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The following projector manual has not been modified or altered in any way.

User's Manual
MultiSync 6PG PLUS
MultiSync 9PG PLUS
Multiple Frequency Projection Monitor

Model Number:
PG-6100/PG-9100/PG-6100G/PG-9100G

For the customers in Germany

Certification for Importers:

This is to certify that the PG-6100G and PG-9100G conform to suppression of interference regulations set down by BMPT-Amtsblatt Vfg 243/1991. This certification was completed by the German Telecommunications authority who have the right to approve equipment in keeping with the legal requirements.

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

3.GSGY Acoustic Noise Information Ordinance:

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



INTRODUCTION

Before operating this projector, please read this manual carefully and completely. This manual will provide you with the basic instructions for projector operation. 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 15kHz to 65kHz (PG-6100/PG-6100G) and graphics signals from 15kHz to 93kHz (PG-9100/PG-9100G). You can interface video and high resolution RGB signals from various computers, workstations and graphics boards.
- ◆ 7" CRTs with deflection angle 90 degrees produce a detailed picture with a resolution of 1500×1200 pixels (PG-9100/PG-9100G) and 1280×1024 pixels (PG-6100/PG-6100G).
- ◆ Impregnated cathode used in the CRTs makes possible 850 lumens of light output.
- ◆ ECP lens produces an image with true color reproduction.
- ◆ AKB circuit provides stable white balance.
- ◆ The wide band video circuit provides 75MHz of Video Bandwidth.
- ◆ 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.
- ◆ Digital point convergence provides high accuracy for a projecting fine graphic displays. (This can be purchased as an optional item for the PG-6100/PG-6100G)
- ◆ On-screen menus provide easy access to adjustment items.
- ◆ ISS-6010/ISS-6010G interface allows 10-100 inputs.
- ◆ Video system compatible with NTSC, PAL, SECAM and NTSC 4.43.
- ◆ Up to 100 convergence patterns can be stored in the stand alone mode in digital memory.
- ◆ Quick copy convergence for fast easy set up from one pre-set signal.
- ◆ Built in self diagnostics for on-site troubleshooting.
- ◆ Built in "CROSS HAIR", "CROSS HATCH", "DOT", "WINDOW" and "H (FOCUS)" test patterns 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.

Important Safeguards

The following important safety instructions are 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

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 parts supplied by the manufacturer. Observe all instructions and warnings.

Power supply

The PG-6100 and PG-9100 projector are designed to operate on 120V 60Hz, and the PG-6100G and PG-9100G are designed to operate on 220-240V 50Hz 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 pliers 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.

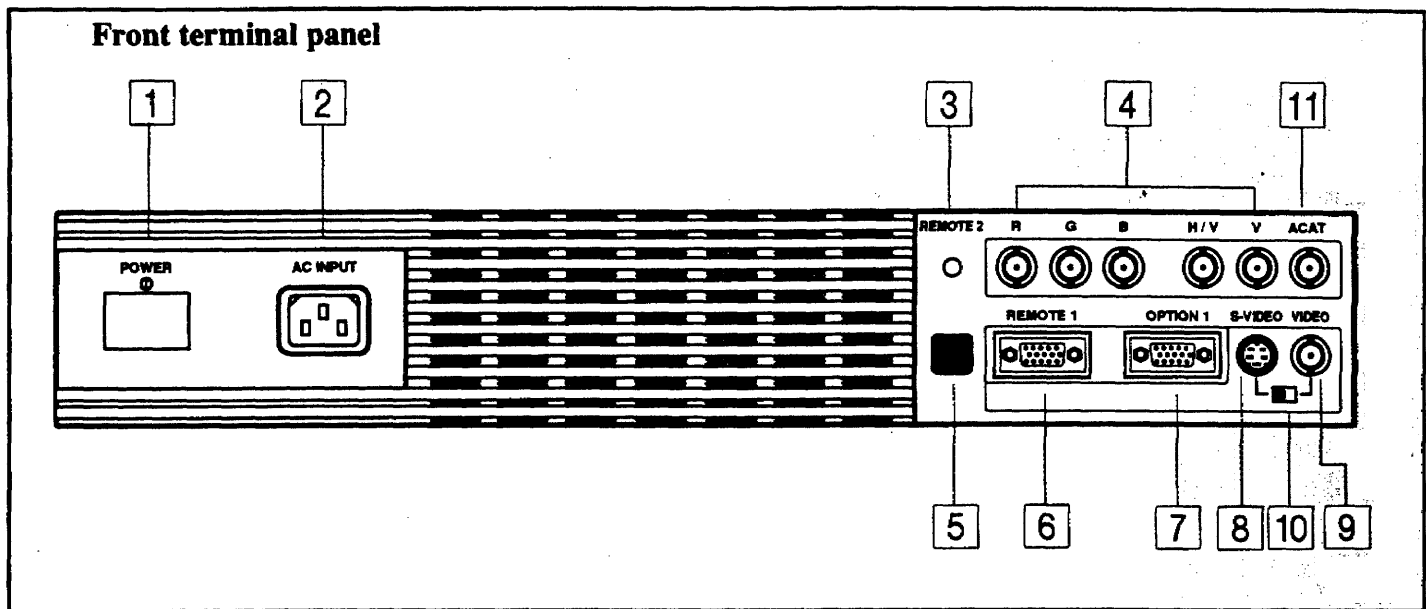
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This manual covers both the PG-6100/PG-6100G and PG-9100/PG-9100G series projectors.

