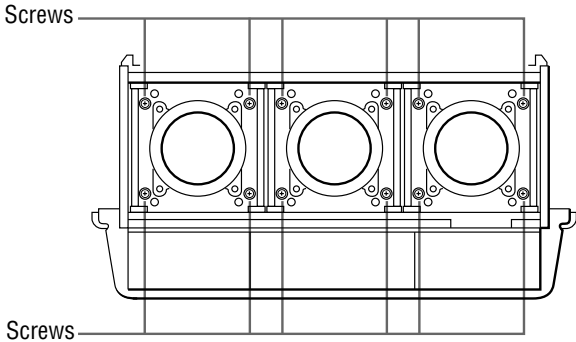
• Adjusting Focus Rings for the XG135LC

There are three sets of adjusting focus rings, two between each CRT and lens.

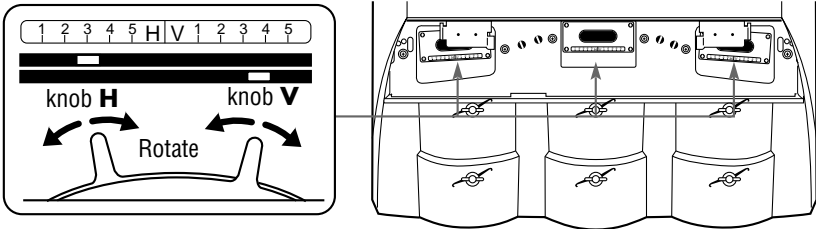
These focus rings are used for maintaining optimum edge focus for the various screen sizes and projection angles.

*When setting the focus rings or changing CRT angle, you must first remove the front panel.

- ① Loosen the four screws.



- ② Rotate and set the knobs (**H** and **V**) to the right position. The table below lists which position the knob should be set to for any given screen size and angle. The similar table is also on the back of the front panel.



- ③ Tighten the four screws.

Position of Knobs for the XG135LC

Projection angle and screen size (Diagonal)		CRT		R		G		B	
		Knob		Knob		Knob			
		H	V	H	V	H	V		
11.8°	60" – 69"	1	5	5	5	1	5		
	70" – 89"	2	4	5	4	2	4		
12.2° (Factory preset)	90" – 109"	3	3	5	3	3	3		
	110" – 129"	3.5	2.5	5	2.5	3.5	2.5		
12.4°	130" – 169"	3.5	2.5	5	2.5	3.5	2.5		
12.6°	170" – 209"	3.5	2.5	5	2.5	3.5	2.5		
	210" – 300"	4	2	5	2	4	2		
0°	60" – 69"	1	1	5	1	1	1		
	70" – 89"	2	1	5	1	2	1		
	90" – 109"	3	1	5	1	3	1		
	110" – 209"	3.5	1	5	1	3.5	1		
	210" – 300"	4	1	5	1	4	1		

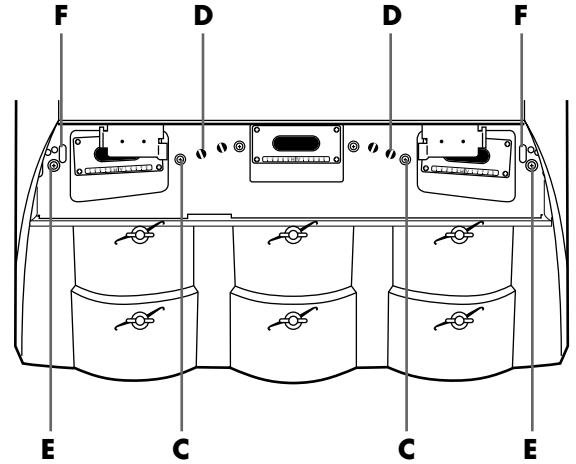
PROJECTION CONFIGURATION CHANGE

• Adjusting Angle of CRTs for the XG135LC

To adjust the angle of the CRTs, remove screws E and loosen screws C and D.

Now you can move the tube and lens assembly to one of the three other positions. Then replace screws E and tighten screws C and D. This process needs to be done for the red and blue CRTs. The green CRT is never repositioned. Use the table below to select the proper setting for your screen size.

NOTE: The threaded hole **F** is drilled lengthwise so you can move the CRT assembly to any screen size. Adjust the red and blue lens so that the red or blue beam is aligned with the green beam. After doing this, adjust the lens focus (see the next page).



Then tighten the screws **E**.

Metal impression stamp screen size	60-300	100	120	180
Range of screen size (diagonal)	60"-300"	100"	120"	180"

Lens Focus Adjustment

Adjust the center focus and edge focus mechanically to obtain the best screen focus.

NOTE:

- Plug the power cord and turn on the projector before adjustment.
- The lens focus adjustment must be performed for each lens.
- Select the FOCUS test pattern using the TEST button on the full function remote control.

Proceed as follows:

- ① Press the R, G, or B button on the full function remote control to project the CRT beam to be adjusted.
 - You can turn on or off each CRT beam(R, G and B)separately.

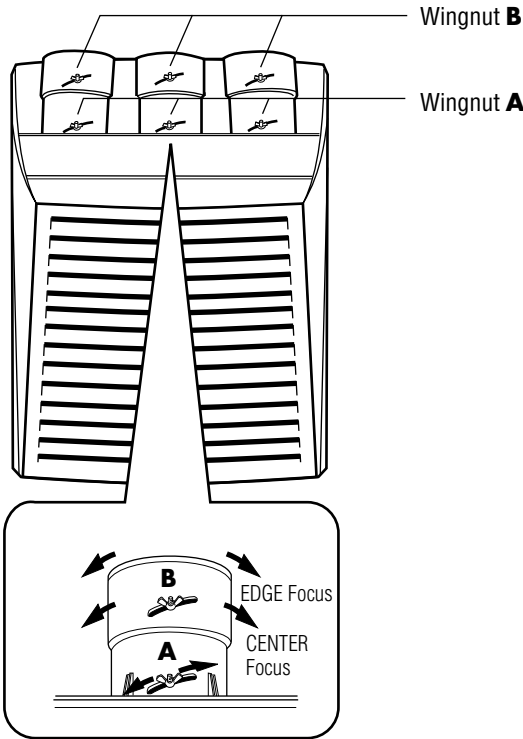
- ② Adjust the center focus.
 - Loosen the wing nut A. Rotate the lens using the wing nut **A** until the center of the screen is in focus.
 - When you get the best center focus, tighten the wing nut **A**.

NOTE: Do not over-tighten the wing nut.

- ③ Adjust the edge focus.
 - Loosen the wing nut B. Rotate the lens barrel until the edge area of the screen is focused. Tighten the wing nut **B**.
- ④ Recheck center focus.
 - If it is out of focus, repeat steps ② and ③.

- ⑤ Repeat steps ① to ④ for the other CRTs.

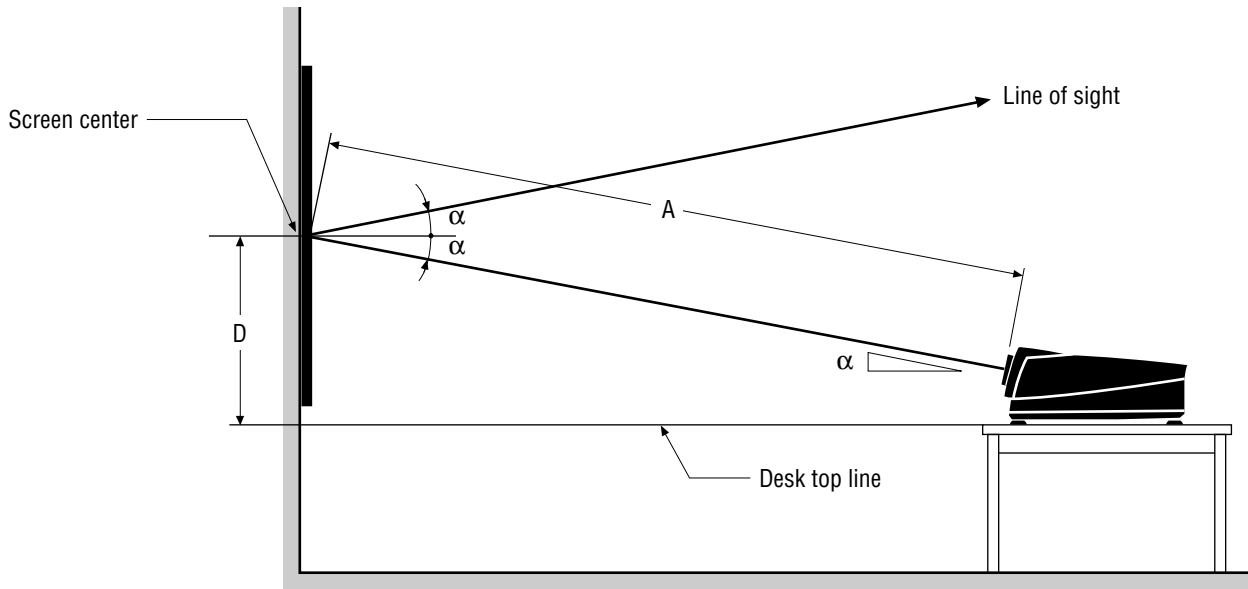
- ⑥ Reinstall the front panel.



Desk Top Projection Distance and Screen Size for XG135LC

• The following shows the relative position relationship of the projector with the screen. See table below.

Desk Top System



A:Distance between the lens and the screen center

D:Distance between the desk top and the screen center

α		11.8°			12.2°			12.4°	12.6°				
Screen size H-Width (4:3 Diagonal)		48" (60")	56" (70")	64" (80")	72" (90")	80" (100")	96" (120")	120" (150")	144" (180")	160" (200")	192" (240")	216" (270")	240" (300")
A	inch	71.10	82.83	94.61	106.34	118.07	140.91	175.16	209.57	232.48	278.15	309.17	338.62
	mm	1806	2104	2403	2701	2999	3579	4449	5323	5905	7065	7853	8601
D	inch	24.20	26.59	29.00	32.13	34.61	39.43	47.27	55.37	60.37	70.33	77.10	83.52
	mm	615	675	737	816	879	1002	1201	1406	1533	1786	1958	2121

NOTE:

- The projection distance is based on the screen width.
- Sizes not found between 48 (60) and 240 (300) inches are determined by the following formulae:

Units=inches W=Screen H-Width
 $A = (25/96 \times W - 12.5) \times 5.47 + 71.85$
 $D = (\beta \times A) + 10.04$

Units=mm W=Screen H-Width
 $A = (25/96 \times W - 12.5) \times 141 + 1825$
 $D = (\beta \times A) + 245$

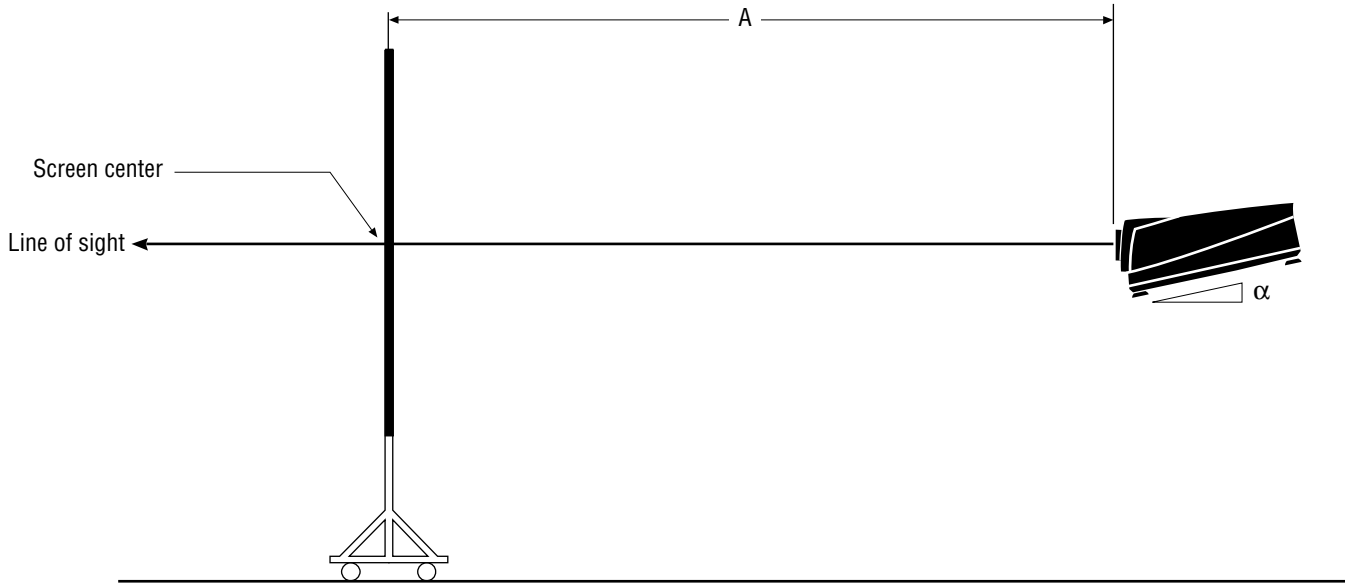
Screen size (Diagonal)	α	β
60-89"	11.8°	0.204
90-129"	12.2°	0.211
130-179"	12.4°	0.215
180-300"	12.6°	0.218

INSTALLATION SET-UP INSTRUCTION

Rear Screen Projection Distance and Screen Size for XG135LC

The following shows the relative position relationship of the projector with the screen. See table below.