The operating procedures are common to both models.

PART NAMES AND FUNCTIONS



1 POWER Switch (Main power)

Press to turn the main power on. The STANDBY 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 again 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 to protect your projector and the connected equipment.

2 AC INPUT

Connect the supplied power cord here.

3 REMOTE 2 Jack

The supplied full function remote control is connected here. The wireless control does not work when the remote plug is inserted here.

4 R,G,B, H/V and V Input Terminals

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.

5 Remote Sensor

Receives the infrared signal from the supplied remote control when used in the wireless mode.

6 REMOTE 1 Terminal

This terminal allows external control of the projector from either the Switcher or from an external control device. When the Switcher is used, connect to the RF MOTE 1 terminal on the back of the Switcher.

NOTE: The ISS-6010/ISS-6010G is compatible with this projector.

7 OPTION 1 Input Terminal

For future system expansion.

8 S-VIDEO Input Terminal

Connect to the S-video output of the external equipment such as VCR with an S-video output.

9 VIDEO Input Terminal

Connect to the video output of the external equipment such as a VCR or laser disk player.

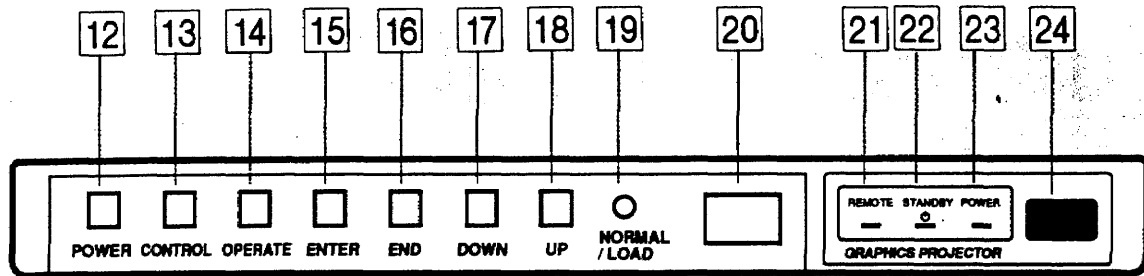
10 S-VIDEO/ VIDEO Select Switch

Selects either the S-VIDEO input or the VIDEO input terminal.

11 ACAT Terminal

This is a video output connector for the optional built-in CCD camera. Connect to the video capture board of your computer for the convergence adjustments using the optional ACAT (automatic convergence) software.

Rear control panel

**12 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 indicator lit).

13 CONTROL Button

Used with other buttons, similar to a shift key on a computer. This serves the same function as the CTL button on the remote control.

14 OPERATE Button

Press to display the OPERATE menu. You can select the following adjustment functions from this menu.

- | | |
|------------|----------------|
| 1/PICTURE | 4/INPUT SELECT |
| 2/POSITION | 5/SOURCE INFO |
| 3/SOUND | 6/STATIC |

NOTE: The SOUND item is not included in the "OPERATE" menu on the stand alone mode.

15 ENTER Button

Executes menu selection and switches input.

16 END Button

Exits the adjustment mode.

17 DOWN Button

Used to decrease values or move the cursor downward. When used with the CONTROL button, the DOWN button works as the CURSOR  button on the remote control unit.

18 UP Button

Used to increase values or move the cursor upward. When used with the CONTROL button, the UP button works as the CURSOR  button on the remote control unit.

19 NORMAL/LOAD Button

Returns the adjustment data to the standard level (factory preset level). While holding down the CONTROL button, press the NORMAL button to display the "LOAD/CANCEL" menu to select either LOAD (last stored level) or CANCEL (data cancelled).

20 2 Digit Display

Displays projector error codes. ("00" in normal operation)

21 REMOTE Indicator

Flashes to acknowledge when the projector receives a signal from the remote control.

22 STANDBY Indicator

Lights up when the projector's main POWER switch is on. Flashes when the projector might not be connected with the Switcher correctly or when the Switcher is turned off.

23 POWER Indicator

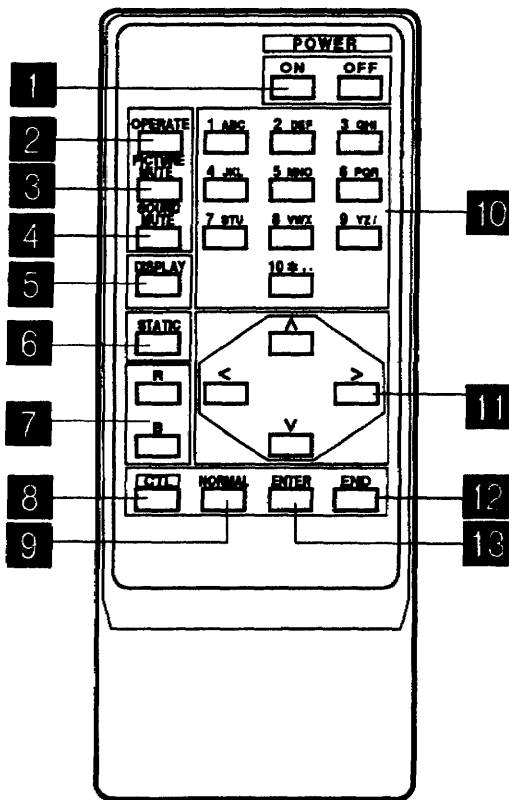
Lights up when the projector is turned on.