Rear Projection System



A: Distance between the lens and the screen center

α		11.8°			12.2°			12.4°	12.6°				
Screen size H-Width (4:3 Diagonal)		48" (60")	56" (70")	64" (80")	72" (90")	80" (100")	96" (120")	120" (150")	144" (180")	160" (200")	192" (240")	216" (270")	240" (300")
A	inch	71.10	82.83	94.61	106.34	118.07	140.91	175.16	209.57	232.48	278.15	309.17	338.62
	mm	1806	2104	2403	2701	2999	3579	4449	5323	5905	7065	7853	8601

NOTE:

- The projection distance is based on the screen width.
- Sizes not found between 48(60) and 240(300) inches are determined by the following formulae:

Units=inches W"=Screen H-Width
 $A = (25/96 \times W - 12.5) \times 5.47 + 71.85$

Units=mm W"=Screen H-Width
 $A = (25/96 \times W - 12.5) \times 141 + 1825$

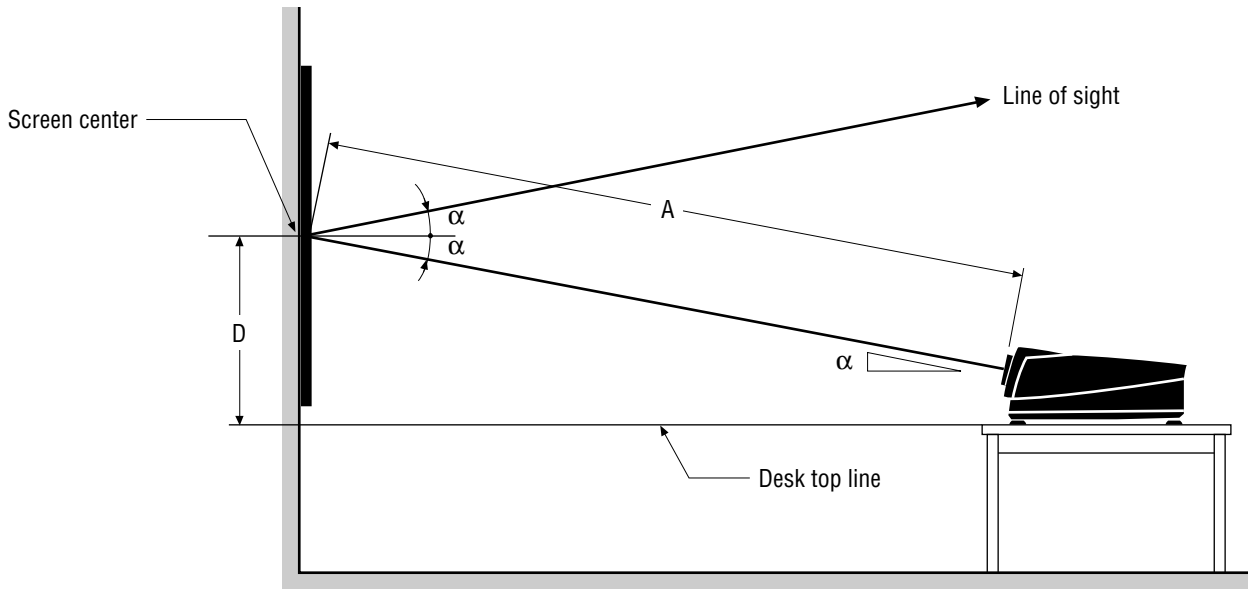
Screen size (Diagonal)	α
60–89"	11.8°
90–129"	12.2°
130–179"	12.4°
180–300"	12.6°

INSTALLATION SET-UP INSTRUCTION

Desk Top Projection Distance and Screen Size for XG85

- The following shows the relative position relationship of the projector with the screen. See table below.

Desk Top System



A:Distance between the lens and the screen center

D:Distance between the desk top and the screen center

α	12.1°		12.4°					12.6°	12.7°				
Screen size H-Width (4:3 Diagonal)	48" (60")	56" (70")	64" (80")	72" (90")	80" (100")	96" (120")	120" (150")	144" (180")	160" (200")	192" (240")	216" (270")	240" (300")	
A	inch	70.28	81.54	91.26	101.74	112.68	133.43	164.69	196.11	214.02	258.51	290.48	315.67
	mm	1785	2071	2318	2584	2862	3389	4183	4981	5436	6566	7378	8018
D	inch	24.81	27.17	29.68	31.93	34.28	38.73	46.01	53.20	57.13	66.91	73.94	79.48
	mm	631	691	754	811	871	984	1169	1351	1451	1700	1878	2019

NOTE:

- The projection distance is based on the screen width.
- Sizes not found between 48 (60) and 240 (300) inches are determined by the following formulae:

Units=inches W"=Screen H-Width

$$A = (25/96 \times W'' - 12.5) \times 4.99 + 70.28$$

$$D = (\beta \times A) + 10.08$$

Units=mm W"=Screen H-Width

$$A = (25/96 \times W'' - 12.5) \times 126.64 + 1785$$

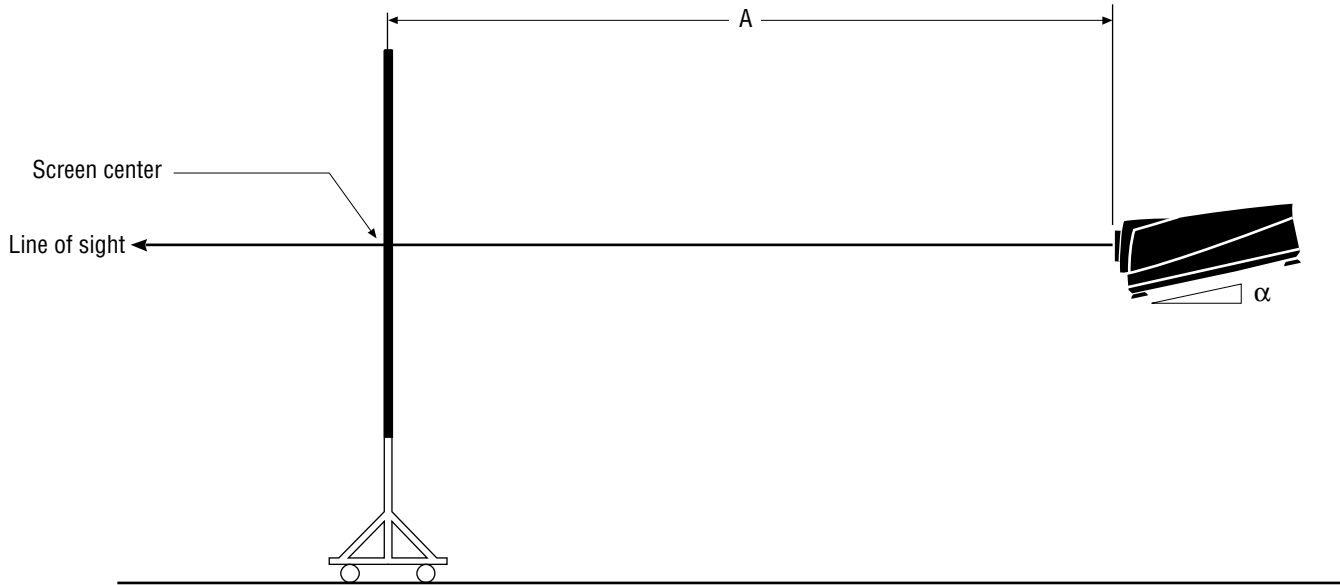
$$D = (\beta \times A) + 256$$

Screen size (Diagonal)	α	β
60-79"	12.1°	0.210
80-129"	12.4°	0.215
130-179"	12.6°	0.218
180-300"	12.7°	0.220

Rear Screen Projection Distance and Screen Size for XG85

The following shows the relative position relationship of the projector with the screen. See table below.

Rear Projection System



A:Distance between the lens and the screen center

α		12.1°		12.4°				12.6°	12.7°				
Screen size H-Width (4:3 Diagonal)		48" (60")	56" (70")	64" (80")	72" (90")	80" (100")	96" (120")	120" (150")	144" (180")	160" (200")	192" (240")	216" (270")	240" (300")
A	inch	70.28	81.54	91.26	101.74	112.68	133.43	164.69	196.11	214.02	258.51	290.48	315.67
	mm	1785	2071	2318	2584	2862	3389	4183	4981	5436	6566	7378	8018

NOTE:

- The projection distance is based on the screen width.
- Sizes not found between 48(60)and 240(300)inches are determined by the following formulae:

Units=inches W"=Screen H-Width
 $A = (25/96 \times W" - 12.5) \times 4.99 + 70.28$

Units=mm W"=Screen H-Width
 $A = (25/96 \times W" - 12.5) \times 126.64 + 1785$

Screen size (Diagonal)	α
60–79"	12.1°
80–129"	12.4°
130–179"	12.6°
180–300"	12.7°

INSTALLATION SET-UP INSTRUCTION

Note on Installation

CAUTION ON INSTALLATION

Position the projector according to the procedures specified in the following pages. Be sure to maintain the correct projection distance, direction and angle for optimum performance. Deviating from the correct installation could degrade the performance of the projector and may cause reliability problems.

WARNING:

Static displays that are left on for extended periods may cause CRT burns that are not covered under warranty.

For screen sizes other than 100", 120", and 180" diagonal, adjust the CRT angle using the threaded holes. See pages 16 and 18 for detailed procedures.

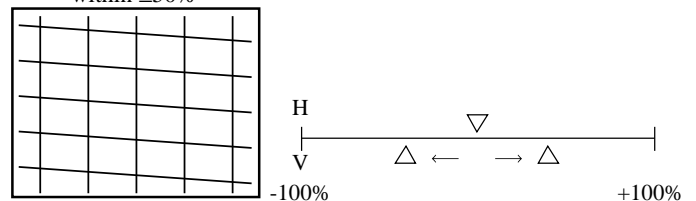
CAUTION ON ALIGNMENT ADJUSTMENT

The adjustment value of the items on the right must be within the recommended range of the values on the right. If it is hard or impossible to adjust the items on the right within the recommended range of values, the most probable cause of this is incorrect position of the projector. Check for correct projection distance, direction and angle, and reposition as recommended in this manual.