24 Remote Sensor

Receives the signal from the supplied remote control when used in the wireless condition.

PART NAMES AND FUNCTIONS

Remote control unit



User Remote Control
RC-6020

NOTE: The full function remote control is designed for setup adjustment. Use the user remote control for normal operation.

1 POWER Buttons (ON/OFF)

Press the ON button to turn the projector on when the projector is in the standby condition (STANDBY indicator lit). Press the OFF button to return the projector to the standby condition.

2 OPERATE Button

Press to display the "OPERATE" menu.

3 PICTURE(PIC) MUTE Button

Press to mute the picture. Press again to display the picture.

4 SOUND MUTE Button

Press to mute the sound. Press again to return the sound.

NOTE: This works only with the ISS-6010/ISS-6010G Switcher.

5 DISPLAY Button

Press to turn on or off the on-screen display.

Pressing with CTL eliminates the on-screen display; pressing with CTL again restores it.

NOTE: Even if the on-screen display may be turned off with pressing CTL and DISPLAY, any adjustment is still being done in the projector's memory.

This mode is available even when the input is switched or the power is turned off. Turning off the main power cancels this mode.

6 STATIC Button

Press to enter the STATIC mode. you can adjust the static convergence.

7 R and B Buttons

Turn each CRT beam on and off separately. When using with the CTL button, you can select the CRT to be adjusted during static convergence adjustments.

8 CTL Button

Used with other buttons, similar to a shift key on a computer.

9 NORMAL Button

Returns the standard level for each VIDEO or RGB input signal. When pressed once, the confirmation message will be displayed. When "YES" is selected and ENTER is pressed, the data will be returned to the standard level. While holding down the CTL button, press the NORMAL button to display the "LOAD/CANCEL" menu to select either LOAD (last stored level) or CANCEL (data cancelled).

10 INPUT Buttons

Selects menus and switches input signals.

11 CURSOR Buttons

Used for increasing and decreasing control levels, cursor movement and convergence adjustments.

12 END Button

Ends the adjustment mode.

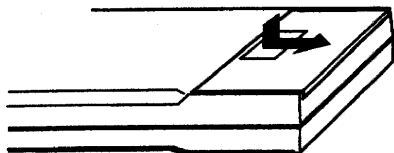
13 ENTER Button

Executes menu selection and switches to selected input.

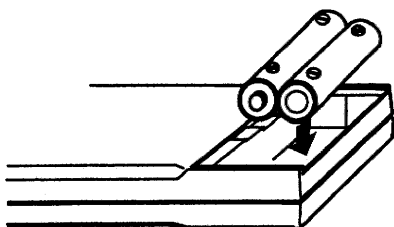
Battery installation and replacement

User remote control

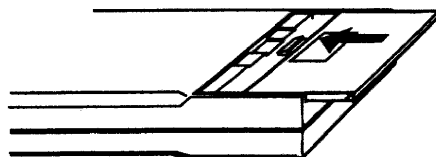
- 1 Press down on the battery compartment cover and slide the cover in the direction of the arrow.



- 2 Install the two new batteries, making sure that their polarity matches the (+) (-) diagrams inside the battery compartment. Incorrect polarity could damage the unit.



- 3 Close the battery compartment cover.



NOTE: The remote control is powered by two alkaline 1.5V AA batteries.

Remote control cautions

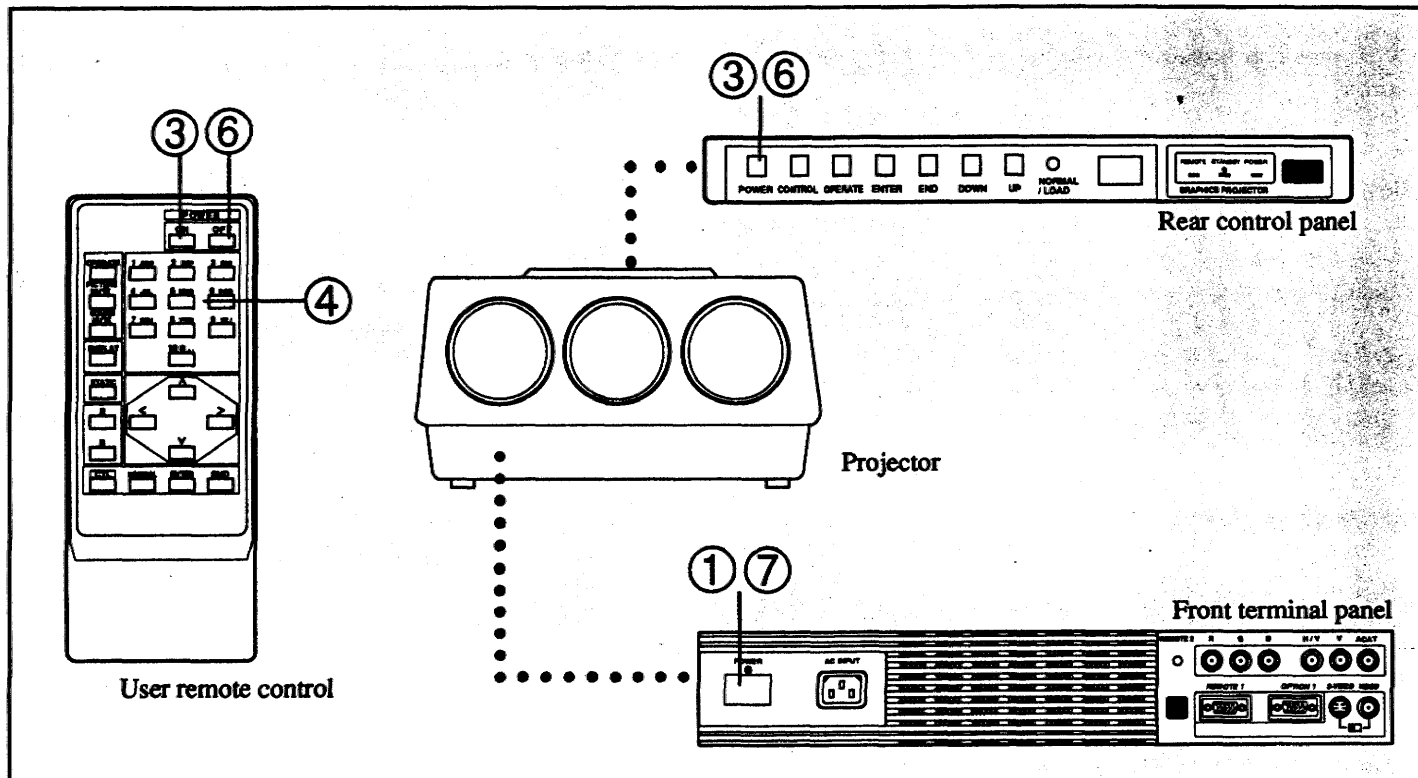
Use the remote control within a distance of about 7m (23 ft.) and at 30 degrees angle left and right.