Value Recommendation

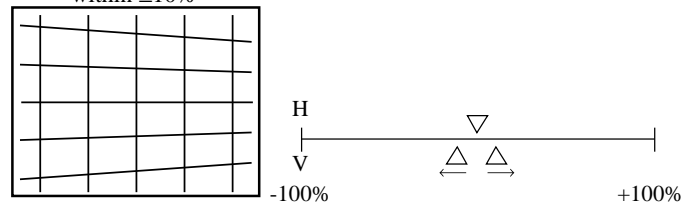
• TILT

within $\pm 50\%$



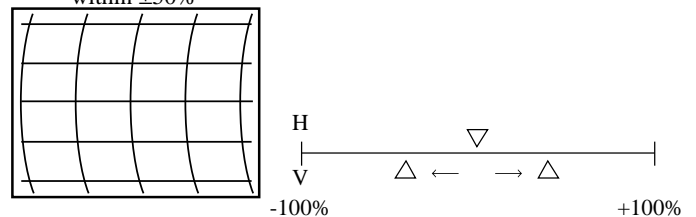
• V-KEY

within $\pm 10\%$



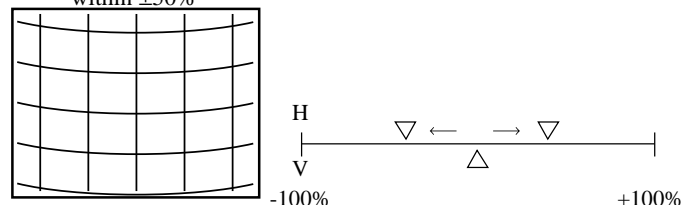
• H-BOW

within $\pm 50\%$



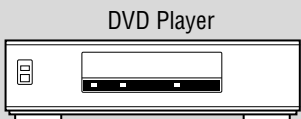
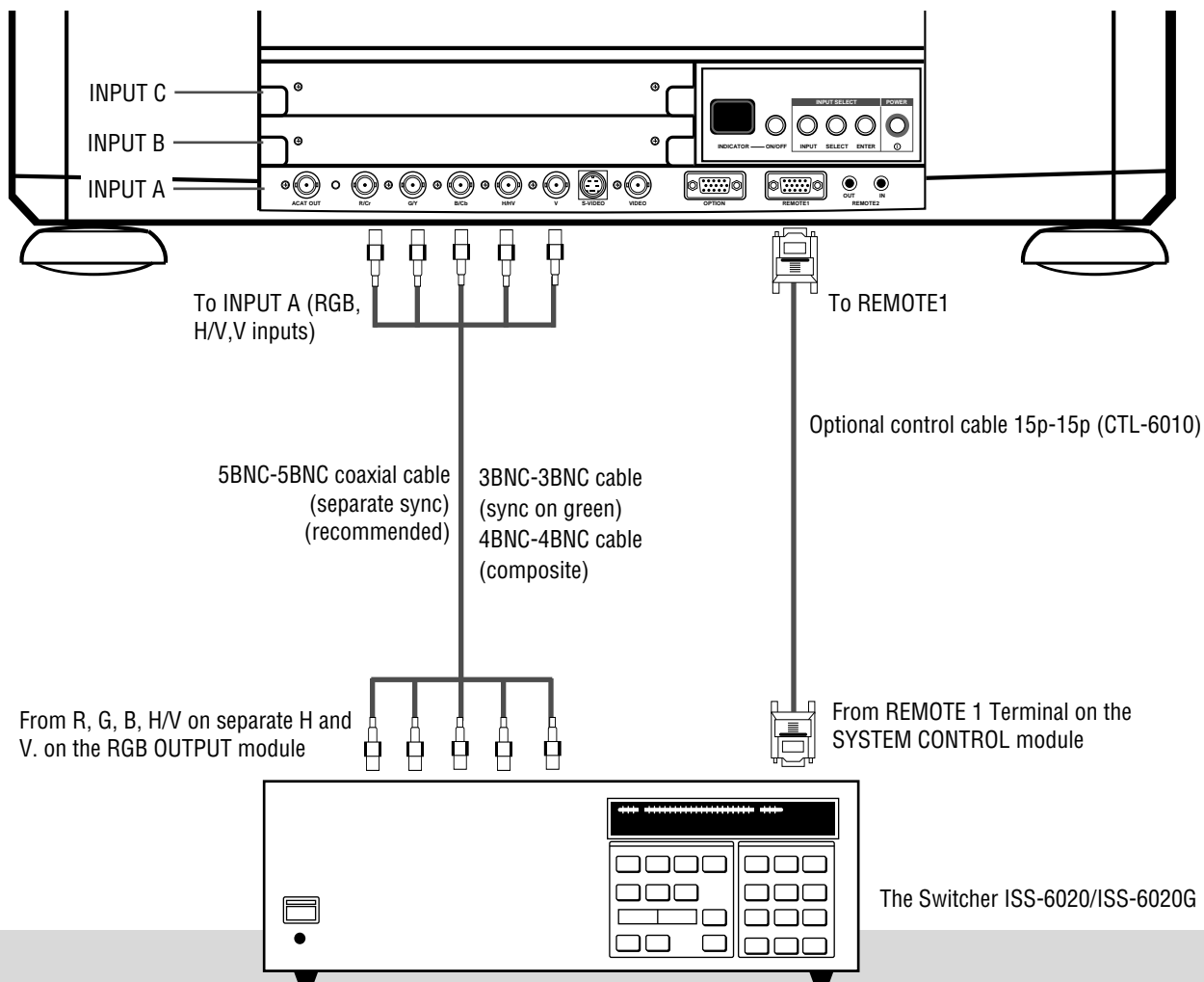
• V-BOW

within $\pm 50\%$



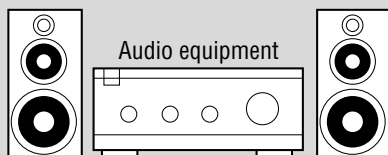
When Used with One Switcher (ISS-6020/ISS-6020G)

Up to 10 input signals can be accepted when the projector is connected to one Switcher. Using the projector with the Switcher allows easy adjustment and signal selection.

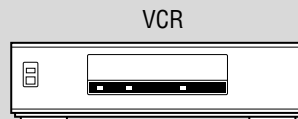


DVD Player

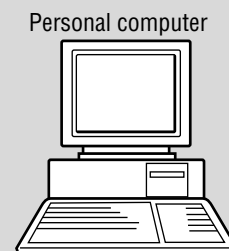
* To connect a COMPONENT signal of the equipment such as DVD player to the optional RGB input board, the projector must recognize the optional RGB input board as a COMPONENT input board. See "RGB/COMPONENT Search Setting" of the Set-up manual.



Audio equipment



VCR



Personal computer

- Make sure that the SW1 LEVEL mode is selected from the CONNECT CONDITION menu. Contact your dealer for the information in detail.
- For more information on the Switcher, refer to the user's manual accompanying the ISS-6020/ISS-6020G Switcher.
- All cables mentioned above are optional.

EXAMPLES OF CONNECTIONS

When Used with Two or More Switchers (100 Inputs)

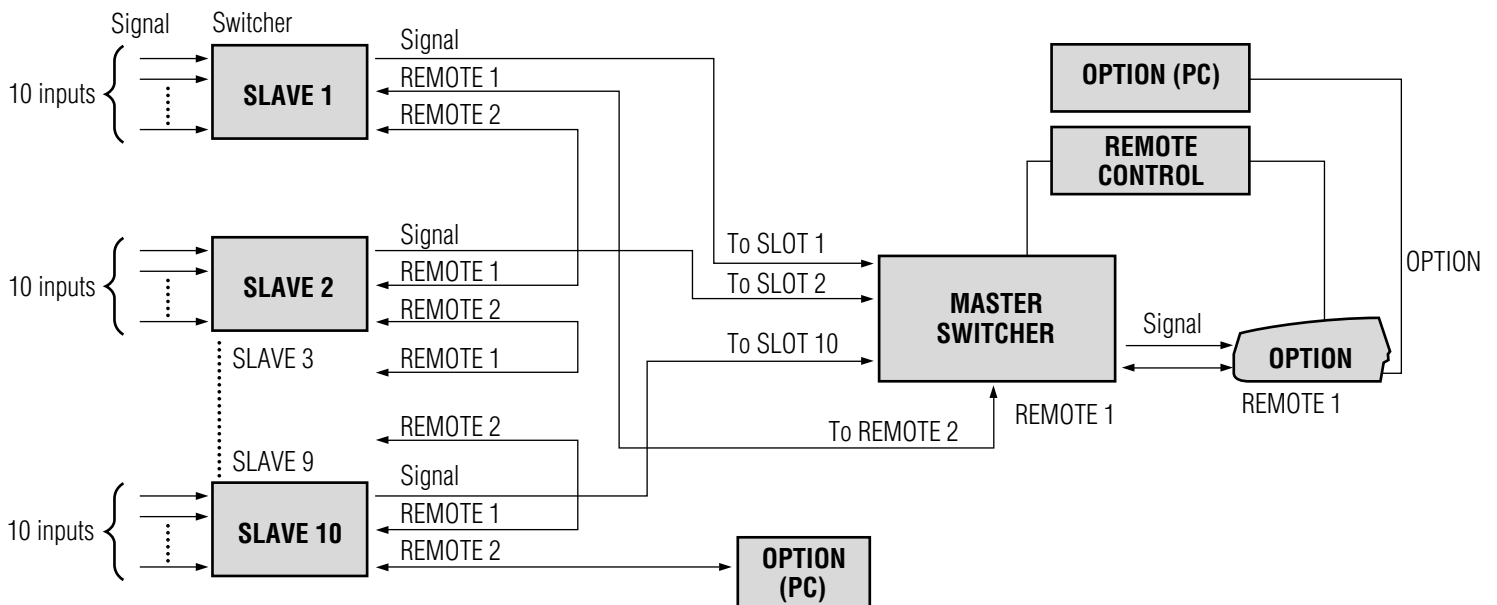
Up to 100 inputs can be accepted using the Switcher.

How to make connections:

- ① Connect the REMOTE 1 terminal of the master Switcher to the REMOTE 1 of the projector using the optional control cable (15p-15p/CTL-6010).
- ② Next connect the REMOTE 2 terminal of the master Switcher to the REMOTE 1 terminal of the first slave Switcher using the same optional control cable as mentioned above. Third, connect the REMOTE 2 terminal of the first slave to the REMOTE 1 of the second slave, and the REMOTE 2 terminal of the second slave to the REMOTE 1 terminal of the third slave (— and the REMOTE 2 of the ninth slave to the REMOTE 1 of the tenth slave). Connect all the Switchers with optional control cables.

NOTE:

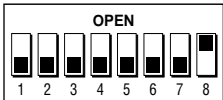
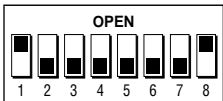






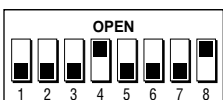
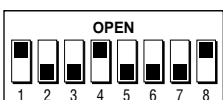
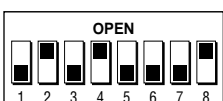
- Be sure to set all the slide switches (S8603) of the Switcher to RS-422 positions. Set the one on the last slave Switcher to the appropriate position to match the connected equipment such as a personal computer. (RS-422/RS-232C for PC control of projector)
- Set the DIP switch S8601 of the Switcher.



- Make sure that the SW2 LEVEL mode is selected from the CONNECT CONDITION menu. Contact your dealer for the information in detail.
- Refer to the user's manual accompanying the Switcher.
- Cables mentioned are not included with the projector.

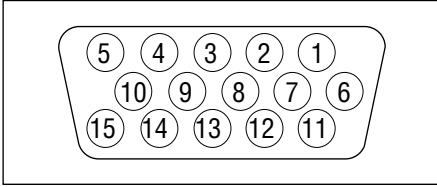
Set the DIP switch (S8601) of the Switcher as follows:

NOTE: Slave numbers 1 to 10 must correspond to the master's slot numbers 1 to 10.

ISS-6020 ISS-6020G	Output to	Setting of S8601
Master	The Projector	
Slave 1	Slot 1 of the Master	
Slave 2	Slot 2 of the Master	
Slave 3	Slot 3 of the Master	
Slave 4	Slot 4 of the Master	
Slave 5	Slot 5 of the Master	
Slave 6	Slot 6 of the Master	
Slave 7	Slot 7 of the Master	
Slave 8	Slot 8 of the Master	
Slave 9	Slot 9 of the Master	
Slave 10	Slot 10 of the Master	

EXAMPLES OF CONNECTIONS

REMOTE 1 Terminal

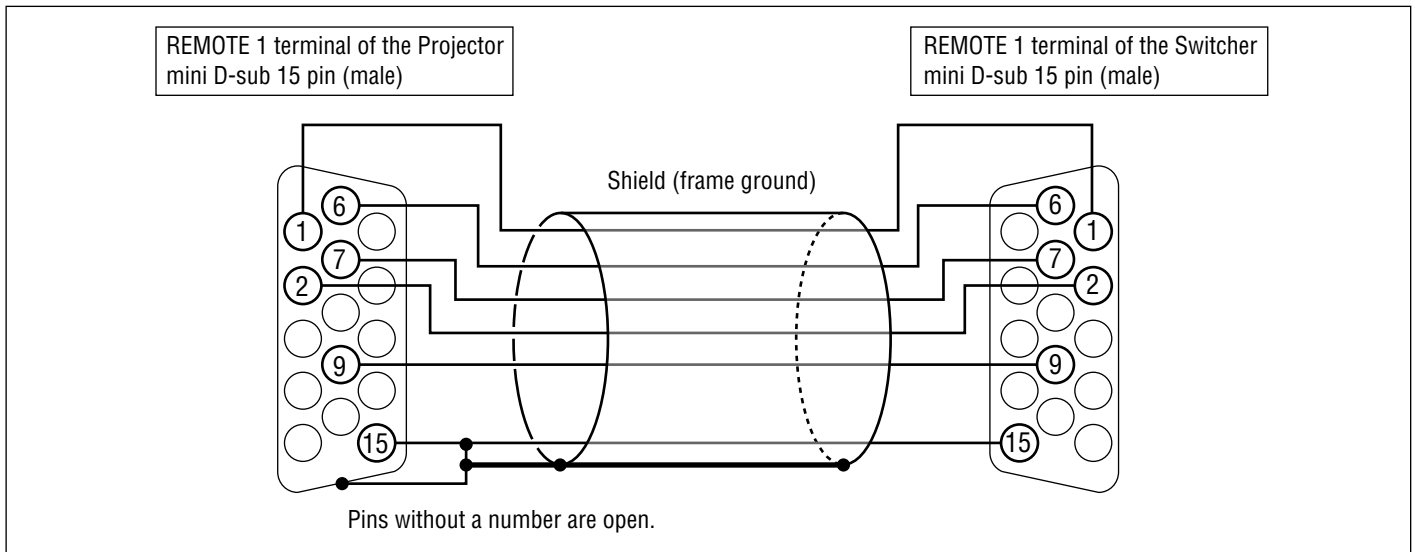


This terminal is used for either connecting the ISS-6020/ISS-6020G Switcher or a third party external control device. When the Switcher is used, connect it with the optional control cable (15-15 pin; 50 ft./16m; CTL-6010) to this terminal.

When used with the Switcher.

Pin No.	FUNCTION
1, 2, 6 and 7	Sending and receiving data when the Switcher is used.
9	Identifying the Projector
15	Ground
Others	Used inside the Projector. Normally set to OPEN.

When using with the Switcher ISS-6020/ISS-6020G, connect no. 1,2,6,7,9 and 15 pins of the projector to the same no. pins of the switcher as shown below.



Pin Configuration of Optional CTL-6010 Cable

When used in stand alone operation.