Handling remote control and batteries

- Do not drop or mishandle the remote.
- Do not get the remote wet. If the remote gets wet, wipe it dry immediately.
- Avoid heat and humidity.
- When not using the remote for a long period, remove the batteries.
- Do not use new and old batteries together, or use different types together.
- Do not take apart the batteries, heat them, or throw them into a fire.

BASIC OPERATION

Picture Projection



To project the picture source, proceed as follows:

- ① Turn on the main power of the projector.
 - Press the POWER switch on the front terminal.
- ② Turn on the connected equipment.
- ③ Turn on the power.
 - 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 page 17 "INPUT SELECTION" for more details.
- ⑤ Adjust the picture and sound.
 - See pages 12 through 16 for more details.

NOTE: The volume function works only with the ISS-6010/ISS-6010G 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 terminal to turn off the main power of the projector.
- ⑧ Last, turn off the connected equipment power.

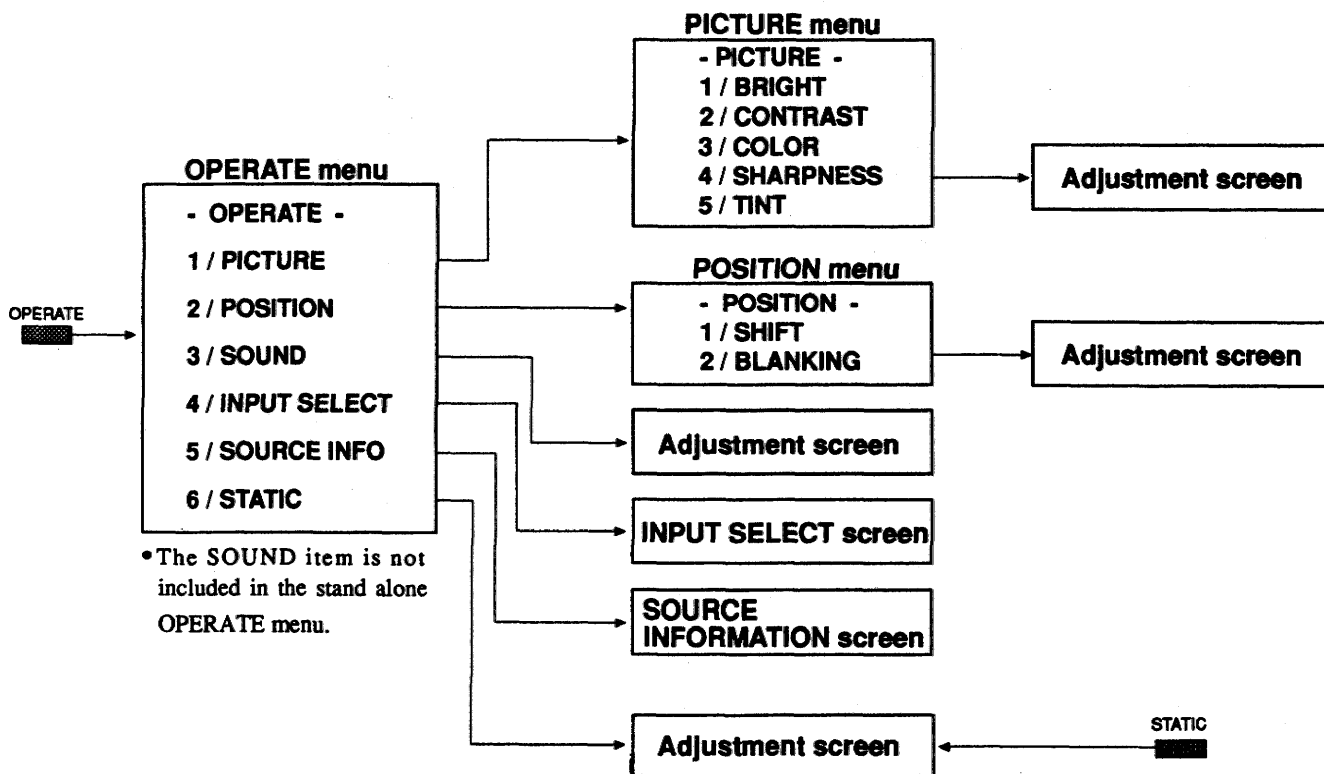
Displaying the Menu and Adjustment Screens