Pin No.	SHORT/OPEN			FUNCTION		Remote button
14	SHORT OPEN			External control mode ON External control mode OFF		–
5	SHORT			POWER ON		POWER ON
	OPEN			POWER OFF		POWER ON
10	SHORT			PICTURE MUTE ON		PICTURE MUTE
	OPEN			PICTURE MUTE OFF		
4,8, and 12	12	8	4			
	OPEN	OPEN	OPEN	INPUT A	RGB*1	1
	OPEN	OPEN	SHORT	INPUT A	VIDEO	2
	OPEN	SHORT	OPEN	INPUT A	S-VIDEO	3
	OPEN	SHORT	SHORT	INPUT A	COMPONENT	10
	SHORT	OPEN	OPEN	INPUT B	*2	4
	SHORT	OPEN	SHORT	INPUT B	*3	5
	SHORT	SHORT	OPEN	INPUT C	*2	7
	SHORT	SHORT	SHORT	INPUT C	*3	8

*1 Some settings allow you to retrieve a COMPONENT signal automatically. See “RGB/COMPONENT Search Setting” of the Set-up manual.

*2 When the optional RGB input board is installed and the RGB input is set, an RGB signal will be selected; when the RGB input board is installed and the COMPONENT input is set, a COMPONENT signal will be selected; when the optional RGB input board is installed and the VIDEO input is set, a VIDEO signal will be selected.

When the optional VIDEO input board is installed, a VIDEO signal will be selected.

*3 An S-VIDEO signal will be selected when :

1. the optional RGB input board is installed and the VIDEO input is set.
2. the optional VIDEO input board is installed.

The term “SHORT” means to connect with pin 15

• When in the external control mode, the POWER, INPUT and PICTURE MUTE buttons on the remote control will not function.

NOTE: Pin 13 is the external remote signal terminal. The projector can be controlled by the same format signal as the supplied remote control from the external controller regardless of setting Pin 14.

NOTE: When turning the power on using the external control, short Pin 5 about three seconds after supplying the AC power to the projector; when turning the power off using the external control, power off the AC supply to the projector about three seconds after opening Pin 5. These procedures are to protect your projector and the connected equipment.

Front Panel

1 Power Switch (Main power)

To turn on the main power to the projector press the switch to the ON position (I). The STANDBY and the RC READY indicator will light.

In this condition you can start up the projector by pressing the POWER ON button on the remote control or the POWER button on the rear panel.

Press to the OFF position (O) to turn the main power off.

NOTE: When turning off the main power, first return the projector to the standby condition by pressing the POWER OFF button on the remote control or the POWER button on the rear panel and then turn off the main POWER switch. These procedures are necessary to protect your projector and the connected equipment.

2 AC INPUT

Connect the supplied power cord here.

3 Remote Sensor

Receives the signal from the supplied remote control when used in the wireless condition.

Rear Panel

4 Remote Sensor

Receives the signal from the supplied remote control when used in the wireless condition.

5 POWER Indicator

Lights up when the projector is turned on.

6 STANDBY Indicator

Lights up when the projector's main POWER switch is on.
Flashes when the projector is not connected with the Switcher correctly or when the Switcher is turned off.

7 RC READY Indicator

Lights up when the projector's main POWER switch is on.
Flashes when the projector receives a signal from the remote control.

8 Two Digit Display

INDICATOR:

Displays projector error codes. ("00" in normal operation)

ON/OFF Switch:

Turns the INDICATOR on or off.

9 INPUT SELECT Buttons

INPUT: press to display the INPUT SELECT screen.

SELECT: press to select an input by highlighting the input terminal.

ENTER: press to execute selection and to switch input.

0 POWER Button

Turns the projector on or off when the projector is in the standby condition (Main Power switch must be on and the STANDBY and the RC READY indicator lit).

A ACAT OUT Terminal

This is a video output connector for the optional built in CCD camera. The CCD camera is needed in order to perform automatic convergence with the optional ACAT software.

B R/Cr, G/Y, B/Cb H/V and V Input Terminals (INPUT A)

Connect R,G,B,H (Horizontal sync) and V (Vertical sync) outputs of the external equipment (such as the Switcher). If using a component with a combined sync (SYNC) output, connect it to the H/V terminal. When using luminance and color-difference signals of HDTV and DVD, connect a Pr/Cr to the R, a Y to the G and a Pb/Cb to the B input of the projector.

C S-VIDEO Input Terminal (INPUT A)

Connect to the S-video output of the external equipment such as a VCR with an S-video output. This terminal allows switching between S2 and S1 VIDEO input modes.

D VIDEO Input Terminal (INPUT A)

Connect to the video output of the external equipment such as a VCR or laser disk player.

E OPTION Terminal

For system expansion such as PC-control.

F REMOTE 1 Terminal

This terminal allows external control of the projector from either the Switcher or from an external control. When the Switcher is used, connect to the REMOTE 1 terminal on the back of the Switcher.

NOTE: The ISS-6020/ISS-6020G Switcher is compatible with this projector.

G REMOTE 2 Terminal

IN: for the supplied service remote control.

OUT: connect to a second projector's IN terminal to relay the input at the IN terminal.

NOTE: The wireless control does not work when the plug of the supplied remote cable is inserted into the REMOTE 2 IN terminal.

H INPUT B

Slot for adding optional RGB or video input cards.

I INPUT C

Slot for adding optional RGB or video input cards.

NOTE: The optional RGB INPUT and VIDEO INPUT modules can be installed in the INPUT B and INPUT C slots.

J Active Indicator (green LED)

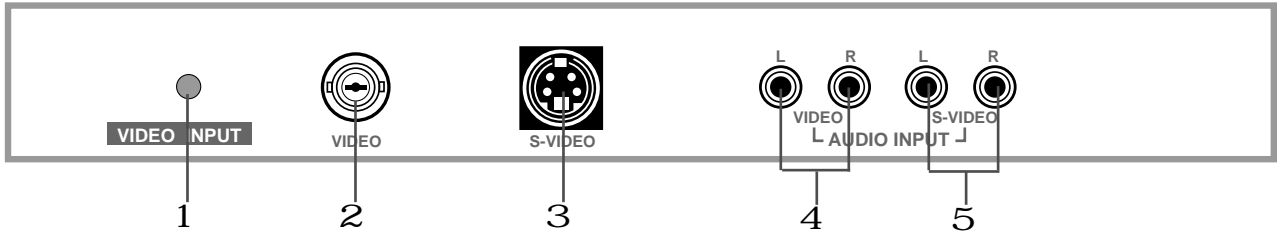
Lights up when the INPUT A slot is selected.