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: Examples of the screen display are only when used with the ISS-6010/ISS-6010G Switcher.



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. You can also operate the projector using the buttons on the control panel of the projector.

BASIC OPERATION

Picture Adjustment

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

NOTE: The Color, Sharpness, and Tint controls are not included in the "PICTURE" menu for RGB signal. The Tint control is not included 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" and press ENTER to display the "PICTURE" menu. You can also select the "PICTURE" menu directly by pressing the INPUT "1" button.

*"3/SOUND" is not included in stand alone operate menu.

- ③ Use the CURSOR  or  button to select a picture function and then press ENTER. You can also select an item directly by pressing an Input 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)

- 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 to display the "STORE?" screen.
 - Whenever the END button is pressed, the screen changes in this order:
"PICTURE" menu → "OPERATE" menu → "STORE?" menu
 - If the picture adjustments have not been changed, the "STORE ?" menu is not displayed.

```
- OPERATE -  
1 PICTURE  
2 / POSITION  
3 / SOUND  
4 / INPUT SELECT  
5 / SOURCE INFO  
6 / STATIC
```

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

PICTURE

- BRIGHT -

 60%

- ⑥ Use the CURSOR  or  button to select either "YES" or "NO" and press ENTER.
- You will return to the source screen.

Items to select

- YES -----The data will be stored
- NO -----The data will not be stored

- To exit this mode without storing the current status, select "NO".
If the current status is not stored due to pressing another button, the "STORE ?" menu is displayed.

STORE ?	
YES	NO

BASIC OPERATION

Position Adjustment

Adjust the position and screen area.
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. Press ENTER to display the "POSITION" menu. You can also select the "2/POSITION" menu directly by pressing the INPUT "2" button.

*"3/SOUND" is not included in stand alone operate menu.

- ③ Use the CURSOR  or  button to select either "SHIFT" or "BLANKING" and press ENTER. You can also select the item directly by pressing the INPUT "1" or "2" button.
 - The selected adjustment screen is displayed.

Items to select

- SHIFT (Position of the picture)
- BLANKING (Screen area)

- ④ Adjust the position 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.

NOTE: Adjust to position the picture in the center of the raster. Over shift-adjusting to the top of the raster may cause the top of the picture to curve.

```
- OPERATE -  
1 / PICTURE  
2 / POSITION  
3 / SOUND  
4 / INPUT SELECT  
5 / SOURCE INFO  
6 / STATIC
```

```
- POSITION -  
1 / SHIFT  
2 / BLANKING
```

POSITION

- SHIFT -

H
V



+10%
-90%

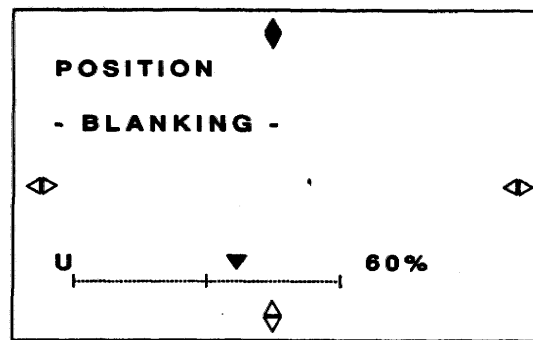
When selecting BLANKING:

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 (U) and Right (R) ---- Pressing  or  increases.
Pressing  or  decreases.
- Bottom (D) and Left (L) -- Pressing  or  increases.
Pressing  or  decreases.



⑤ To end this adjustment, press the END button to display the "STORE?" menu.

- Whenever the END button is pressed, the screen changes in this order:

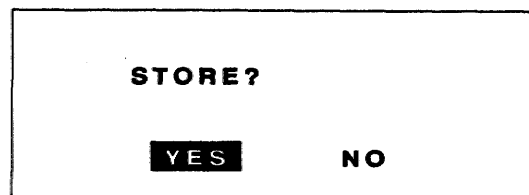
"POSITION" menu → "OPERATE" menu → "STORE?" menu

⑥ Use the CURSOR  or  to select either "YES" or "NO" and press ENTER.

- If the position adjustments have not been changed, the "STORE?" menu is not displayed.
- You will return to the source screen.

Items to select

- YES ----- The data will be stored
- NO ----- The data will not be stored



- To exit this mode without storing the current status, select "NO".
If the current status is not stored due to pressing another button, the "STORE ?" menu is displayed.

BASIC OPERATION

Sound Adjustment (only when used with the ISS-6010/ISS-6010G)

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 "VOLUME" screen. You can also select the "VOLUME" screen directly by pressing the INPUT "3" button.
- ③ Use the CURSOR buttons to adjust the volume.
 - The CURSOR ☐ or ☒ button increases the volume.
The CURSOR ☒ or ☐ button decreases the volume.
- ④ To end this adjustment, press the END button to display the "STORE?" menu.
 - Whenever the END button is pressed, the screen changes in this order:
"OPERATE" menu → "STORE?" menu
- ⑤ Use the CURSOR ☒ or ☐ button to select either "YES" or "NO" and press ENTER.
 - If the VOLUME has not been changed, the "STORE?" menu will not be displayed.

Items to select

- YES -----The data will be stored
- NO -----The data will not be stored

- To exit this mode without storing the current status, select "NO". If the current status is not stored due to pressing another button, the "STORE ?" menu is displayed.

- OPERATE -
- 1 / PICTURE
- 2 / POSITION
- 3 / SOUND
- 4 / INPUT SELECT
- 5 / SOURCE INFO
- 6 / STATIC

SOUND

- VOLUME -



STORE?

YES

NO

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" 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/SOUND" is not included in stand alone operate menu.

*When the projector is used in stand alone operation, the third item is "3/INPUT SELECT".

- ③ Use the CURSOR ☐ or ☐ button to highlight the signal to be switched to and press ENTER to change to the selected input signal.

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 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

Continued on the next page.

```

- OPERATE -
1 / PICTURE
2 / POSITION
3 / SOUND
4 / INPUT SELECT
5 / SOURCE INFO
6 / STATIC
  
```

```

P01  INPUT SELECT
ISS-6010                      SW 2 LEVEL
NO  INPUT      NAME      DATE
01  M-01 S-01  VTR-1     12/01/92
02  M-01 S-02  VTR-2     12/03/92
03  M-01 S-03  VIDEO-1    12/11/92
04  M-01 S-04  VTR-3     12/24/92
05  M-01 S-05  RGB-1      12/28/92
06  M-01 S-06  VIDEO-2    12/30/92
07  M-01 S-07  VIDEO-3    12/31/92
08  M-01 S-08  NTSC       01/18/93
09  M-01 S-09  PAL        01/18/93
10  M-01 S-10  SECAM      01/29/93
  
```

BASIC OPERATION

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 1 → Selects the VIDEO input or S-VIDEO input on the projector

INPUT 2 → Selects the RGB input on the projector

When using the projector with the ISS-6010/ISS-6010G:

INPUT 1 through 10 → Selects the corresponding number slot of the ISS-6010/ISS-6010G

When using the projector with two ISS-6010/ISS-6010G 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.

For 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 finally press ENTER.

- When pressing any one of the INPUT buttons to directly access one signal among two or more of the same signals, the projector will output the signal listed in the upper line automatically. To select the one listed in the lower line, use the CURSOR  or  button and press ENTER.

INPUT SELECT List Format

Page (P01 to P10)		Connection condition of the Switcher	
P01	INPUT SELECT	SW 2 LEVEL	
The Switcher connected — ISS-6010			
NO	INPUT	NAME	DATE
01	M-01 S-01	VTR-1	
02	M-01 S-02	VTR-2	12/03/92
03	M-01 S-03	VIDEO-1	12/11/92
04	M-01 S-04	VTR-3	12/24/92
05	M-01 S-05	RGB-1	12/25/92
06	M-01 S-06	VIDEO-2	12/30/92
07	M-01 S-07	VIDEO-3	12/31/92
08	M-01 S-08	NTSC	01/15/93
09	M-01 S-09	PAL	01/16/93
10	M-01 S-10	SECAM	01/29/93

Slot number of the master Switcher —

Slot number of the sub Switcher —

Source name of input signal —

Date registered —

Source Information

This is for viewing the signal information and the current status of various setting.
Proceed as follows:

- ① Press the OPERATE button.
 - The "OPERATE" menu is displayed.
- ② Use the CURSOR  or  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/SOUND" is not included in stand alone operate menu.

*When the projector is used in stand alone operation, the fourth item is "4/SOURCE INFO".

- ③ 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

NOTE: You cannot change NAME, LOCK, SYNC DETECT, COLOR TEMP, AKB, COUNTER and TIMER in this screen.

```

- OPERATE -
1 / PICTURE
2 / POSITION
3 / SOUND
4 / INPUT SELECT
5 / SOURCE INFO
6 / STATIC
  