PART NAMES AND FUNCTIONS

OPTIONAL Boards

VIDEO INPUT Board [XG VIDIN (A)]

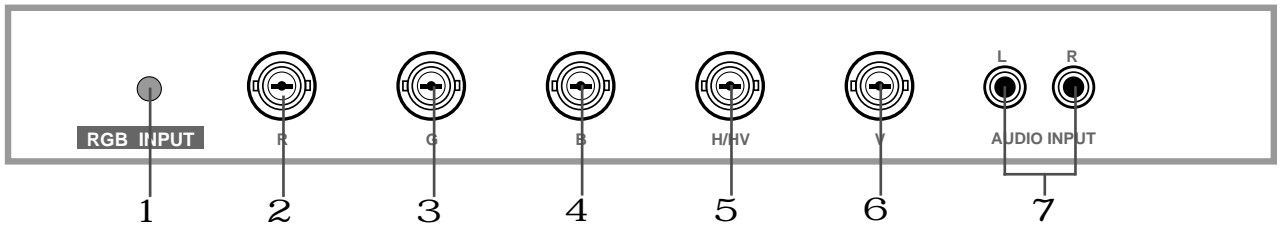
Front view



- 1 **Active Indicator (green LED)** Lights up when this board is selected.
- 2 **VIDEO INPUT Terminal** Connects composite video output signals.
- 3 **S-VIDEO INPUT Terminal** Connects S-video output signals.
- 4 **VIDEO INPUT Terminal** Connect to the audio outputs of the external equipment such as a VCR.
(Not available on this model.)
- 5 **S-VIDEO INPUT Terminal** Connect to the S-video audio outputs of the external equipment such as a VCR with S-video outputs. (Not available on this model.)

RGB INPUT Board [XG RGBIN (A)]

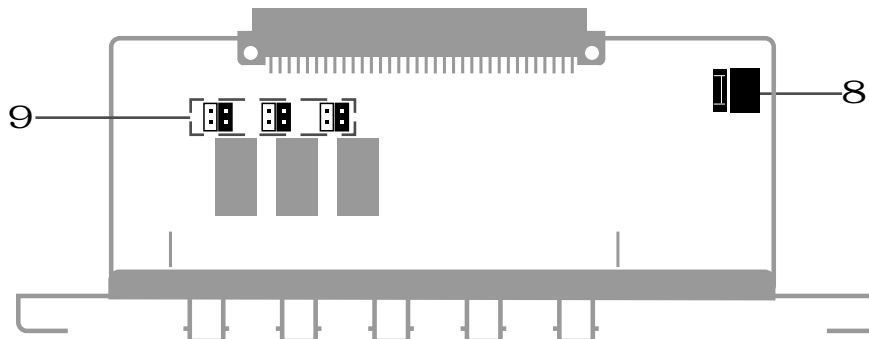
Front view



- 1 **Active Indicator (green LED)** Lights up when this board is selected.
- 2 **R Input Terminal** Connects an Red output signal.
- 3 **G Input Terminal** Connects a Green output signal.
- 4 **B Input Terminal** Connects a Blue output signal.
- 5 **H/HV Input Terminal** Connects horizontal sync or horizontal/vertical sync output signals.
- 6 **V Input Terminal** Connects a vertical sync output signal.
- 7 **AUDIO Input Terminals** Connect to the audio outputs of the external equipment such as ISS-6020/6020G.
(Not available on this model.)

RGB INPUT Board

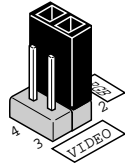
Top view



- 8 **Rotary Switch (S1001)**
- 9 **Jumper(S1002, S1003, S1004)**

The combination of the rotary switch and the jumper pins allows the projector to accept VIDEO or COMPONENT signals. Note that this board cannot accept RGB signals when board is set to VIDEO input.

Rotary switch (S1001) Jumper (S1002, S1003, S1004)



Setting of Rotary switch

No.	Mark	Input
0	VIDEO	VIDEO input
1	OPTION	COMPONENT INPUT
3	RGB	RGB input
2, 4-9		Not used

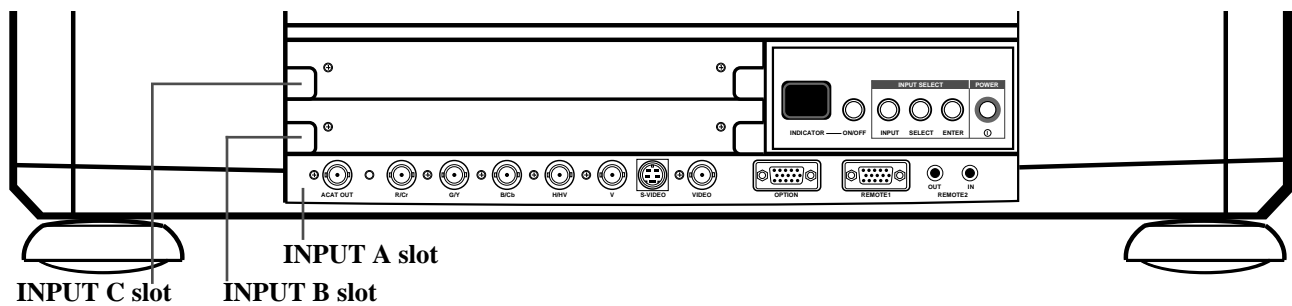
* No.3 is factory preset.

Table for Setting Rotary Switch and Jumpers.

Setting of Rotary switch and Jumpers		Input Signal			Board Identification
Rotary Switch(S1001)	Jumpers	R terminal	G terminal	B terminal	
0	(2, 3) Short	VIDEO	Y	C	VIDEO
1	(2, 3) Short	Pr/Cr	Y	Pb/Cb	COMPONENT
* 3	(1, 2) Short	R	G	B	RGB

* indicates factory preset.

SLOT FOR OPTIONAL MODULE



Corresponding slot number

You can also select the input signal directly by pressing the INPUT "1" through "10" button. In this case INPUT buttons function as follows:

	INPUT A slot	INPUT B slot	INPUT C slot
1 *1	RGB		
2	VIDEO		
3	S-VIDEO		
4 *2		RGB/COMPONENT/VIDEO	
5 *3		S-VIDEO	
6			
7 *2			RGB/COMPONENT/VIDEO
8 *3			S-VIDEO
9			
10	COMPONENT		

*1 Some settings allow you to retrieve a COMPONENT signal automatically. See "RGB/COMPONENT Search Setting".

*2 When the optional RGB input board is installed and the RGB input is set, an RGB signal will be selected; when the RGB input board is installed and the COMPONENT input is set, a COMPONENT signal will be selected; when the optional RGB input board is installed and the VIDEO input is set, a VIDEO signal will be selected.

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