```

```

SOURCE INFORMATION

M-01 S-01      NAME      LOCK
*****        OFF

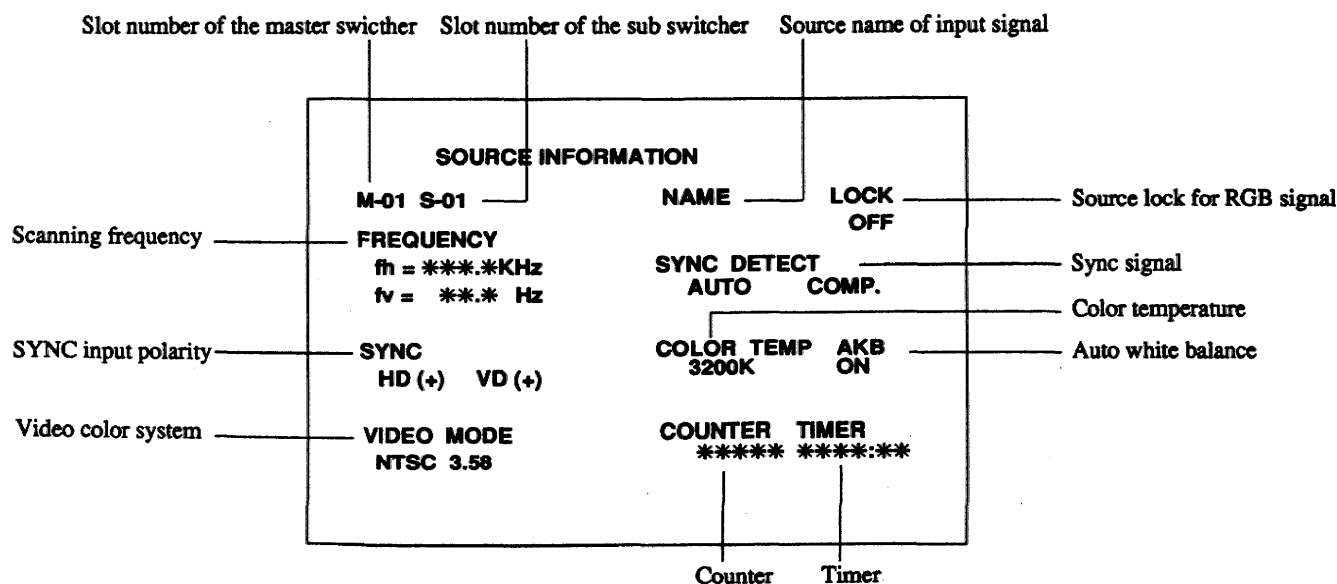
FREQUENCY
fh = ***.KHz
fv = **.* Hz

SYNC DETECT
AUTO          COMP.

SYNC           COLOR TEMP  AKB
HD(+) VD(+)   3200 K      ON

VIDEO MODE
NTSC 3.58     COUNTER    TIMER
*****      ****:*
  
```

SOURCE INFORMATION Screen Format



NOTE: The example of the screen display is only when used with the ISS-6010/ISS-6010G.

BASIC OPERATION

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.
 - "3/SOUND" is not included in stand alone operate menu.
 - When the projector is used in stand alone operation, the fifth item is "5/STATIC".
 - 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 to display the "STORE ?" menu.
 - Whenever the END button is pressed, the screen changes in this order:
"OPERATE" menu → "STORE?" menu

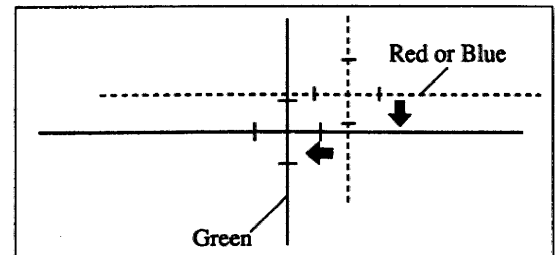
```
- OPERATE -  
1 / PICTURE  
2 / POSITION  
3 / SOUND  
4 / INPUT SELECT  
5 / SOURCE INFO  
6 / STATIC
```

CONVERGENCE

- STATIC -

CRT - R -

H  +10%
V  -10%



- ⑧ Use the CURSOR ☐ or ☐ button to select either "YES" or "NO" and press ENTER.

- If the STATIC convergence data has not been changed, the "STORE ?" menu is not displayed.

Items to select

- YES ----- The data will be stored
- NO ----- The data will not be stored

- To exit this mode without storing the current status, select "NO".
If the current status is not stored due to other button operation, the "STORE ?" menu is displayed.
- The CROSS-HAIR test pattern is changed to source screen.

STORE ?**YES****NO**

BASIC OPERATION

Picture and Sound Mute

This function mutes picture or sound.

To mute picture or sound:

- Pressing PICTURE (PIC) MUTE mutes picture.
Pressing SOUND MUTE mutes sound.
Pressing again restores the picture (or sound).

NOTE: When picture is muted, "OPERATE" menu cannot be accessed.

Normal, Load, and Cancel Function

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

To return to the standard level (NORMAL):

- ① Press the NORMAL button.
 - A confirmation message is displayed.
- ② Use the CURSOR or button to select "YES".
- ③ Press ENTER.
 - The NORMAL function is performed.

NOTE: If you select "NO", you will exit this mode suspending current status.

To return to the last stored level (LOAD):

- ① While holding down the CTL button, 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 = Adjustment item to be normalized

XXXXXXXX

LOAD

CANCEL

XXXXXXXX = Adjustment item to be loaded or cancelled

XXXXXXXX
DATA LOAD?

YES

NO

XXXXXXXX = Adjustment item to be loaded

XXXXXXXX
DATA CANCEL?

YES

NO

XXXXXXXX = Adjustment item to be cancelled

SPECIFICATIONS

Projection type	: Refraction type Projector and screen are separated
Projection system	: 3 lens and 3 CRT's in-line
Scanning frequency	: H 15 to 65kHz / V 38 to 150Hz (PG-6100/PG-6100G) H 15 to 93kHz / V 38 to 150Hz (PG-9100/PG-9100G)
Retrace time	: H 4.0 μ S (fH 15 to 30kHz) H 2.5 μ S (fH 30 to 93kHz) V 350 μ S
Video bandwidth	: 75MHz (-3dB)
CRT	: 7 inch liquid cooled Deflection angle 90 degrees
Lens	: Hybrid lenses multilayer coating F1.0
Picture size	: 60 to 300 inches diagonal
Resolution	: 1000TV lines
Pixel resolution	: 1500 $\times$ 1200(PG-9100/PG-9100G) 1280 $\times$ 1024 dots (PG-6100/PG-6100G)
Light output	: 850 lumens (Small area peak high light brightness)
Contrast ratio	: 1 : 20(HDTV method)
High voltage	: 32kV
Input	: RGB signal 0.7Vp-p 75ohm positive (BNC) H/V sync 0.7 to 4.0Vp-p 75ohm negative or positive (BNC) COMP sync 0.7 to 4.0Vp-p 75ohm negative or positive (BNC) Sync on G 0.3 to 0.6Vp-p 75ohm negative (BNC) Video 1.0Vp-p 75ohm positive (BNC) or (switchable) S-video; Y 1.0Vp-p 75ohm positive C 0.28Vp-p 75ohm (burst level) Video system NTSC, PAL, SECAM and NTSC4.43
Convergence	: Digital convergence (Pre-set 100 positions) Quick copy convergence Static and wave convergence Point convergence; PG-6100/PG-6100G Optional PG-9100/PG-9100G Standard
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 (PG-6100/PG-9100) AC 220-240V 50Hz (PG-6100G/PG-9100G)
Power consumption	: PG-6100/PG-6100G 440W PG-9100/PG-9100G 500W
Input current	: 6.3A (AC 120V) PG-6100/6.7A (AC 120V) PG-9100 4.0A (AC 220-240V) PG-6100G/4.4A (AC 220-240V) PG-9100G
Safety and regulation	: PG-6100/PG-9100; Meets FCC class A requirements UL Approved (UL 1950) Governed by IEC 950 CSA certified Meets DHHS requirements PG-6100G/PG-9100G; Meets TÜV GS requirements Governed by EN 60950 and IEC 950 Meets FTZ class B requirements Governed by DBP Vfg. 243 Meets x-ray requirements Governed by § 10 Röntgenverordnung (RöV)

SPECIFICATIONS

Cabinet dimensions	: 610(W) × 754(D) × 309(H) mm 24 1/8(W) × 29 5/8(D) × 12 1/8(H) inch
Weight	: 57 kg/ 125.7lbs
Remote control	: Wired application Wireless (operating distance 7m/23ft.)
Remote control functions	: User remote (RC-6020); 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, Display, Normalize, Enter, End Full function remote (RC-6051); Test, Display, Help, Information, Input list, Static focus, Edge focus, H/V position, White balance select, Static convergence, Wave convergence, Point convergence, Phase, 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, Picture mute, Bright, Contrast, Color 1), Sharpness 1), Tint 2), Volume 3), Sound mute 3), Source information, Static convergence, Normalize, Enter, End
External control	: Power ON/OFF, Input signal select, Picture mute, Remote control data input
PC control	: Acceptable
Supplied accessories	: Full function remote control unit (RC-6051), User remote control unit (RC-6020), Remote cable 4m/13ft., Remote cable 16m/52ft., AC line cable, Ceiling mounting kit, User's manual, Installation manual (not included with PG-6100G/PG-9100G)
Environment	: Temperature 0 to 40 degrees C Humidity 0 to 90% non-condensing Storage -10 to 50 degrees C
Sound emission	: PG-6100/PG-9100 45dB or less PG-6100G/PG-9100G 45dB or less

- 1) This works only for VIDEO signals.
 - 2) This works only for NTSC video signals.
 - 3) This works only with the Switcher operation.

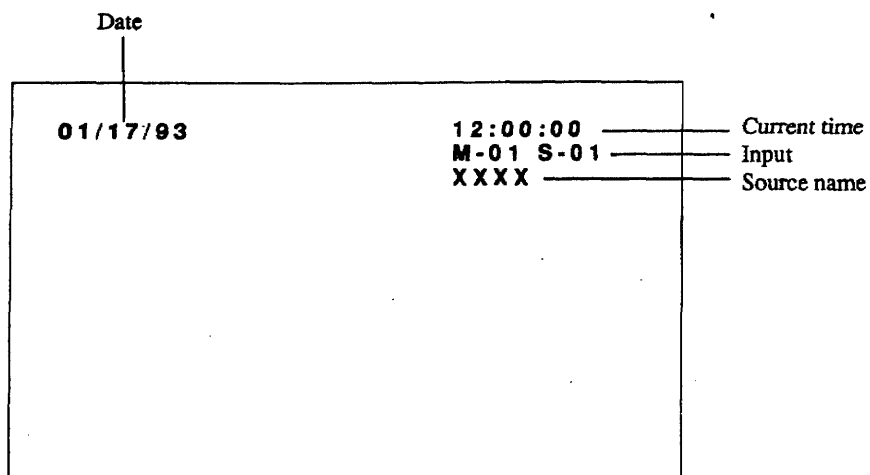
Specifications are subject to change without notice.

The dimensions given for the projector do not include protruding parts.

APPENDIX

Screen Format in Projecting a Picture

NOTE: The example of the screen display is only when used with the ISS-6010/ISS-6010G.



NOTE:

- Consult 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 have to be reset. If this happens, consult your dealer for setting date and time.

NEC Corporation